

Ecology of Perception: Yoga as a Dancing Ecology

MPhil submission

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(16.12.13) *I step out. Everything hits me. The rhythms and momentum are not mine and yet I am in them. It is everything at once – my body is exhausted by information. My stride is regimented and nothing much is asked of my feet, endless concrete slabs and sloping curbs. But movement: cars, people, bikes, buses, air traffic, the ground underneath me even vibrates, the whole city shakes. My ears hear passing conversations, shouts, horns, traffic, rumble. I smell the cold, food in every direction – coffee, bakery, fried oil, burgers, popcorn. I feel the filth of the city on me, in me. My eyes - movement, signs, windows, objects, small out of place things, rubbish, unwanted items. I see all the time, but now my whole body feels vital. Things touch me, sometimes I never notice them go, somehow their touch stays with me. I stop, stand still and take hold of an iron railing. I pause and feel the cold of the iron penetrating into my body, further and further. I feel the ache of its cold in my shoulder – how far can I follow it inwards, how long will it remain with me? If you want to be aware of your senses go to the city. And yet living there, I cannot imagine remaining/surviving in that conscious tempo of sensation all the time – how can the body filter all that out? We are always in the ebb and flow of systems no matter what our sense of place is. Are we then looking for a way to engage with those systems?*

(09.02.14) *When I walk with the gale force winds and pelting rain, my body speaks out just as much as the creaking limbs of the trees, the torrent of the river, the tangible crackling buzz of the electricity pylons. My feet become sodden, my legs tingle and ache from the wet and wind that penetrates my body. I lean into it, my head and gaze lower. My breath quickens. There is an effort being demanded from my body to carry me through. I walk with my head, my feet trail behind. My cheeks and chin feel burnt with ice, tingling as I turn from the wind. The force of the elements is now behind me. The wind now drives me and my pace quickens. I am caught like my surroundings in forces that displace, rearrange. I negotiate the water, mud. My step is never certain; the ground beneath me is unpredictable. I am wary of the wires above me. Their vibrations pass through me, they deepen and then diminish. I am inside. I still feel the wind and cold in my body. The weather is still on me, in me. My body is changing, acclimatizing.*

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Introduction

You and I are so deeply acculturated to the idea of 'self' and organization and species that it is hard to believe that man might view his relations with the environment in any other way. (Bateson 2000: 492)

As an attempt to engage with and make sense of the provocation proposed by the ecological thinker Gregory Bateson in the citation above, this thesis sets out to explore how yoga – primarily, Hatha yogaⁱ – can enhance and expand the subject's perception of their environment in an ecologically progressive manner. By this I mean, a type of perception that by grounding itself in embodied experience has the potential to allow for a more caring, playful and reciprocal engagement with life on the planet.ⁱⁱ Following on from that, my second aim is to propose the notion of a 'dancing ecology', which through the practice of yoga brings together Maurice Merleau-Ponty's phenomenological notion of being in the world and Gregory Bateson's concept of an 'ecology of mind'. While this has certain parallels with the 'environmental dance practices' of contemporary movement artists such as Anna Halprin, Simon Whitehead, Nigel Stewart, Jennifer Monson and Paula Kramer, a 'dancing ecology', as I see it, does not necessarily have anything to do with professional dance.ⁱⁱⁱ Rather, it is a way of understanding the everyday body as a dancing body, a body that, as humans, we all have potential access to.^{iv}

Reflecting the ecological sensibility inherent in the word yoga (etymologically yoga means 'yoke' or 'union'), I intend to investigate, through a 'sensory' auto-ethnographic methodology (Pink 2008), how yoga asanas

might contribute to current debates concerning ecological sustainability and resilience. In particular, I am interested in how the practice or performance of yoga might 'ecologize' the relatively new and sometimes elusive discipline of somatics.^v Importantly, I do not approach yoga as a primarily spiritual or transcendental practice, as many do; and neither do I see it as a new age fitness routine. Rather, for the purposes of this thesis, I conceive of yoga in distinctly materialist terms, that is to say, as something corporeal, rooted in proprioceptive and kinesthetic perception. In my understanding, yoga becomes a key tool for foregrounding the body and for acknowledging a first-person perspective on the world. Such a perspective perceives the world through an awareness of movement and sensation, and places the emphasis on subjective rather than objective knowledge. Although I use first person sensory ethnographic methods in my case study in Chapter 4, my methodology for exploring yoga's ecological affordances seeks to avoid the dangers of solipsism, mere navel gazing. To do that, I make references throughout the thesis to the ideas of phenomenological and rhizomatic thinkers such as Maurice Merleau-Ponty, Tim Ingold, Michel Serres, Gregory Bateson, Gilles Deleuze and Félix Guattari. By exploring yoga as a type of somatic 'machinics' (Deleuze and Guattari 1983: 4), a method for coupling different energy flows and modes of information, I intend to show how environmental awareness has little to do with 'getting back to nature' (Morton 2008). Rather, I see ecology as a type of systems awareness, awareness that is sensitive of connections, of being a part of things, of existing within the larger 'mind' of an ecosystem. So although the practices of yoga that I use in this thesis come from within the body and are, as I pointed out, subjective, the

body does not act in isolation; rather, it is dependent upon its environment and is affected by the numerous forces at play around and within it. The body is always, in other words, in dialogue, entangled, patterned, caught up in a 'dancing ecology'.

In keeping with the very meaning of ecology – the fact that everything 'is interconnected, part of a mesh' (Morton 2010: 1), a matter of '*organism plus environment*' (Bateson 2000: 491; original italics) - the point is not to posit a 'dancing ecology' as something reserved for virtuosic performers working in 'nature', such as Anna Halprin and Simon Whitehead. On the contrary, I want to propose that a 'dancing ecology' is inherent to everything we do, and at every moment. How, for instance, we hold ourselves while walking, standing in a queue or working at the computer. My objective here is to bring an active mode of perception of the body back into quotidian experience, and to move away from regarding the mind as the privileged perceptive vessel, as it has been from Descartes onwards. It is through the proprioceptive and kinesthetic senses of the soma^{vi} that we experience the world. By acknowledging these senses as potentials within the body, I believe, we might inch towards a new way of living in the world, a way of living that acknowledges how human beings create and are created by their environment in a relationship of mutual interdependence and feedback. This holds out for the possibility of a better, more sustainable relationship with the planet. Such a viewpoint is at the very heart of contemporary environmental philosophy and ethics, which do not see ecology as simply conserving the environment. On the contrary, thinkers like Félix Guattari (2008), Gregory Bateson (2000) and Arne Naess (1990) believe that it is more important to

produce a fundamental transformation of how we relate to, exist in, and live on the planet. Crucially, as I see it, this transformation is perceptive; it starts from the body, in muscles, bone and breath. For me, this is a key step in the enhancement of flexibility, which, for Bateson, is the touchstone for a better ecological practice.

The need for a sensualized soma, an embodied form of perception, is recognized by the eco-phenomenologist philosopher David Abram in his Introduction to *The Spell of the Sensuous*, in which he states:

Today we participate almost exclusively with other humans and with our own human-made technologies. It is a precarious situation, given our age-old reciprocity with the many-voiced landscape. *We still need that which is other than ourselves and our own creations.* The simple premise of this book is that we are human only in contact and conviviality, with what is not human. (1997: ix; original italics)

Abram then goes on to remark:

[This implies] that we must renew our acquaintance with the sensuous world [...] Without the oxygenating breath of the forests, without the clutch of gravity and the tumbled magic of river rapids, we have no distance from our technologies, no way of assessing their limitations, no way to keep ourselves from turning into them. [...] Direct sensuous reality [...] remains the solid touchstone for an experiential world [...]. (1997: ix-x)

Yoga, as I consider and practice it, responds to Abram's call for engaging subjects in 'direct sensuous reality'; and it is interesting in this respect how Abram pays so much attention to what he terms 'oxygenated breath'. Importantly, my concern with the perceptive affordances occasioned by breath (*pranayama*) in this thesis is an attempt to turn our attention away from sight as the primary channel for relating to the world. Like Merleau-Ponty in his

posthumous publication *The Visible and the Invisible* (1968), I want to contest the way in which seeing has been posited as a form of scientific knowing. Instead of breaking the world down into component parts, I look to the body – the full oxygenated body – as an instrument for producing a different, more expansive, less ocular-centered mode and practice of ‘ecological perception’.^{vii}

Outline

The argument in this thesis develops through five chapters. Chapter One, ‘From an ecological body to a dancing ecology’, lays out the groundwork from which my argument takes shape by introducing key terms, and positioning my research within the field of somatics. Particular attention in this part of the thesis is given to Sandra Reeve’s notion of an ‘ecological body’, which she writes about in her text *Nine Ways of Seeing a Body* (2011). Towards the end of the chapter, I argue that yoga is important not simply because it informs the performance practice of environmental dance, but rather because it is a bodily practice in its own right, something which gives rise to a ‘dancing ecology’.

Chapter Two, ‘Living ‘in’ the world – yoga as a bodily practice’, examines Maurice Merleau-Ponty’s notion of phenomenology through the concepts of reciprocity and flesh. These ideas are then aligned with Marcel Mauss’s techniques of the body and Carrie Noland’s theories of embodied agency. The aim here is to provide an ethical framework by which engrained dispositions can be transformed enabling a different, more conscious, way of

existing in the world. In this way, I hope to lay the groundwork for my own interest in positing yoga as a technique for cultivating ecological perception through a process of bodily emancipation.

Chapter Three, 'Relationships, shifts and sustainability', is an exploration into how the practice of yoga can be understood through the systemic structures developed by Gregory Bateson. The headings 'Relationships', 'Shifts' and 'Sustainability' are used to point the way towards a synthesis of theory and practice. The first heading, 'Relationships', is an exploration of the 'organism plus environment' equation that forms the grounding of Bateson's ecology of mind. 'Shifts' makes reference to choreographer Michael Kliën's understandings of dance and choreography in terms of its capacity to create a new way of living in the world. 'Sustainability', discusses Bateson's idea of flexibility in terms of a healthy ecology. I then go on to transpose these ideas onto the embodied practice of yoga. In doing so, I focus on how yoga's attention to and disruption of corporeal habits can be used to enhance the body's awareness of a 'dancing ecology' and hence produce a more creative engagement with our world.

Chapter Four, 'Research through practice', is an enquiry into my practice of Tadasana (Mountain pose) through a sensory auto-ethnography methodology. This asana has been chosen in order to examine the body through an experience of 'gravity' and 'grounding'. Tadasana locates the body in a bipedal upright stance particular to human beings, which is grounded through the feet, and supported in its verticality through the pelvis and spine. Further explanation of my choice of asana will be given within the context of the case study chapter. The chapter is introduced by a first-person account of

my practice of Tadasana that is intended to provide a subjective account of the conceptual theories previously discussed in this thesis. The second half of the chapter adopts Pierre Vermersch's 'self-explicitation interview technique' with the intention of examining, in detail, the embodied experience of the posture. The interview technique is used to articulate and tease out how a 'dancing ecology' might function by bringing information stored in my body into consciousness and ultimately into language.

The final chapter, 'Conclusion', will be used to unify my research. In keeping with my primary objective, my intention is to show how, through a detailed, first person account, yoga can enhance ecological perception and so give rise to a 'dancing ecology'. I will conclude with a provocation as to where such a study might lead for the emergent discipline of somatic studies.

Chapter One: From an ecological body to a dancing ecology

In the 'Introduction' to his influential text, *The Absent Body*, the phenomenologist philosopher Drew Leder, distances himself from the standard Cartesian notion of perception, so integral to Western thinking, by highlighting the vital role played by the body: 'The structure of my perceptual organs shapes that which I apprehend. And it is via bodily means that I am capable of responding' (1990: 1). Leder's comments are revealing: they highlight the extent to which the world is perceived and encountered through a body that is lived and affected, a body, then, that 'matters', a body which 'grounds' us in and to the environment that we are always already part of. Leder's concluding words in *The Absent Body* go on to reflect the ecological context of the body in the environment.

Through the lived body I open to the world. The body is not then simply a mass of matter or an obstructive force. It is a way in which we, as part of the universe, mirror the universe. (1990: 173)

Leder's argument for a non-absent body, a body that 'mirrors', is central to the argument of this dissertation. Rather than adhering to the Cartesian separation of mind and body – the absence that Leder refers to – yoga links them. Yoga is ecological because it allows mind, body and environment to be connected to each other, and to produce, through a process of mindful awareness, a sense of bodily engagement with the world.

In this thesis, I call this relationship of embodied, mindful awareness 'grounding'. In my understanding, grounding is an activity that is essentially critical of the ways in which the body is produced by industrial and post-

industrial capitalism. In the same way that Leder contends that the body is absent from the Cartesian worldview, I believe that modern subjects have forgotten their sense of a ground, of existing in and on the planet, of being connected to and immersed in the 'flesh' and materiality of the world. The anthropologist Tim Ingold makes a similar point, in his Heideggerian inflected critique of contemporary urban life:

It is as though, for inhabitants of the metropolis, the world of their thoughts, their dreams and their relations with others floats like a mirage above the road they tread in their actual material life. (2011a: 39)

To remain with Ingold's metaphors, yoga disperses the 'mirage' and unites one with the 'materiality' of the road. When I move in yoga, my mind is with the movement and the bodily sensations that arise through the movement. When I step, I am aware of my bodily movements, the foot I step with, the ground that meets me, the medium I move in, gravity that both challenges and supports my movement, my breath and the participation of my whole body with the environment. By cultivating an awareness of movement, my aim is to enhance the ability to be present in the moment with a unified body and mind.

The body and mind are not separate entities, but work in continual interchange as one system. Likewise, perception is not a result of sensory organs working in isolation, rather these organs are a system in ceaseless dialogue that allows for the unity of our bodily experience in the world. As writer George Leonard says,

To make sense of what you are seeing ... you sometimes need to know what the eyes register, what you are touching, your relation to

gravity and motion, and the position of your joints. What we call “seeing” involves all this, and dramatically illustrates the relationship between perception and the whole body. (in Moore and Yamamoto 2012: 18)

Leonard’s concept of vision is very different from the type of scientific or even aesthetic looking that would seek to dominate or abstractly ‘know’ the world. For Leonard, seeing is a mode of embodied perception that acknowledges the sensations afforded by our immersion in the world. This connection of body and presence establishes a relationship of reciprocity with the objects and things that populate our environment. As a consequence, it creates a climate of care where the individual becomes aware of their being *a part* of the multitude of systems at play, rather than *apart* from and in control of the systems before her/him. The French feminist ecophilosopher Verena Andermatt Conley, in her book *Ecopolitics: The Environment in Poststructuralist Thought*, underlines the ethical potential inherent in this meshing of individual and collective lives:

Natural ecology displaces human subjects from their myth of occupying a central position in the order of the world. They simply become a participant in the whole. (1997: 53)

To this connected body, like the philosopher Michel Serres, I ascribe a sensitivity and awareness to all of the senses: ‘It takes a body and senses to create a culture. Language or artificial intelligence produce a sub-culture, for want of a body’ (2008: 234). Rather than being bound by the overtly prominent sense of vision, I ask that we engage in a more participatory manner by being present to the multi-faceted bodily experience that is

constantly unfolding through an awareness of all the senses. Serres signals this acknowledgment of the 'sentient body', in his critique of abstraction:

Many philosophies refer to sight; few to hearing; fewer still place their trust in the tactile, or olfactory. Abstraction divides up the sentient body, eliminates taste, smell and touch, retains only sight and hearing, intuition and understanding. To abstract means to tear the body to pieces rather than merely to leave it behind: analysis. (2008: 26)

In order to circumvent what Serres defines as 'abstraction', and instead both acknowledge and celebrate the 'sentient body', we need to shift subjectivity from existing as a pedestal-like position of centrality, and rather situate it as one system amongst many.

In order to address this shift in bodily position from a somatic point of view, I turn to movement teacher, artist and psychotherapist Sandra Reeve. In her book *Nine Ways of Seeing a Body*, Reeve reflects on various experiences of the body. Her investigation comes out of a recognition that the experience of the body is unique to the individual. Reeve explains,

At the time it was already clear to me that notions of the self were culturally specific and that each person's experience of the self was unique; but the body seemed so 'there', so biological, anatomical, physiological, indisputable... In that moment of practice, I understood that how we view our bodies, the way we inhabit our bodies and our experience of the 'body' are equally varied. (2011: v)

To demonstrate different experiences of the body, in her book, Reeve looks at the human body through nine different 'lenses', 'lenses' that shape the worldview for those who look through them.^{viii} Reeve opens her 'Introduction' by stating:

The human body is thought about in many different ways and viewed through many different lenses. That might seem a statement of the obvious, but it is intended to offset our enduring habit of forgetting that we ever saw the world differently from the way we see it right now (whether that is 'we' as individuals, as a tribe or as a species). (2011: 1)

Reeve's, 'lenses' are in no way 'mutually exclusive' – she says that they 'co-exist' and at times 'overlap' with one another - and nor are they intended to be considered as 'an exhaustive study'. Rather, they offer a contingent and mobile way of approaching how we exist as bodies in the world.

Reeve's approach is based on two primary beliefs. First, that how we move shapes, creates, and reveals our attitudes to the world to the same extent as the spoken word. Second, that a change of movement can bring forth a change in attitude when we take into account the dynamic interaction of body and environment. With these two claims supporting her, she says:

The way we experience our bodies, and how we articulate that experience, *is* of academic interest but I believe that it has also shaped – and continues to shape – our whole relationship to one another and to the world we inhabit. That is to say, the way we in the West look at our bodies – and the sense of dislocation from our bodies that we have tended to experience – help to explain the equally dislocated worldview that has led to our current ecological crisis. Equally, in my opinion, changing the way we view our bodies can help to change the way we view the world around us and the ecosystems of which we form a part. (Reeve 2011: 2)

Reeve understands the body as shaping our relationship with others and the world we inhabit. For Reeve, coming to terms with the embodied nature of perception, the materiality of our human existence, has distinct eco-political potential. According to Reeve, if we are to attend to the ecological concerns facing us today then we need to cultivate what she calls an 'ecological body',

‘a “body-in-movement-in-a-changing-environment” (2011: 48). In her coupling of the experience of the body with our worldview, Reeve believes the dislocation of the western body has contributed to the ecological crisis that we are in. From this, one might conclude that when we fail to register the body, we fail in a sustainable relationship with the world. In many ways, Reeve is drawing here on the phenomenology of Maurice Merleau-Ponty, and which is also found in the work of Leder. In this school of phenomenology, the body is posited as the key instrument for attuning ourselves to the world, the thing that produces connections, and which, in an eco-phenomenological sense (see Abram) creates a sense of belonging and attachment to the planet.

In the context of my thesis, the ‘lens’ of greatest interest is the ninth lens, which Reeve names ‘the ecological body’. Reeve distinguishes ‘the ecological body’ from ‘the environmental body’ by suggesting that the former is a body that perceives the world from motion and the latter through stasis. For Reeve, ‘the ecological body’ is a body in transition, whereas ‘the environmental body’, although still a body subject to change, ‘is situated in a specific location and [...] is often articulated as if viewed through a static lens’ (2011: 48). The emphasis that Reeve places on movement and transition is crucial: for it is here, in the dialogue and exchange between the moving body and its environment, self and world, that yoga can be considered as contributing towards the production of a different, more materialized version of ecological subjectivity. Yoga cultivates attunement to bodily movement and is practiced by a body that is connected to and interdependent on its surroundings.

Reeve writes, 'The ecological body is situated in movement itself and as a system dancing within systems, rather than an isolated unit' (2011: 48). In her usage of the terms 'system within systems' and 'isolated unit', Reeve is concerned to contrast 'the ecological body' with the alienated and privatised bodies produced by what she perhaps problematically terms 'Western daily life'.^{ix} According to Reeve, 'Western daily life' 'dislocates us from our bodies' by removing the body from its environment, shutting down its channels of sensation and perception, reducing its power to be affected. This is exemplified by the protective barriers and technologies that are constantly being created in an attempt to distance the body from exposure to the elements and materiality of the world. Consider, for instance, how clothes are weather proofed, houses are draft free, chairs recline, mattresses have memory foam, walkways are paved, insoles are cushioned, aromas are manufactured, and seasonal food is year round. These conveniences and pleasures hinder our enjoyment in the world, preventing the charge of a bodily connection with what the political theorist Jane Bennett has recently called 'vibrant materiality' (2009).^x

In her comparison of the lens of 'the ecological body' and that of 'Western daily life', Reeve distinguishes their positions through their kinaesthetic emphasis; whereas movement is the emphasis for 'the ecological body', achievement and goals mark the emphasis for 'Western daily life'. For 'the ecological body', the 'stillness' or 'stopping' denoted by achievement does not become a point of reference; rather, it is a lens wrapped up with motion and transition. Take for instance the pauses in our breath, the lingering moments between inhalation and exhalation. These pauses are not

interruptions in our respiration, but serve to sustain the body through to the next breath. Reeve proposes that, 'the ecological body' connects 'stillness' to movement; it values sustaining moments or modes of transition that connect one action to the next. For, she notes, 'In absolute terms, there is no such thing as a fixed 'position' because there is always movement' (Reeve 2011: 48). Reeve explains this concept of constant movement by noting:

Even in a fixed position there is still the movement of our breathing or of our circulation, so, in fact, like the rest of the natural world, we are constantly in change or in some kind of transition. (2011: 48)

According to Reeve, the only time we do stop moving is when we die. Or as she puts it, 'Western daily life', with its emphasis on fixed points, attainments or goals, 'may be unconsciously looking at life from the viewpoint of death' (Reeve 2011: 49). For Reeve, stopping becomes a fixed reference point, something that we look back at, rather than the fluid transition that 'the ecological body' allows for in realizing its potentials. In her view, 'Western life' does not reward being alive, rather it applauds accomplishments and achievements, moments of fixity and acts of doing. Reeve explains:

within a comparative framework, the kinaesthetic emphasis in Western daily life is on one's position, on goals and on structure rather than paying attention to transition: that is to process, to the journey or to the spaces between activities. (2011: 49)

In the extent to which life in the west ignores movement and transition, Reeve concludes that it loses sight of the process or 'journey' that allows for a different way of being in the world, a way of being that would stress the necessity of play and enjoyment, a way of being prepared to expend energy,

to lose. For Reeve, 'the ecological body' is a joyful body, a body that affirms the world as it affirms itself.

Reeve's critique of the 'Western body' suggests that sustainability is not simply about transforming consciousness through the communication of ecologically friendly ideas. For no matter how sound or rational these ideas might appear to be to the logical mind, they tend to function through the logocentric play of language, which leaves no mark on our deeply ingrained corporeal habits, on what Pierre Bourdieu, after Marcel Mauss, calls our 'habitus' – the unconscious processes in and through which the body produces and is produced by the specific socio-cultural world it is thrown into. Rather – and this is key to my thesis - for a more sustainable future to be realized, Reeve suggests that we need to provoke a more fundamental/corporeal shift in perception; one that releases potentials in the body, and looks forwards rather than backwards. This shift in corporeal values is inherent in Reeve's notion that 'the ecological body' 'perceives the moving world through movement and experiences itself as one part of a changing situation' (2011: 50). Through this awareness of existing in a complex and constantly changing environment, Reeve foregrounds or makes conscious our habitual patterns and, by doing so, creates a situation whereby transformation can be facilitated. In such cases, 'the ecological body' is aware of the effect its movement has on others and the environment, but is also, at the same time, aware of how these factors condition its movement. Life becomes participatory rather than fixed.

Reeve's notion of 'the ecological body' marks an important moment for thinking through what a progressive, embodied form of ecological corporeality

might consist of. However, for all its usefulness and applicability, it is nevertheless beset with potential contradictions. Paradoxically, these pitfalls are inherent in the conceptual framework evinced by Reeve, the same framework, strangely, where the very strength of her project resides. By positing the notion of ‘the ecological body’ as a noun, Reeve tends to fix the fluidity of the idea that she introduces, and in the process renders it abstract. This has several negative consequences. First, it negates the body itself; second, it ignores specifics, the contingency inherent in different, individuated bodies, and the way in which they relate to the world; and third, it does not pay enough attention to the micro-processes or small perceptual movements that allows for a shift in one’s physical being to occur.

Without ever wanting to reject Reeve’s insights and concepts entirely – her work is too generative and full of potential for that – my aim is to use yoga as a way of moving towards the ‘dancing ecology’ that her notion of an ecological body implies and calls out for. As I show in Chapter Four, I do this by engaging in a form of sensory ‘fieldwork’ (Daniels, Pearson, Roms 2011) or research through practice. By paying particular attention to my own bodily sensations and micro-perceptions through a practice-based case study, I intend to build on her research, to flesh it out, to make it more personal, less abstract and conceptual. This will entail a different form of writing from conventional academic prose, for I will be attempting to track and trace a mind in a dancing body, a body of movement and breath.

Ecology of Dancing / Dancing ecology

In order to identify the role I am prescribing for yoga in this thesis, as a practice that enhances the sentient interrelationship and interdependence between body and world, it seems important, at this stage, to distinguish between the terms 'ecological dance' and what I call a 'dancing ecology'.

Borrowing the terminology of contemporary dance practitioners and academics such as Nigel Stewart (2010) and Paula Kramer (2012), I understand ecological or 'environmental dance' to be a form of dance that seeks to take the body out of the studio, and to place it instead in the natural environment.^{xi} In general, this is a distinctly non-urban form of dance, dance that is performed in idealized countryside - open fields, rocky cliffs, vast coastlines, meandering rivers, hills and mountains. These are often picture post card locations that idealize the countryside and where technologies, industry and sometimes even other human beings are somewhat conveniently not to be seen, felt or engaged with.^{xii} Within this genre of dance making, there is a tendency to argue for 'a return to nature', with an essentially therapeutic aim in mind. I am thinking here specifically of Anna Halprin's work (*Still Dance* 1997; *The Planetary Dance* 1987 – ; *Circle the Earth* 1985 – 1991) where she enters into a natural environment, whether it be field or tree and seeks to become what she supposedly already 'is'.^{xiii} In *Still Dance* (1997) Halprin worked with visual artist Eeo Stubblefield in a series of durational dance pieces in which a naked Halprin is dressed or painted in such a way as to resemble the components of the surrounding environment. These pieces

portray Halprin in response to a variety of elemental landscapes where she summons forth 'a return to nature'.

For instance, in *Water Dance* a lightly shrouded Halprin positions herself in the tidal scape of sea and shore and through the duration of the ebb and flood allows her body to be moved by the flows and pulls of her immediate environment. She is rocked, buffeted and repositioned like the wood, stone, seaweed or shells that she lays amongst. In this piece Halprin surrenders her body to the forces of nature in order to experience where it takes her; she becomes a product of the sea. The piece epitomizes the incidental nature of human kind, acknowledging that humans are not central to the universe, nor in a position of control. In *Blue Dance*, moreover, the naked body of Halprin is painted sky blue and she wears a headdress of bracken and mud. In her 'dance' with 'nature' she proceeds to slowly, ritualistically coat her body in the mud of the earth that surrounds her, until eventually she resembles the bowels of the earth that she sits within rather than the blue of the sky above. This process continues in *Forest Dance* where Halprin is covered in moss, bracken, pine shingles and other shrapnel of the woodland floor. In this state of fusion, she explores and embeds herself amongst the outward reaching roots of a tree to the point where she can no longer be discerned except for the almost imperceptible rise and fall of the woodland floor under which her breathing body lies. The piece finishes with a moment of rebirth in which she chooses to assert herself and re-emerge from the earth.

In each of these dance pieces Halprin explores the limits of her body and challenges herself to get beyond her skin, to transform and become

nature. Through durational notions of endurance, and exhaustion, her body relates to the environment in a different and unfamiliar way. Although, she dances with nature as if she was dancing with another body, there is a definite entrance to these pieces – costumes are worn, ‘nature’ is located and the dance begins. At all times it is Halprin who has initiated these dances, and little attention is given to how the ecosystems might function apart from her. In these attempted integrations with nature and self, Halprin claims to engage in a process of healing, which occurs through the rediscovery of a nurturing relationship that has been lost, a nature we have according to her work abandoned through the twin pressures brought about by industrial society and, more generally, the dominance of Cartesian thought.

A related form of ecological dance performance is exemplified in the work of Nigel Stewart and Sap Dance. Pieces such as *Fissure* 2011; *Still Life* 2008, rev.2009; *The Saturated Moment* 2006-7; *Lune* 2005; *Night Side* 2001, explore the relationship between movement and the ‘natural world’. In these works, the dancer is located in what Stewart defines as a ‘Heideggerian space’ of wheat fields, shore line and limestone rock. Here, again, as with Halprin there is an attempt of the body to re-enter into ‘nature’, but this time the body moves in response to ‘nature’, which is posited as simultaneously other and something to engage with and become part of. Importantly, though, Stewart’s work in the environment is not interested, as Halprin’s is, in healing as such (at least not explicitly); on the contrary, he uses movement repetition to engage in a form of bodily witnessing, in which he looks at the environment, and the environment looks back at him. However, it must be said that Stewart’s, always human, consciousness remains central to the equation. He

can only tell us about nature's witnessing by refracting it through his own imagination, and subjecting it to his own analysis.

The Welsh-based dancer and conceptual artist Simon Whitehead practices a different type of ecological dance. In his work, such as, *Emergence* 2012; *Walking between craters* 2010; *Louphole* 2010; *23 Towers* 2007; *Dulais* 2006; *2mph* 2002; *Tableland* 1998-1999; *Folcland* 1997; *Salt/Halen* 1996; *Locator* 1995-ongoing; *Shed* 1995-96 Whitehead locates the body in nature, but he has no desire to either witness or heal himself. Rather Whitehead seeks to disappear in order to let the world appear in his place. His practice is based around everyday pedestrian movements, and is both body and place sensitive. His work is influenced by Judson Dance Theatre group, and in particular, Steve Paxton. Simon believes, as Paxton, that 'the body is always in the environment. It can't really be separated from it' (Lavery and Whitehead 2012: 114). For Whitehead, the body is an ecological resource that we do not fully understand:

If we are to understand, fully, how the body can allow us to "become" at home, then we have to find ways of preparing it, working with it so that we can be receptive to our surroundings. (Lavery and Whitehead 2012: 114)

According to Whitehead, the body is fundamental to the receptivity of our surroundings. His dance creations, shaped in and through this experience of receptivity, are elucidated by his notions of 'home'. He understands the 'first home' to be the body; the 'second home' as the territory we live amongst; and the 'third home' as the creative interplay of body and environment. It is from this 'third home' that something new is created and where Whitehead situates

his work. This creative process of interplay of body and environment is instilled with techniques of improvisation. 'When I am working I feel I am getting somewhere if I can sidestep the intellect and simply play with the materiality around me' (Lavery and Whitehead 2012: 115). His dance creations come out of an experience of flux, being sensitive to his surroundings and allowing the unpredictable to break through. Take for example his piece entitled *Shed*, in which Whitehead walks the same path over a period of time, forging a mark in the land where his feet have trodden. When the new grass is sprouting he abandons the familiar walk in order to watch his trace vanish. In his book, *Walking to Work*, he writes about *Shed*:

The work is, I feel, about presence and alternatively about transience. Moving through a place as if to learn from it, through my body, my senses and to witness the effect of my actions. (Whitehead 2006: 24)

Shed incorporates a notion of being familiar to a place, but also draws upon transformation and the transience of moving on and moving through. The place always, in some sense, outlives us. We are its ghosts or tenants.

I perceive humility in Whitehead's work; although inwardly attentive, his care and attention focuses on the environment, animal world and people. He works as a visible presence in the land and it is the people as well as the land that enables him to feel at home. 'Some people in the village ask me what I am doing and I usually reply that I am trying to get to know this place, to internalize it' (Whitehead 2006: 24). The conversations that transpire from his work in the land are another way of knowing and embodying the environment. In this way, his work opens out to a wider community. This opening outward is

exemplified in his piece *Louphole*, where Whitehead pays homage to the wolf through 'public howls.' He comments:

I was wondering about how we might find some memory of the wolf in a collective voice and body, a memory that might allow us to physicalize and emotionalise a relationship to an animal long absent from our ecosystem. (Lavery and Whitehead 2012: 116)

Here again in Whitehead's work we experience presence and absence through bodily actions, and through these aspects we encounter the ecological. In *Howl*, moreover, this relates to the human responsibility for species extinction. In an unpublished essay Carl Lavery explains how the joyfulness in the piece, produced through the collective howling, was always shadowed by a sense of sadness caused by the absence or ghostly presence of the 'wolf'.

Despite very real differences in philosophy and aesthetic techniques, the work of these performance artists, all demonstrate sensitivity to the relationship of the body in its surroundings, rather than to a performance of constrained stylized movement. The pieces reject the spectacle and theatricality of the dance stage and allow the body in its interdependence with the environment to be the impetus for the movement created. The environment shapes and generates the performance, rather than the performance shaping and generating the environment. The dance pieces they create seem to reflect process rather than product. They posit the body as a space for creativity; freeing it up and allowing it to stand as the expression in itself.

The problem here – and it is a problem that besets the deep ecology movement which always tends to equate nature with wilderness or countryside – is that the human subject does not experience nature as it is; on the contrary, she tends to meet an idealized human view of ‘nature’ which masquerades as the authentically non-human.

The work of Halprin that I refer to illustrates the Romantic idea of the human meeting nature through the process of ‘ecological dance’. Over time, Halprin’s work gravitated from an emphasis on ordinary people doing everyday actions on stage (such as her 1965 piece *Parades and Changes*) towards more transpersonal explorations and rituals. As movement practitioner Libby Worth and movement artist Helen Poynor explain in their book *Anna Halprin*:

Halprin believes in an intrinsic connection between our inner world and the outer landscape. An embodied encounter with nature can become a metaphor for our life story offering us a new understanding of our human condition and potential healing of unresolved feelings or situations in our lives. (2004: 89)

It is clear, that for Halprin the connection between human and environment has personal meaning and therapeutic outcomes for the subject involved. Halprin’s large-scale projects, such as *Circle the Earth* and *The Planetary Dance*, serve as community based ritual acts of healing and renewal. In such pieces the collective power of the group of 100 or more participants is summoned forth to evoke an energy that is intended for the healing of the planet and the generation of peace.

Halprin’s language, at times, expresses a way of thinking that seems in line with Gregory Bateson’s ideas of an ‘ecology of mind’ (see Chapter

Three). An example of this similarity is illustrated by Halprin's observations as she conveys how she came across a new way of working (quoted from an article that appeared in the April 1963 issue of *Dance Magazine*).

It happened that I was looking at the sunlight on a tree. For no reason at all, and without apparent preparation I became intensely aware of a foghorn in the bay, a red berry at my side, and passing birds overhead. I saw each thing as a separate element and then as independent elements related in unpredictable ways. (in Banes 2003: 29)

Halprin's observations portray a way of perceiving that recognizes a world of systems that are linked and yet separate, all functioning in a state of uncertainty and transience, as Worth and Poynor explain:

since we are a part of nature, our bodies composed of the same elements as the earth and our lives shaped by the same cyclic patterns, it is possible 'to understand the natural world as a reflection of ... human experience'. (2004: 89)

According to Halprin, bodies and environment share and are shaped by the same patterns. Although she maintains an intrinsic relationship with the environment, believing that 'it becomes a partner in her dance' (Worth and Poynor 2004: 90), ultimately, Halprin's engagement with the environment is a means of 'discovery' for the individual. As Worth and Poynor comment, 'Through the encounters with the environment a deep intuitive knowledge is awakened in the individual' (2004: 90). It is here, in the value Halprin places on human experience, that her considerations deviate from Bateson's; whereas Halprin's explorations always return to human experience, Bateson invests in the interaction of systems that bypass the human subject.

Halprin's physical approach to her nature work is structured and systematic. The expression seems to be set in motion through cycles or rituals of exploration which can be seen in her development and use of RSVP cycles, movement rituals, and experiential cycles. Out of these patterns individual expression is realized. Take for instance, Halprin's 'experiential cycle,' which is composed of three parts: Contact, Explore, Respond. Worth and Poynor explain, the cycle is initiated by 'preparatory exercises to deepen sensory awareness [...] for example a silent blindfold walk in the environment [...]' (2004: 89). It is in this state that Halprin opens to the first segment of her cycle - 'Contact'. Here a physical connection with the environment is established.

The whole body is used to physically connect with an element in the environment, for example, a tree, rock or sand, absorbing its texture, weight, shape, movement, smell and sounds, becoming familiar with the materiality of the element through the physicality of the body and the senses. (Worth and Poynor 2004: 89)

This segment asks for the participant to experience the materiality in an unfamiliar way, developing knowledge of the object or environment through a sensory experience of the body to an extent that goes beyond their common perception of it. This is followed by 'Explore', where the individual interacts in a more active way with the environment. 'A full range of physical activities and tasks in relation to it are explored, for example, climbing, rolling, digging, sculpting, throwing' (Worth and Poynor 2004: 89). Here, the physicality of the activities is intended to take the individual beyond habitual movement patterns providing them with new creative responses that they can draw upon. The final segment of the cycle - 'Respond' - is a subjective response to the

element. Feelings and associations that came forth from the relationship of human and element are expressed to establish a personal meaning. Halprin's 'experiential cycle' hence allows for the individual to arrive, interact and gain personal meaning from an experience with nature. The difficulty from an ecological perspective, is that her view of 'nature' is reflected as an idealized other, something that the human has lost, but can return to, and, in and through this learning experience of reconnection, can emerge renewed.

By contrast, a 'dancing ecology', the ecology I want to explore in this thesis, does not seek to return to nature as such, but rather aims to disclose the extent to which we are, and always have been, a part of nature. In fact, it is my contention that there is no escape from nature, no space where we can retreat into some uniquely purified and non-contaminated human essence. In my view, everything – bodies, cities, drains, landfill sites – is nature. Nature in this connotation reflects Jane Bennett's notion of 'vibrant materiality', materiality that has a vitality in and of itself. As she comments:

I have been trying to raise the volume on the vitality of materiality per se, pursuing this task so far by focusing on nonhuman bodies, by, that is, depicting them as actants rather than as objects. But the case for matter as active needs also to readjust the status of human actants: not by denying humanity's awesome, awful powers, but by presenting these powers as evidence of our own constitution as vital materiality. In other words, human power is itself a kind of thing-power. At one level this claim is uncontroversial: it is easy to acknowledge that humans are composed of various material parts (the minerality of our bones, or the metal of our blood, or the electricity of our neurons). But it is more challenging to conceive of these materials as lively and self-organising, rather than as passive or mechanical means under the direction of something nonmaterial, that is, an active soul or mind. (Bennett 2010: 10)

This 'lively and self-organising' materiality is the nature of a 'dancing ecology,' an ecology that emphasizes the extent to which the body itself is nature and its movement is dance. Why? Because the body, as Reeve and Bateson show, is constituted through systems of informational flows that run through it, and which open it out to other organisms (animals, stones, people). As Bateson notes, the human being is implicated in and by the environment it is a part of.

We are not outside the ecology for which we plan – we are always and inevitably a part of it.

Herein lies the charm and the terror of ecology – that the ideas of this science are irreversibly becoming a part of our own ecosocial system. (Bateson 2000: 512)

Bateson's caution allows us to see how our relationship with the world is not about organism and environment merging as if in some 'authentic marriage' between human being and 'nature'. Rather, it is best described as something that occurs through a series of interdependent and mobile feedback loops.

Bateson explains:

When you narrow down your epistemology and act on the premise 'What interests me is me, or my organization, or my species,' you chop off consideration of other loops of the loop structure. You decide that you want to get rid of the by-products of human life and that Lake Erie will be a good place to put them. You forget that the eco-mental system called Lake Erie is a part of *your* wider eco-mental system – and that if Lake Erie is driven insane, its insanity is incorporated in the larger system of *your* thought and experience. (2000: 492; original italics)

I see the dynamic relationship that Bateson discusses here, albeit in negative terms, as a dance of atoms, a dance that occurs within, outside and between body and environment. Understood in terms of a 'dancing ecology', a

constantly shifting and mobile pattern of interlacing systems, dance moves away from choreography or performance as conventionally understood, and instead enters the realm of the everyday. Dance, in this model, is extended to include quotidian movement, and embraces the fact that everyone is a dancer, because everything – the world, the body, ‘nature’ - is already dancing, it is a ‘dancing ecology’. This democratic, notion of dance is underlined by the philosopher Friedrich Nietzsche.

In *Thus Spoke Zarathustra*, the old man who speaks to Zarathustra as he comes down from the mountain after ten years of solitude says: ‘Yes, I recognize Zarathustra. His eyes are clear, and no disgust lurks about his mouth. Does he not go along like a dancer?’ (Nietzsche 1969: 40). For Nietzsche, dancing is an act of undoing and liberation. It is through dancing that we find the free spirit. Kimerer L. LaMothe, in her book *Nietzsches Dancers*, defines a free spirit as a person

unbound by convention, tradition, or habit, having the vitality and discernment needed to do what is necessary for her own health – one who finds in the death of God an occasion to *love* her bodily becoming. (in Böhler 2007: 2; original italics)

As LaMothe proposes, the free spirit is a body of energy that in the process of movement becomes oneself. She clarifies, ‘In the end, the difference between the bound and free spirits is not one of intelligence or will, but *energy*’ (in Böhler 2007: 2; original italics). This energy is what I see as the democratic notion of dance; it is the body fostering the potential for freedom.

In teaching *us* to educate our senses, to believe in earth and in our bodies, Zarathustra invites everybody to resist ascetic ideals in order to

become a dancing star herself. [...] a form of *bodily self-creation*.
(Böhler 2007: 4; original italics)

In 'bodily self-creation', there is an undoing – of cultural restraints, boundaries, definitions, knowledge - in order to recognize the 'vibrant materiality' that we are, and which, to return to Jane Bennett, has capacity for self-creation. As Zarathustra says: 'I tell you: one must have chaos in one, to give birth to a dancing star. I tell you: you still have chaos in you' (Nietzsche 1969: 46). This democratic notion that we all have access to the chaos that gives birth to a dancing star is inherent in the dance practices of Steve Paxton and the choreography of Michael Kliën.

Paxton empowers people by drawing attention to what the body does in everyday movement. Paxton does not enter 'nature', rather he believes the body is nature and explores, through his dance, the quality and expression of everyday movement. This expression is politically fuelled. Writing about Judson Dance Theatre, dance historian Sally Banes explains:

They were interested in finding ways of moving (and other human actions and expressions) that would have meaning for the democratic majority, valuing the ordinary lives of ordinary people. This determination stemmed from egalitarian political principles. Thus for Yvonne Rainer, Steve Paxton, and several other choreographers of the time, simple actions such as walking became symbolically charged, revolutionary acts. (2003: 18)

Paxton looks to equate dance with everyday movement. In *State* (1968), *Satisfyin Lover* (1967), and *Flat* (1964), he explores the quotidian practice of walking. In more specific terms, *State* focuses on collective movement; in this piece walking and standing are performed as a group of ordinary people huddle together. In '*Flat*, [Paxton] undresses, dresses and

ambulates in circles punctuated by movements of arrest' (Carroll in Banes: 94). And in *Satisfyin Lover* an assortment of bodies walk, sometimes pause or sit, as they move across a floor. As an audience, one observes ordinary people 'performing' acts that we do everyday in such a way that the invisible is made visible, allowed to appear. Paxton explains:

It had to do with invisibility. The ordinary is, in a sense, un-visible, invisible, because it's...ordinary. The senses tune it out. [...] ...what I thought was that one spends so much time in one's body ignoring it, being with other focuses. And I was real interested to see, to examine and to question what was going on when one was doing this activity that was really setting one's set most of the time. I might spend five or six hours a day working on my body and working on dance.... and yet all the rest of the time my body was just carrying on by itself and I became really interested to see what was happening on that level. I felt it was important. (in Archias 2010: 2)

For Paxton, dance is about movements of the everyday that we fail to give attention to, those mundane tasks and gestures that the body performs as we go about our daily business. As he sees it, these unseen acts are politically charged.

With respect to this, Paxton believes that the practice of Contact Improvisation has the potential to be a mode of political power and corporeal emancipation:

We are conditioned to voluntary slavery. In a democracy, dictators must demand that others be slaves; fortunately for the dictators, the American life produces slaves who are unaware of the mechanisms of that production... This conditioning in unawareness produces "gestures, modes of posture [...] behavior [...] which constitute [the] proper social activities and communications [...] as well as accompanying mental attitudes we acquire or aspire to for proper presentation of our 'selves'" ... What we learn in school for the most part is 'to sit still and focus our attention for hours each day. The

missing potential here is obvious – movement of the body and varieties of peripheral sensing. (Turner 2010: 124)

Contact Improvisation is an act of emancipation for the performer, for the body. There is no prescribed choreography here; rather the piece unfolds, as participants choose movement in relation to their contact. On the level of systems, Contact Improvisation locates the body in a sphere. This way of perceiving one's surroundings through movement allows for changes; it opens the dancer up. Although in a continual relationship with gravity, there is no stable sense of sky/ground here, for the body is immersed in a series of surfaces that it is in perpetual dialogue with. The sensations of up/down/right/left are vacuous when movement is experienced in this way. Contact improvisation enables us to understand the body as a system, in dialogue with numerous other systems. It demonstrates that a body is many bodies, a corporeality that is constantly shifting and transforming in relation to what it comes in contact with.

While the framework for contact improvisation might be clear in a studio-based context, in our daily life, the systems we engage with are not necessarily visible. There is too much mass; too much close vicinity. Dance and multidisciplinary artist Kent De Spain comments how:

In an interview, Steve Paxton explained to me that there was no longer a clear dividing line between his everyday life and his improvising. I know exactly what he means: once you have developed and honed your awareness, you can attend to the improvisational quality of any moment of your life. (in Albright and Gere 2003: 27)

De Spain explains that it is through our ability to hone our awareness to the senses that everyday life becomes a dance. He goes on to clarify his understanding of improvisation as an attentional practice.

Improvisation, as I understand it, is an attentional practice: the more you attend to movement and memory and sensing and intention, the more you play (improvise) with all the elements of what we call living – and the more you come to understand that reality itself is based on the relationship between our attention and the world. You sense that your attention is both selecting and forming your experience in real time, but that what is being selected and formed is not completely of your choosing, because the world is improvising too; and that dance, your interaction with the world, forms you just as you form the world. (in Albright and Gere 2003: 37)

Through improvisation, as De Spain indicates, Paxton emancipated the disciplined body, and thus allowed us to see how movements of daily life are dance. His technique railed against social and cultural constraints, those

“gestures, modes of posture [...] behavior [...] which constitute [the] proper social activities and communications [...] as well as the accompanying mental attitudes we acquire or aspire to for proper presentation of our ‘selves’” ...We are disciplined in “constraints and taboos of touching” that undermine our potential for satisfying physical contact. (Paxton in Turner 2010: 124)

The gestures that Paxton alludes to here are constraints to which the social body conforms. Paxton links these prescribed gestures with ‘mental attitudes’, demonstrating that the presentation of our ‘selves’ reflects mind and body.

On this point, Paxton comes close to the ideas of the anthropologist Marcel Mauss. In *Techniques of the Body*, Mauss explored how the body was disciplined and socialised via specific, cultural iterations. Mauss believed that

'total man' was to be viewed through a triple viewpoint of the social, the biological and the psychological. He proposed:

that in their corporeal and technical *habitus*, individuals are 'total' human beings, setting in motion the biological, psychological and sociological dimensions of their being. (Brewster in Mauss 2006: 77; original italics)

The three components - biological, psychological and sociological – all play a role in the acquisition of 'techniques of the body'. Technique, for Mauss, refers to 'an action which is *effective* and *traditional*' (Mauss 2006: 82; original italics).

The constant adaptation to a physical, mechanical or chemical aim (e.g. when we drink) is pursued in a series of assembled actions, and assembled for the individual not by himself alone but by all his education, by the society to which he belongs, in the place he occupies in it. (Mauss 2006: 83)

For Mauss, techniques of the body are learned techniques. They are assembled via patterns of movement that are imposed from without, and which are articulated and expressed as embedded bodily habits.

Placing Paxton's notion of discipline in conjunction with Mauss's notion of bodily techniques can provide a path for liberation. When habit and/or disciplined movement is acknowledged we are confronted – at least, initially – with how our co-creation of the world lacks our engagement and participation. Conversely, when we attend to our everyday movements, as in the practice of yoga, we are developing a potential for the liberation of the body. This liberation allows for the individual to partake more fully in a 'dancing ecology'.

There are intimations towards a 'dancing ecology' in the choreographer Michael Kliën's questions of what makes us dance and why. His explorations are shaped by the scholarship of anthropologist Gregory Bateson (further examination of Kliën and Bateson follows in Chapter Three), and focus on the governing of our life through patterns. Like Bateson, Kliën is on 'A search that aims to imagine and formulate a vivid awareness of the profound and deeply ambiguous structures and dynamics working in man and nature' (Kliën, Valk and Gormly 2008: 11). Within this myriad of patterns he sees a dancing world, an ontology of which the human being is very much a part:

Patterns are flexible and fluid constellations, appearing and disappearing, crystallising and dissolving, being born and dying. They are an ongoing dance of creation and de-creation in the world where we have our being, enabling our very own subtle frame of flight, our living. In this dance lies a world full of interaction, relationships, constellations, dependencies, arrangements and ecologies. To enquire into this reality of changing patterns and the forces at play, is to enquire into the choreography of life, examining what makes us dance and why. (Kliën, Valk and Gormly 2008: 11)

As with Paxton, dance, for Kliën is not a practice reserved for an elite group of athletes and artists, and neither it is simply an art form to be studied and written; rather, it is embedded in the potential of how the body moves in the world. Choreography, for Kliën, is about setting the right conditions for dance to take place. In Kliën's view, the 'everyday choreographer' is an individual who is in constant negotiation and co-creation with the ecologies she/he is a part of. Through this choreography the conditions can be set to transform, radically, how we perceive, negotiate, respond and create our world:

We are inscribed with the capacity for original thought and the possibilities to bring about change. We can create and facilitate the conditions for something to happen, for patterning and re-patterning to occur. Doing so is the act of the everyday choreographer – the negotiator, the navigator and the architect of fluid ecologies we are all part of. (Kliën, Valk and Gormly 2008: 12)

For Kliën, there is potential in the everyday to bring something new into being. This capacity is based on creating ‘fluid ecologies’ – that is, patterns which are in constant flux and reflux. Such ecologies exist, for Nietzsche, Paxton and Kliën, in dance. It is through dance that we are confronted with chaos, the breaking of prescribed order, the drive for individual and collective creativity.

According to this view, dance is not something that occurs in isolation; it is interwoven into a network of constellations and relationalities. Kliën et al explain: ‘We make each other possible. We enable or disable each other’s elasticity and life’ (Kliën, Valk and Gormly 2008: 23-24). It is in and through this interconnectivity of constellations that perception takes place.

Importantly, perception is imaginative, flexible and creative; it has potential to break with old hierarchies:

As hierarchies prevail in the conscious ordering of humans and narrow cause-and-effect thinking rules medicine, sex, and urban planning, it becomes increasingly self-evident that the limits of our imagination are intrinsically linked to the limits of our perception. Trapped in linear time, perception takes its bearing from sensation and then maps the landscape of our imagination. The patterns we subsequently perceive become our repertoire for building. (Kliën, Valk and Gormly 2008: 20)

Rather than framing perception by limitations, Kliën sees it as an imaginative faculty. The more intensely we can feel, the more expansive we become. In the work of Paxton and Kliën there is a desire to go beyond the known, to become something new. This desire comes through the body; and it is caused

by a conscious awakening to the senses, to their pulse and energy. With this heightened perception comes wonderment, a continual re-experiencing of the world that is inseparable from the recognition that we are part of it.

Consciousness has given you and I the possibility to gain glimpses of our condition. Let us put a stop to, or inject a new step into, habitual movement formed by outmoded frames of awareness. Let us align our being within an ecology of mind and start creating from the basis of such knowledge and freedom. (Kliën, Valk and Gormly 2008: 26)

In this context, I present dance as an awakening to the totality and presence of the sensory body. This awakening can also be seen in terms of consciousness, the mind engaged with movement. If we become aware of our movement, we can choose to move in a different way; if we question the movements that society, culture and experience have prescribed for us, we have the potential to free ourselves from these habits and prescriptions, and so, facilitate a wider repertoire for the construction (building) of our world.

It is here, in the awareness and potential for the liberation of movement that I place yoga's capacity to evoke a dancing ecology. Yoga facilitates the learning and unlearning that is a prerequisite for the dance intimated by Paxton and Kliën. In order to learn, or bring forth, a new way of inhabiting the body and the world, the individual needs to first recognize and then unlearn instilled habits. This process of undoing, in yoga, starts with the recognition of the limitations placed on the individual body by the gestural stories and corporeal narratives that have been inscribed on it. It is through the recognition of these bodily stories, that people are able to liberate themselves from their habitual movements. On a more personal level, the demands of daily life deposit tensions within my body – as I go about my day, tension

builds up in the framework of my body, my shoulders stiffen, rise and constrict inwards on my neck, my head becomes a weight I carry with me, my neck and spine feel the pressure, the breath becomes restricted. Without attentiveness to the body, these tensions establish restrictions in the way I move in the world and the way I perceive it. However, by drawing awareness to how my body attends to the everyday I can engage with a gradual process of undoing and attend to reinstating a degree of balance and agency within the body.

Yoga is a linking of systems, it centers on the freeing up and fluidity of energy. Through the unity of mind, body and breath it enhances perception and in turn, creates a greater attentiveness to the relationship between the body and its environment. If we return to De Spain's comments (see pp35-36), that describe improvisation as an attentional practice, I believe, yoga functions in a similar way. Like the dance of Paxton and the choreography of Kliën, yoga permits us to reconfigure our engagement with the world in unexpected and dynamic ways.

As I have been arguing here, the body and perception are key to understanding this fluid process of reconfiguration. Therefore, in the next chapter, I focus in greater detail on the interrelationship of body and environment. In doing so, I explore, through the embodied phenomenology of Maurice Merleau-Ponty, how, as a body, we live in the world. According to Merleau-Ponty perception emerges from a lively, dynamic environment working in and through the bodies of human agents. Merleau-Ponty, therefore, provides an ecological insight, by suggesting that the body is always embedded in the flesh of the world, a part of things.

Chapter Two: Living 'in' the world – yoga as a bodily practice

As I explained in the previous chapter, the 'dancing ecology' that I am investigating in this thesis, refers to a network of interdependent corporeal and environmental systems that are in continual movement, transformation and adjustment. It is an ecology that recognizes the body as something which is always already in and part of the environment, and not something independent, distanced or separate. The interdependency that entwines body and environment is revealed as a dance; as organism and environment we are in playful and continual negotiation with one another.

Yoga, as a practice, has the capacity to disclose, enhance and be sensitive to the dancing ecology that we are always already implicated in. Within yoga's ability to enhance our perception of movement and to intensify our awareness of interdependency there is, I contend, the potential to create a different relationship with the world. For, as I will show towards the end of this chapter, by relating to the body in a different way, we can in turn, alter how we inhabit the world. In order to unpack this new relationship of what we might call embodied and transformative agency, this chapter first makes reference to phenomenology through the work of the influential French philosopher Merleau-Ponty and philosopher David Abram^{xiv}, before proceeding to explore the anthropologist/sociologist Marcel Mauss's 'techniques of the body' and the new materialist thinker Carrie Noland's theory of agency.

My rationale for bringing this diverse group of thinkers together is based on the following logic. Where phenomenology, at least the type of phenomenology influenced by Merleau-Ponty, shows how the body is an

irreducible component of our 'being in the world', Mauss discloses how this experience of being in the world is imposed upon by a culturally specific process of inscribing the body with a series of congealed postures and bodily habits.^{xv} Noland, on the other hand, provides an excellent account of the transformation of these ingrained dispositions through embodied agency. This bodily shift permits a different, more conscious, way of existing in the world. Taken together these thinkers and methodologies provide a context or background that allows us to understand how yoga might provide us with an awareness of a dancing ecology, in such a way that we recognize and celebrate that we are a part of it. In my understanding, a 'dancing ecology' is not something we ever leave or depart from. Rather, the mistake we make is to forget this, and to think instead that we are an organism apart from the environment. In my view, yoga performs the ecological by attuning us to this dance, this connectedness of the body (see Chapters Three and Four). I begin this chapter by looking at the relationship of body and environment and considering how this relationship informs our perception of the world. To tease these meanings out, I explain the phenomenological concepts of 'life-world' (*Lebenswelt*), 'flesh', 'chiasm', 'immersion', 'skin', 'reciprocity', 'perception' and 'care'.

Two final points: First, if the writing is sometimes repetitious in this section, this is because the concepts I have listed above are densely interwoven and hard to separate out. Furthermore, in line with Merleau-Ponty's subjectivist phenomenology, they only make sense within a first-person attempt to account for them via a reference to one's own bodily experience. Inevitably, then, there will be a certain amount of conceptual

leakage and circularity in this part of the chapter, along with a certain amount of poetic reflection, a writing that comes from the body.

Second, although I do not always conceptualize its significance to yoga until the very end of the chapter, there is always a focus on the breath. By highlighting the reciprocity of breath and breathing, I intend to intimate how central it is to a phenomenological and eco-phenomenological way of relating to the world. The significance of the breath for a 'dancing ecology' is a theme that I pick up and develop more directly in Chapters Three and Four.

In contrast to positivist and intellectualist philosophies that would seek to provide an objective or scientific viewpoint of perception, phenomenology allows for a way of engaging with one's immediate subjective experience of the living world, or what has been termed an experience of the 'life-world' (*Lebenswelt*). In this respect, a specific body always experiences the life-world at a specific time and place. Abram posits the life-world as:

the world of our immediately lived experience, as we live it, prior to all our thoughts about it. It is that which is present to us in our everyday tasks and enjoyments – reality as it engages us before being analyzed by our theories and our science. The life-world is the world that we count on without necessarily paying it much attention, the world of the clouds overhead and the ground underfoot, of getting out of bed and preparing food and turning on the tap for water. (1996: 40)

As explained by Abram, the phenomenological life-world is the world of immediate experience, the world that I find myself immersed in before it is subjected to the logics of cognitivism and abstract knowledge. In the life-world, I go about my business without necessarily thinking about it. I am confronted, in a way, with the naturalness of the world. I do not question the

fact that there are clouds overhead or earth under foot. Things are simply there and I accept them as they are.

To be on the earth for a human being is to live in a life-world. This is how I inhabit an environment; it is also the place or relational site from which all experience arises. Phenomenology reacts against the Cartesian partitioning of mind and body, and instead promotes the idea of the whole organism (mind and body) being in direct and playful engagement with the environment. The body, for phenomenology, is the link that brings experience into being, and hence perception. The centrality of the body to phenomenology is evident in the following passage from Abram where he draws heavily on the ideas of Merleau-Ponty:

If this body is my very presence in the world, if it is the body that alone enables me to enter into relations with other presences, if without these eyes, this voice, or these hands I would be unable to see, to taste, and to touch things, or to be touched by them – if without this body, in other words, there would be no possibility of experience – then the body itself is the true subject of experience. (1996: 45)

According to Abram's reading of Merleau-Ponty, our humanness, our life-world, is dependent on the body. If we did not have a body, we would not be able to experience. Importantly, though, the body is never an isolated instrument, some thing in the world; it is a corporeal body, a material body immersed in and communing with the materiality of its environment. The body is the link between subject and object. Abram states: 'Far from restricting my access to things and to the world, the body is my very means of entering into relation with all things' (1996: 47). To understand further the relationship between body and life-world, it is instructive to explore the writings of

Merleau-Ponty, with particular emphasis being placed on the ideas he developed in the latter part of his career.

In *The Visible and the Invisible*, the book he was working on when he died and which was published posthumously with copious editorial notes in 1964, Merleau-Ponty attempts to go beyond the somewhat abstract and fragmented description of our phenomenological being in the world that he gave in *The Phenomenology of Perception* (first published in French in 1945). The key notion in *The Visible and the Invisible* deals with what Merleau-Ponty calls 'flesh', and is explored in the chapter 'The Intertwining – The Chiasm'. According to Merleau-Ponty, flesh is not a property of the world, something that can be known or objectified; it is more akin to an element, something that we are always already inside:

The flesh is not matter, is not mind, is not substance. To designate it, we should need the old term "element", in the sense it was used to speak of water, air, earth, and fire, that is, in the sense of a *general thing*, midway between the spatio-temporal individual and the idea, a sort of incarnate principle that brings a style of being wherever there is a fragment of being. The flesh is in this sense an "element" of Being. (1968: 139; original italics)

What Merleau-Ponty is saying here is that to exist in the world is to experience a sense of what we call earthly 'style', and that the style or underlying ground of this ontology is designated as a type of flesh, a kind of invisible background or element that is a 'facticity' of the world. To be in the world, in other words, is to be part of its mysterious, elemental flesh:

[The flesh is] Not a fact or a sum of facts, and yet adherent to *location* and to the *now*. Much more: the inauguration of the *where* and the

when, the possibility and exigency for the fact; in a word: facticity, what makes the fact be a fact. (1968: 139-40; original italics)

As this explanation shows, the flesh of the world 'is not matter, in the sense of corpuscles of being which would add up or continue on one another to form beings' (Merleau-Ponty 1968: 139); rather, it is more accurately conceived of as an ontological element - by which I mean a fundamental element of being - that inaugurates and constitutes the placement of all things. This includes the orientation of my body, which for Merleau-Ponty, only knows the geometry of world by being in it.^{xvi} Flesh is the hidden facticity that allows things to appear, the invisible density of the world. Merleau-Ponty explicates this point when he says that the flesh of the world is what unites seer and seen, hearer and heard, toucher and touched. As is often the case with Merleau-Ponty, the artist, in this instance the painter, offers a privileged viewpoint into the intertwining fabric of flesh^{xvii}:

Thus since the seer is caught up in what he sees, it is still himself he sees: there is a fundamental narcissism of all vision. And thus, for the same reason, the vision he exercises, he also undergoes from the things, such that, as many painters have said, I feel myself looked at by the things, my activity is equally passivity – which is the second and more profound sense of the narcissism [...]. (1968: 139)

Care needs to be taken here. Narcissism, as Merleau-Ponty has it, is not a negative condition, as it is in psychoanalysis; on the contrary, narcissism is a fundamental aspect of existence itself. We touch and are touched by the very world in which we are mutually enveloped by and implicated in. Being is indivisible. Merleau-Ponty continues:

not to see in the outside, as the others see it, the contour of a body one inhabits, but especially to be seen by the outside, to exist within it, to emigrate into it, to be seduced, captivated, alienated by the phantom, so that the seer and the visible reciprocate one another and we no longer know which sees and which is seen. It is this Visibility, this generality of the Sensible in itself, this anonymity innate to Myself that we have previously called flesh, and one knows there is no name in traditional philosophy to designate it. (1968: 139)

In order to better describe this difficult concept, for which Merleau-Ponty insists that philosophy has 'no name', he introduces the idea of the chiasm, a word which in Greek translates as a crisscrossing, an 'X', an intertwining. To illustrate the chiasm, Merleau-Ponty, refers to a body touching itself, through the image of hands:

If my left hand can touch my right hand while it palpates the tangibles, can touch it touching, can turn its palpitation back upon it, why, when touching the hand of another, would I not touch in it the same power to espouse the things that I have touched in my own? (1968: 141)

This touching, in the first instance, of the hands touching themselves, and in the second, the hand touching the other, expresses an essential understanding of flesh. For when I am part of the flesh of the world I am the subject who, at the same moment, touches and is touched. At the end of 'The Intertwining - The Chiasm' Merleau-Ponty states that 'we do not have to reassemble them [subject and object] into a synthesis' (1968: 155) - rather there is only a relationship of intimacy, in which the subject finds itself in a relationship of what he calls 'reversibility' with the world (1968: 154). If this reversibility is an intimacy, then it is a strange intimacy, for while it brings me close to the world, it also highlights my apartness from it. Historian Martin Jay explains:

But although ultimately one, thus allowing the narcissism of vision, the flesh is not a specular unity or Idealist identity. Instead, it contains internal articulations and differentiations, which Merleau-Ponty struggled to capture with terms like dehiscence, separation (*écart*), latency, reversibility, and circularity. (1994: 319; original italics)

Jay allows us to see that although the flesh of the world is an element, most certainly, I am 'in', I never fuse with it. On the contrary, I maintain my bodily integrity, my 'difference', my 'dehiscence' (splitting). To lose my subjectivity completely would mean that no world could ever exist. In this extent, flesh, for Merleau-Ponty, is a material entity that connects me to other objects in the world as well as separating me from them. It is what, then, simultaneously joins me and keeps me apart. We are enraptured by the materiality of things, always caught up with them in a relationship of endless reversibility. In a phrase that has much resonance for this study, the phenomenologist Alphonso Lingis, who translated *The Visible and the Invisible* into English, ends his brilliant commentary on flesh by discussing it in terms of breath and breathing. Quoting Merleau-Ponty's essay 'Eye and Mind', he says: 'There really is inspiration and expiration of Being, respiration in Being...' (1968: lvi).

According to Merleau-Ponty it is imperative that we rediscover this reversible breathing, this respiration in the flesh of the world. For him, it has the potential to overcome the alienation that separates human beings from each other, and human beings from the world. Jay is particularly perceptive to the utopian dimensions of flesh in Merleau-Ponty's thought:

If the phenomenal field linking, but not fully uniting, lived body and natural body was based on the communication of the senses, so too the human *Lebenswelt* entailed reciprocity rather than conflict. Indeed,

the very bodily experience of being at once viewer and viewed, toucher and object of the touch, was an ontological prerequisite for that internalization of otherness underlying human intersubjectivity. (1994: 311)

For Jay, Merleau-Ponty's ontology of flesh posits a pre-reflective mutual interconnectedness linking both humans with humans and humans with things. There is no need to be frightened by the other, since the other is always in continual dialogue with us. Indeed without the other, there would be no world. We all share the same flesh. For Jay, Merleau-Ponty's ideas of flesh and chiasm provide the human subject with a bond in and to the world, that ties us to the natural environment in a pre-cognitive manner, and which also fosters a sense of participation and reciprocity. I will return to this notion of reciprocity later in this chapter when I explore its ecological consequences in David Abram's notion of ethical care. But before doing that, it is important to say a little more about how perception is inherently immersive in the thinking of Merleau-Ponty.

A key notion in this thesis – we might even think of it as a thread that binds my argument – is drawn from the phenomenological insight that subjects are not abstract bodies that perceive the world from a distance, but agents who are immersed in the world. As Merleau-Ponty observes, 'we perceive not as subjects standing over against objects, but as bodily agents in and of the world' (in Carman 2008: 26). Merleau-Ponty's usage of propositions is instructive here, and warrants being unpacked. By suggesting that we do not stand 'over' the world, Merleau-Ponty proffers a vision of relationality that first, avoids placing the human subject as inherently superior to the world it inhabits, and second, recognizes that the world is not a

standing reserve that merits our exploitation. In his relationality, Merleau-Ponty posits that we are of the world, fashioned out of it, immersed in it, creatures of the air and earth, always in contact with a materiality that infringes on us, and affects us. The social anthropologist, Tim Ingold, provides an apposite account of this immersion, when he states:

Like all other creatures, human beings do not exist on the 'other side' of materiality, but swim in an ocean of materials. Once we acknowledge our immersion, what this ocean reveals to us is not the bland homogeneity of different shades of matter but a flux in which materials of the most diverse kinds, through the processes of admixture and distillation, of coagulation and dispersal, and of evaporation and precipitation, undergo continual generation and transformation. (2011a: 24)

Perhaps in an attempt to remind the reader of the origins of the human being, and so to evoke a sense of what Donna Haraway calls our 'companionship' with other species (2008), Ingold compares Merleau-Ponty's notion of being in the world to being in water. We swim, he says in an 'ocean of materials'. Importantly, however, this oceanic material is not homogenous; rather, it is an opening on to difference itself. For Ingold, existence is a constant process of transformation and change. We move in the world as if in fluid. The world flows through us and we flow in it. As human beings, or as human animals we are, at all times, in a state of immersion. But what does this mean in bodily terms? The environment humans occupy does not stop at the flesh, nor is it underfoot and at the command of our bodies. Rather, the environment we swim amongst is an ocean of mutual contact. What is outside us, is in us, and what is inside us, is also outside us - the body is porous, affective. Ingold states that, 'Wherever there is life and habitation, the interfacial separation of

substance and medium is disrupted to give way to mutual permeability and binding' (2011a: 120). Ingold explicates this permeability and binding through the process of respiration. It is through the breath, via the process of breathing in and out, that one can experience the exchange of materiality; the porosity of the body.

The porosity of the individual body in its immersion in a world of substances and surfaces transforms the significance of skin. Although the skin is a container of the body, it also takes things in. The skin is a sensory organ that responds and adapts to the environment. It functions as a selective barrier through which the environment is welcomed and expelled. The somatic practitioner Deane Juhan provides an apposite account of how the skin functions as both obstacle and point of exchange:

On the one hand, the skin is a barrier, effectively containing within its envelope everything that is ourselves and sealing out everything that is not. On the other hand, it is an open window, through which our primary impressions of the world around us enter into consciousness and structure our experience. (2003: 21)

Juhan points out how the skin is an interface between body and environment, how through it we meet the world. This porosity of the body is further exhibited through the orifices of mouth and nose that accommodate permeability and exchange through the breath. The breath sustains life; it nourishes both body and environment in the reciprocal exchange of within and without. These qualities of permeability reveal the body as contained, but not sealed, caught up in and part of a life-world that reflects an ecology of systems overlapping and in continual generation and transformation (see Chapters Three and Four for a more detailed discussion of this point).

The sense in which the life-world is maintained by a complementary material process of inhaling and exhaling – taking the world in, and breathing myself out to it - is close to what the eco-phenomenologist David Abram recognizes as ‘reciprocity’. In his influential text *The Spell of the Sensuous*, Abram acknowledges the reciprocity of organism and environment, self and world, when he writes:

the boundaries of a living body are open and indeterminate; more like membranes than barriers, they define a surface of metamorphosis and exchange. The breathing, sensing body draws its sustenance and its very substance from the soils plants, and elements that surround it; it continually contributes itself, in turn, to the air, to the composting earth, to the nourishment of insects and oak trees and squirrels, ceaselessly spreading out of itself as well as breathing the world into itself, so that it is very difficult to discern, at any moment, precisely where this living body begins and where it ends. (1997: 46-47)

Abram, as with Ingold, uses metaphors from the ‘natural world’ to highlight our interdependence on and entanglement with the world. Although, where Ingold expresses our being through a sense of liquid fluidity, the language of Abram is more directly influenced by Merleau-Ponty’s notion of the ‘flesh of the world’ and emphasizes the role of the corporeal or carnal being.

In the citation above, he defines our relationship to the world as being like a living membrane, something connected that implies ‘sustenance’. In his view, the sensing body, the phenomenological self, is a body that is nourished and supported by the world. Literally and metaphorically, the earth feeds us, and we in turn feed it through our respiration - our breathing in and out. Abram underlines how we contribute to the living things that surround us – insects, oak trees, compost and soil. In the final sentence of the paragraph cited, Abram highlights the way in which reciprocity, troubles distinctions

between self and other. To be a reciprocal self is to be porous, to be a body always in and with other bodies, to not know where one ends. As subjects in an environment, we are unable to step outside or avoid it. I leave a trace of me in what I touch and there is a trace of what I touch in me. Breath, in the process of respiration, exemplifies this trace of reciprocity. By the act of breathing, the air that is outside enters and that which is within me disperses beyond the containment of my body. By this process of reciprocity, it can be understood that we are in the environment and the environment is in us - the air we breathe, the ground we walk in, the vibrations and rhythms that pulsate through us. The liminality of surfaces is a landscape of traces, the world and our relationship in it is a process of knitting and enmeshment. Ingold refers to reciprocity as a kind of stitching, a weave:

To inhabit the open is not, then, to be stranded on a closed surface but to be immersed in the incessant movements of wind and weather, in a zone wherein substances and medium are brought together in the constitution of beings that, by way of their activity, participate in stitching the textures of the land. (2011a: 121)

This stitching of land and beings that Ingold refers to turns the vacuous space between sky and earth into a field of happening or an 'ocean of materials'. When we inhabit the world, there is, as Ingold alludes to, a dynamic binding, an active sense of continual emergence. A good way of understanding this binding is to think of our participation in the world as a form of weathering. In French, weather translates as *le temps*, that is to say both as time that passes and as climate.^{xviii} To be in the world, then, is to be part of the weather, to realize that one is always temporal, and that this temporality is always transforming us and the world. From Ingold's perspective our

phenomenological notion of 'being-in-the-world' is inherently weathered, dynamic, emergent:

the world emerges with its properties alongside the emergence of the perceiver in person, against the background of involved activity. Since the person is a being-in-the-world, the coming-into-being of the person is part and parcel of the process of coming-into-being of the world. (2011b: 168)

In phenomenology 'being-in-the-world', the relationship between being and world is irreducible. The emergence of body and world are concurrent, and thus in this emergence we affect the world and the world affects us. It is through the body that we experience this emergence and hence, our relationship with the world is one of perception. The reciprocal body is always a weathered body, a body in time.

What can be concurred from phenomenology, therefore, is that in the act of perception both body and environment, perceiver and perceived, are animate, alive. As Ingold explains, again with reference to weather:

Rather than thinking of ourselves only as observers, picking our way around the objects lying about on the ground of a ready-formed world, we must imagine ourselves in the first place as participants, each immersed with the whole of our being in the currents of a world-in-formation: in the sunlight we see in, the rain we hear in and the wind we feel in. (2011a: 129)

It is through an active participation with 'a world-in-formation' that we perceive. Perception is based on the materiality of other entities, for perception does not occur in my head because I imagine a tree to exist in an act of idealism. Rather, I am able to perceive the tree because it is rooted in the materiality of the world as a thing. My perception of the tree is rooted, but

as Ingold's quote brings out, it is not of 'a ready-formed world'. The entities of our perception are not static and lifeless, rather they are animate - the tree beckons to me and perception occurs out of a mutual interchange. Abram sees perception as implicitly empathetic, a way of making connection:

In the act of perception, in other words, I enter into a sympathetic relation with the perceived, which is possible only because neither my body nor the sensible exists outside the flux of time, and so each has its own dynamism, its own pulsation and style. (1997: 54)

The 'sympathetic relation' of perception referred to by Abram – what he calls 'animateness' - establishes an ethic of care. Drawing out the ecological potential that was always buried in Merleau-Ponty's embodied model of perception, Abram indicates that:

If the surroundings are experienced as senate, attentive, and watchful, then I must take care that my actions are mindful and respectful, even when I am far from other humans, lest I offend the watchful land itself. (1997: 69)

Abram's language is an ethical language, a language of respect. In it, he expresses how a fleshed encounter with the world decentres the human perceiver and places him/her in a continuous dialogue with the alterity of the world. Not only is the world animate, but as perceiver, I participate in it. I am as bound to it as it is to me. To harm the world, then, is to harm the self, and vice versa. The more I bring this dialogue between my body and the environment into consciousness, the more I am aware of reciprocity between them. The more, in other words, I care. Abram explains:

Whenever I quiet the persistent chatter of words within my head, I find this silent or wordless dance always already going on – this improvised duet between my animal body and the fluid, breathing landscape it inhabits. (1997: 53)

For me, it is in this act of quieting ‘persistent chatter’, where the practice of yoga takes place. By stilling the mind through the somatic logic of postures or asanas, yoga opens us to the dialogue between body and environment. In doing so, we are able to recognize that we are engaged in an immanent and ethical relationship with the environment that we are part of. In eco-phenomenological terms (and as well as Abram, we might also want to cite other eco-philosophers such as Charles Brown and Ted Toadvine (2003)) the root of our current ecological crisis can be traced to our tendency to posit ourselves as an isolated species. This produces a sense of ecological alienation. If we understand ourselves to be separate from the world, we tend to lose our respect for it. Hence the need in phenomenology – and it is an ethical need – to overcome this separation and to learn to merge with the world, to become part of its flesh. As I have shown in my readings of Merleau-Ponty and Abram, the body is key to this process of ethical immersion in the environment, this reconstitution of what we might call ‘ecological consciousness’, an ethics, that is, of environmental care.

Through a conceptual framework that stresses such things as ‘flesh’ ‘reciprocity’, and ‘care’, I have tried in this section to show how the eco-phenomenology inspired by Merleau-Ponty, posits an inherently ethical relationship between human perceiver and environment. However, as is made apparent in the current eco-crisis that we find ourselves in, this relationship has been obscured. In order to recover it, we need to understand what gets in

the way, and then devise strategies for undoing these obstacles. With this in mind, I want to use the remainder of this chapter to consider the social and cultural practices that prevent our participation in a dancing ecology, before then going on to offer a model of corporeal resistance to these alienating obstacles. In this way, I hope to lay the groundwork for my own interest in positing yoga as a technique for cultivating ecological perception through a process of bodily emancipation.

As beings in the world, we are not simply individuals relating to the world in some ahistorical nexus. On the contrary, we are subjects of and to a wider, more encompassing network of bodies referred to as the social and displayed in and through the specific frameworks of the culture we find ourselves in. As I use it, culture is not simply an abstraction of how, as a community, we perform meaning for ourselves and each other. Rather culture, as I see it, writes itself into the domain of the body. The social is incorporated into the body through learned motor techniques. It is demonstrated by the way we perform tasks, move in space and respond to the environment through habitual and acculturated responses.^{xix} This impression on the body of learned techniques was studied and developed by French anthropologist/sociologist Marcel Mauss. The primary contribution emerging from Mauss's observations is that in order to understand 'techniques of the body' such as walking or swimming, attention must be paid to the triple considerations of the social, biological and psychological elements that make it up, what Mauss refers to as the 'total man'.^{xx} Carrie Noland recognizes that Mauss was neither the first nor the only thinker drawing attention to the cultural significance behind corporeal movement and its location. But she

makes a point of highlighting the importance of his particular approach.

Noland writes:

What distinguishes Mauss's approach is that he was not interested in the perfection of the body through corporeal practices, or even in discovering a "natural" body that certain carefully developed corporeal practices might hope to respect [...]. Mauss's project was neither aesthetic (he did not aspire to free and celebrate the body, as did Isadora Duncan) nor instrumental (he was not interested in determining, as were the industrialists, how best to exploit the kinetic energy of human beings). Rather, as an anthropologist, he sought to understand how a physiological given, the human body, becomes a classed, gendered body – to wit, a social fact – through the act of gesturing. (2009: 18-19)

As opposed to modernist dance practitioners such as Isadora Duncan or industrialists (whose 'science' was aimed at understanding the efficient, factory body), Mauss was concerned with how corporeality or gesturing is a mode of identity formation, a type of bodily constructivism. He wanted to know, in other words, how the individual body was produced through an encounter with culture. To investigate this process of somatic production, Mauss was not interested in relying on abstract theory; rather, he depended upon self-deduction, theorizing from personal experience. Noland confirms that for Mauss: 'interest in bodily techniques was awakened not by the contemplation of artifacts and the skilled bodies that made them but rather by his own reflections on the movements his own body could make' (2009: 23). And in this context, it is certainly true that Mauss begins his influential text 'Techniques of the body' with personal anecdotes pertaining to swimming, digging and marching. Consider for instance the first line of the following citation referring to the specificity of 'digging':

during the War I was able to make many observations on this specificity of techniques. E.g. the technique of *digging*. The English troops I was with did not know how to use French spades, which forced us to change 8,000 spades a division when we relieved a French division, and vice versa. This plainly shows that a manual knack can only be learnt slowly. Every technique properly so-called has its own form. (Mauss 2006: 79; original italics)

In 'Techniques of the body', which originally appeared in 1935, Mauss investigated how the body is produced by specific gestures that are inherent to a given society. Like any tool, Mauss considers the body as an instrument that can be modeled and manipulated for specific purposes: 'The body is man's first and most natural instrument. Or more accurately, not to speak of instruments, man's first and most natural technical object, and at the same time technical means, is his body' (2006: 83). As the word technique implies, this body is not natural; it is something that is acquired over time and with practice. Mauss writes:

The child, the adult, imitates actions which have succeeded and which he has seen successfully performed by people in whom he has confidence and whom have authority over him. The action is imposed from without, from above, even if it is an exclusively biological action, involving his body. (2006: 81)

Here Mauss shows that techniques that produce the body are practices that are learned and imposed from without. That is to say, they are bound up with 'authority' – structures of power and constraint. In his view, the transferal of gestural poses, corporeal dispositions are conveyed through a strict education passed on by teacher to student. Here learning or pedagogy is not associated with bringing something new into being, but rather it is directed at perpetuating an existent code that reconfirms the gesture's hold on society.

As learner in this code, we have confidence in the teacher; there is a desire to cooperate and to achieve what is being asked of you. What is being taught is 'imposed from without' and therefore carries with it a sense of altering what the body would otherwise perform on its own.

'Techniques' of this kind produce another dimension to the idea of intersubjectivity. Not only do we experience the world by being touched by its flesh, as Merleau-Ponty suggested, but our 'way' of touching is historically contingent. Carrie Noland writes:

for Mauss touch is always framed by specific bodily techniques – gestures, ways of ambulating or bearing weight – requiring movement. [...] for him, touch presupposes a specific way of touching. [...] Touch, then, does not occur in a vacuum but establishes (and is the result of) culturally differentiated modes of kinesis. Touch isn't simply touch, but soft touch, rough touch, consistent touch, or rhythmic, punctual touch, all of which imply and stimulate specific ways of moving, using the muscles, and then feeling the way these muscle sets have been used. The social, or intersubjective, element of the tactile contact inheres not only in the fact of being touched – a universal precondition for the emergence of subjectivity – but also in the way one is touched – a culturally differentiated precondition for the emergence of subjectivity. (2009: 25)

For Mauss then, acts requiring movement can be considered through the repertoire constructed by society, rather than pure organic impulses issuing forth from the body, as Merleau-Ponty seems to imply. In Mauss's view, movements are acquired over time and become habitual responses to such an extent that they hide their historicity. The body seems to perform them as if they were spontaneous. History has been forgotten, naturalised. In this way, 'culturally differentiated' ways of moving are written into the muscular anatomy of the body. When I sit, the particular society that I belong to prescribes for me a way of doing so: it might be in a squat, on the floor, on

a chair legs crossed, feet planted on the ground, leaning forward, leaning back – all of which are variations in the technique of sitting. Society determines the technique and the learnt technique determines my body. I have been sculpted in a gestural economy that is so intimate to my body that it becomes automatic in its performance. As Noland affirms:

Our bodies have become sculpted in such a way that the acquired technique now feels more “natural” than what we did before. Blind to the contortions demanded, we no longer sense kinesthetically the impact of our movements on our tendons, ligaments, and bones. (2009: 30)

Corporeal impressions and gestural techniques, therefore, do not simply shape the material body, they at times override or distance us from our kinesthetic senses. Instead of seeing the body as a possibility, something that is always open to change, we experience it as a fixed entity, something that is defined, a type of non-changing substance. This shutting down of corporeal potential occurs because the techniques that are reinforced by society, like class structure or gender relations, always aim at reproducing ‘an action which is effective and traditional [...]’ (Mauss 2006: 82). The tragedy here is that the body does not discover itself – its own joy, pleasure and sadness; rather it projects most effectively what society intends of it. Take for instance, Mauss’s reference to the technique of walking specific to Maori women, termed ‘onioni’. In this technique, the Maori female adolescent is taught to acquire ‘a loosejointed swinging of the hips’ (2006: 81). This technique for walking may not reflect a sense of kinesthetic pleasure for the performer, but is a symbol of femininity and is admired by the Maori. What the gesture signifies is ranked with such importance within Maori society, that the female

walker is required to separate the reality of her bodily sensation from the gestural technique that she has inherited or acquired. It is not the sensate that drives the walk, in this instance, but a persuasive culture.

However, Mauss did recognize that this persuasiveness of culture is also open to contestation. There are subjects who do not submit to the learned technique or who choose to mark it in their own way. This is where Carrie Noland's theory of embodied agency inserts itself into contemporary debates about the body. As she indicates in her discussion of Mauss:

And there are subjects who do not manage to master even the most "durably installed" techniques of gender, subjects who continue to thread out of their own kinetic dispositions gestural sequences that do not conform to traditional practices, that do not efficiently support the categories a gestural regime is constructed to maintain. (Noland 2009: 30)

The subjects referred to here, by Noland, challenge in some way the reality imposed by Mauss's bodily techniques. They do so by reasserting a sense of bodily agency. In her book, *Agency & Embodiment: Performing Gestures/Producing Culture*, Carrie Noland looks at how the embodiment of culture posits itself as both a discipline and departure for individual human agency. She posits that it is through the gestural body that we have the potential to either participate or resist the production of culture. This potential is realized through agency, which Noland defines as 'the power to alter those acquired behaviors and beliefs for purposes that may be reactive (resistant) or collaborative (innovative) in kind' (2009:9). For Noland, agency is an active quality, a way of transforming and opening up acquired behaviors. From

Noland's perspective bodily agency is dynamic and volatile; it disrupts the repetition of corporeal history.

The question is how might this agency be activated? Mauss was aware that whilst the social is imprinted on and in the body, there was also the possibility of challenging these imprints by training the body to move in an alternative way. Yoga was one such practice that was of interest to Mauss. Noland reveals that in 1901, Mauss wrote an article entitled 'Yoga' for La Grande Encyclopédie (2009: 35). Although the article, as read by Noland, focuses on the written texts and philosophy of yoga, Mauss does pay some attention to the practice of bodily postures (*'exercices mystiques'* and *'pratiques'*). Noland articulates:

even the brief encyclopedia entry testifies to the fact that Mauss had achieved an understanding of yoga as more than mere words: he knew that this religion, as described in the Yoga Sutras and Upanishads , involves a belief system transmitted through written texts and verbal formulas (collective representations), and through bodily practices, such as controlled breathing and held postures, capable of harnessing physical energy for spiritual goals. (2009: 36)

Here Noland indicates that Mauss understood yoga as a practice for engaging the body in a way that encompassed and physicalized its textual belief system. In the practice of yoga, words are grasped not just in the logics of the mind, but exist as embedded meaning in the body, that is, in gestures. As such, the body in yoga can be seen not just as performing the text, but as something that stands in for the text or perhaps even is the text. Noland goes on to say:

Through the study of yoga, Mauss realized that the ways the body moves are, themselves, a belief system. That is, the process of moving into and through postures is not the corporeal *translation* of a belief or idea; rather, that the process *is* the belief or idea as it produces a certain stance toward the world, the self, and the relations linking the two. (2009: 36: original italics)

Noland's reading of Mauss underlines how the bodily practice of yoga is not the translation of a belief system, more exactly it is a belief system in its own right. This has important consequences for my attempts to develop a dancing ecology. It shows that a dancing ecology is more than a matter of asking the body to respond to abstract ideas. On the contrary, the body discovers a dancing ecology through its physical participation in the world. By performing postures or asanas, it attunes itself to - and hence enhances - its sensory awareness of being in the world. As I explained in the section on eco-phenomenology above, this knowledge has the potential to produce a sense of reciprocity with the animate world that in turn fosters an ethic of bio centric care.

Yoga propels us to recognize the dancing ecology that we are, at all times, embedded in. It does so by inviting the mind to participate with the gesture of the body, so that the whole body is present to and partaking in mindful movement. In the practice of an asana I am attempting to remain mindful, listening with my embedded body and moving from the stimuli it provides. For instance, when I am instructed to extend my arms overhead from a supine position, I perform this intention mindful of the sensory information created through my movement. As a being in the world, the sensory information created is dependent on the awareness that I am always moving in an environment, for I sense through the recognition of difference. I

am aware of the room, my weight, my location in this space. I feel the warmth and presence of other bodies around me. I am not a body free floating in some anonymous or abstract space. Rather at all times I am orientated in my environment, working with and against it. I become aware of gravity, of the pressure exerted upon me, of the fluctuations in effort as my arms move through the trajectory of an arc. I am aware of how my arms rest on the surface of the floor – the areas of contact and non-contact between body and ground. There is an immense initial effort to lift my arms from the floor, away from the holding force of gravity. Then, an ease in effort as my limbs draw towards verticality and yet, the building force as they, again, move closer towards the vicinity of the floor overhead. I am aware of how these movements of the arm are not isolated, but rather are filtered through the system of my body – how, for example, the front of my body lengthens with this movement and my contact with the floor shifts, how my breathing alters. In this attentiveness to the body, this consciousness of sensation, movement can be felt as emerging forth from a relationship of body in environment, rather than from socially determined techniques that I perform unthinkingly and automatically.

This short depiction of heightened bodily consciousness produced through the practice of yoga illustrates Mauss's contention that bodily inscriptions can be challenged. Mauss believed that resistance always accompanies power. For Mauss, the very act of establishing certain techniques opens up a channel for dissent or opposition. In other words, the individual can either perform culture or challenge it through their technique of movement. Noland addresses this paradox established by Mauss:

Mauss helps us to unearth a striking paradox: *culture, once embodied, produces challenges to itself*. His work reveals that culture requires individual moving persons to act out its imperatives, but that by acting out these cultural imperatives, individuals reproduce culture in distinctive and potentially subversive ways. (2009: 42; original italics)

Noland's comments reveal the body as both a tool of society and a form of agency, hence a means through which the subject can instate difference into how she/he relates to the world. Therefore, as I have hopefully shown, the body is something that can both perpetuate social imperatives and create new ways of being. The necessary embodiment of cultural beliefs means that the body, by experimenting with different corporeal practices, can allow itself to become something other. Put simply, the body can be used to emancipate the subject and open it up to alternative modes of existence.

Through Mauss's techniques of the body, we are able to discern how culture disciplines and limits the ability of the body to partake in a dancing ecology by prescribing non-flexible patterns of movement and response. However, by experimenting with alternative corporeal practices, one can foster in the most material of ways a new way of being in the world. It is in this way that yoga instills the body with a sense of agency, cultivating a capacity to engage with movement and, in turn, dispel set limitations and pre-determined gestures. Because movement creates perception, as Merleau-Ponty suggests, if we are able to free up our patterns of movement, then, in turn, we are able to emancipate how we perceive the world. It is in movement – bodily movement - therefore, that we find the potential to cultivate a new way of inhabiting the world.

Chapter Three: Relationships, shifts and sustainability

Whilst the previous chapter developed an understanding of how we live in the world, through a phenomenological and social perspective, I now want to compliment that enquiry using Gregory Bateson's notions of ecology. I do so in order to further tease out the connection between yoga and the dancing ecology I am pursuing. Bateson contends that:

Nobody knows how long we have, under the present system, before some disaster strikes us, more serious than the destruction of any group of nations. The most important task today is, perhaps, to learn to think in the new way. Let me say that *I don't know how to think that way.* (2000: 468; original italics)

Not only does he assert he does not know how to think that way, but continues by stating that:

The step to realizing – to making habitual - the other way of thinking – so that one naturally thinks that way when one reaches out for a glass of water or cuts down a tree – that step is not an easy one. (Bateson 2000: 468)

Gregory Bateson's insights into the ecological crisis that we are currently embroiled in is noteworthy for the focus he places on shifting habitual patterns of awareness and developing a greater mindfulness that would allow us to exist differently in the world. Although he realizes that such a shift will not be easy to achieve, he is adamant that the primary objective is to develop new forms of thinking. For Bateson, this is dependent upon our ability to cultivate a greater sense of flexibility, a pedagogy, we might say of fluidity, in which we emancipate ourselves from dangerous but engrained patterns of thinking,

perceiving, responding, and acting. Tellingly, and this is perfectly consistent with his pedagogical aim, Bateson gives us little indication of what this 'other way of thinking' might consist of, or indeed how it might be achieved. The onus, in other words, is on us, to experiment with our own methods and practices. In this chapter, I respond to Bateson's task of 'learning to think in the new way' by engaging with it through a bodily practice that corresponds to his ideas of ecology: namely, yoga. By rethinking Bateson's notion of 'ecology of mind' in terms of the body, I aim to show how the practice of yoga is a way of cultivating a sustainable mode of corporeal living.

My overall aim in this chapter is to apply Bateson's ideas about the flexibility of systems to the systems of the body. As I explain in more detail below, for Bateson, flexibility is a key component in the survival of systems at large; he remarks 'the kinds of structures that last are the ones that have enough flexibility that allow for shifts' (in Bateson 2010, on DVD). I approach Bateson's notion of flexibility in terms of an everyday body; a body that is able to make thinking and movement correspond in a mindful way. The shifts he mentions are, for me, to be embedded in our movement and approach to the everyday tasks of life. In the previous chapter, I pointed out, through Mauss, how bodily techniques are socially imposed and become incrustated in mindless habit. Through Bateson, I intend to challenge this inflexible disposition by calling for a form of movement that issues forth from fluidity, an emancipation that becomes habitual. What is required is a shift in how we move and inhabit the body; producing movement that is not constrained by habitual responses, but cultivated by a body that engages with the choices it makes and the processes and play involved in performing tasks. As I will show in this

chapter, yoga cultivates this shift. It is a discipline that opens the body up to a range of movement by exploring and challenging boundaries. In the process of attending to movement, the yoga practitioner is granted further access to the vast potentials implicated by the choices s/he makes. These potentials correspond, not simply to the body, but also to our relationship with the environment. Since movement, as Merleau-Ponty has it, is concurrent with perception, it impacts on how we inhabit our world. If we attend to how we move, we are also attending to what we move amongst and with and because this relationship is established out of experience we provide ourselves with a different way of thinking about our world.

Choreographer Michael Kliën has been active in applying Bateson's ideas to contemporary dance. His dance or freeing of movement, for instance, is a direct, physical response to Bateson's systemically inflected reading of habit, flexibility and stability. Throughout the section, I turn to Kliën as a way of exploring how the body is a system within a larger structure or pattern that both connects with and constitutes it. Kliën et al state, 'Patterns are everywhere [...] patterns govern our lives' (2008: 11). In line with Bateson's ecology of systems, the patterns that Kliën refers to are not static, rather they are in continual flux – they re-organize, learn, evolve, transform, undo, create – they are how we wake up in the morning, the flicker of light, the turning of a page. Through choreography Kliën is seeking out connections, linking our movements to a wider realm of patterns. As he sees it, dance is, above all else, 'A search that aims to imagine and formulate a vivid awareness of the profound and deeply ambiguous structures and dynamics working in man and nature' (Kliën, Valk and Gormly 2008: 11). What Kliën et al are seeking here

is an expression of the body that remains vital, one that responds to the world as a process of living. For Kliën, the body is not to be defined by its habitual action; rather, the body is to be attuned to new perception, novel experience.

Kliën et al equate the vitality of patterns with dance`:

In this dance lies a world full of interaction, relationships, constellations, dependencies, arrangements and ecologies. To enquire into this reality of changing patterns and the forces at play, is to enquire into the choreography of life, examining what makes us dance and why. (2008: 11)

The 'reality of changing patterns and forces at play' that Kliën et al speak of here gestures towards the dancing ecology of this thesis – it is a world in continual improvisation with everything in it and around it.

However, where Kliën is a dancer and choreographer, I want to transpose and extend his insights into how we might relate to our environment and the eco-systems that constitute it to everyday bodies, those bodies that go about the more mundane business of living in the world. In what follows, I outline the constituents of what a dancing ecology might be through notions of relationships, shifts and sustainability. These headings help form a nexus between Bateson's 'ecology of mind' and the dancing ecology I am pursuing. The section 'Relationships' establishes how the patterns and connectivity unifying all things function in terms of the 'organism plus environment' equation that is so fundamental to Bateson's systems theory. 'Shifts' goes on to introduce Kliën's choreography and dance as a means to challenge habitual actions and to show how a new way of living in the world might be achieved. 'Sustainability' explores Bateson's concepts of flexibility, health and survival. I then go on to transpose these ideas, laid out by Bateson and Kliën,

onto yoga with the intent of highlighting the ecological potential inherent in its practice. In doing so I reflect on shifts through Peter Blackaby's terms of appropriate and non-appropriate movement patterns. Then turn, lastly, to consider sustainability in terms of breath.

Relationships

What pattern connects the crab to the lobster and the orchid to the primrose and all the four of them to me? And me to you? (Bateson 2002: 7)

Bateson's questions are rhetorical here, and based on the premise that the world functions through patterns, connections and interdependencies. Bateson's vision of the world, his ontology, is rooted in relationships, paying attention to how seemingly disparate things interact and studying what conditions allow for sustainability, that is, survival. His world is vital; it is continuously re-defining itself and fluctuating between moments of instability and balance. In such a world, one knows things in relation to others, never as things in themselves. Here, the inquiry is one of complexity and unity; it is founded on patterns and values processes, on a world that it is living, growing and re-defining itself all the time.

We can practice Tadasana from Bateson's perspective by experiencing the asana in such a way that the circuits of the body become aware of the play of systems constituting the environment that it is part of. Here, it is not my body performing a posture by rote movement; rather, when I adjust my body I am actively engaged with what Bateson calls 'interlocking circuits of

contingency' – those fluctuating, momentary flows of energy and information that are connected and operating simultaneously within and outside of my body. If on the contrary we attempt to approach Tadasana as something defined and contained, we remove the contingency of forces at play and engage in the posture as a fixed practice - a posture that will be the same every time we come to it. In this instance, there is no learning, engagement or dialogue with the vitality of the world.

In their Editorial Introduction for the *On Ecology* edition of Performance Research, Stephen Bottoms, Aaron Franks and Paula Kramer draw attention to their chosen title. They explain that they opted to shift from the term 'environment' to that of 'ecology', because the latter reflected a myriad of relational and interdependent networks. They explain:

In ecological terms, the human is not central but simply a constituent element. Dependent for our very survival on water, weather, oxygen, animals, vegetables, minerals and each other, we need to think in terms of responsibility but also of humility. (Bottoms, Franks and Kramer 2012: 2)

As 'a constituent element', humans are but a mere part of the overarching and overlapping networks that create and sustain life. 'Responsibility' and 'humility' are implicated in the system Bateson calls 'feedback loops' that bind ecology.^{xxi} These feedback loops, or flows of information, guide adaptive capacities that either serve to regulate deviations towards stasis or amplify them until change is imminent. As a constituent element in these systems humans are not isolated and contained, but embedded in a matrix of complexity in which informational flow is reflected in one and all systems. This is why Bateson makes the point of referring to 'organism plus environment',

as the body and its actions are enmeshed in ‘interlocking *circuits* of contingency’ (2000: 146; original italics). The ecological is not a zone we travel to, nor is it something that we need to return to as expressed in the writings of eco-phenomenologists such as David Abram. Rather it is ever present, ever transforming, in the complexity of systems that produce us, and our world, simultaneously. Bottoms *et al* note:

For *what may be ecological* can be traced, moved with and thought about in the city as in the woods, in the body as in the mind, across a river and within it, at home and in outer space. (2012: 3; original italics)

As the citation above underlines, ecology is not something we can remove ourselves from or consciously opt out of. It is an equation or code, implying that when one factor within the matrix changes, all relationships alter and the sum or meaning differs. Bateson refers to the complexity of these relationships as an ‘ecology of mind’ (2000), an ecology of self-organizing and auto poetic organisms and materialities.

The ‘mind’ for Bateson is not the conventional idea we might have of a corporeal brain existing in human beings alone.^{xxii} Rather, he considers ‘mind’ as the interaction between parts; it is an activity equated with thinking, in as much as information and knowledge are gathered and utilized to inform the system. The fundamental notion behind Bateson’s theory of mind then is based on the differentiation and the interaction of parts. The interaction of parts occurs through circuits or feedback loops, so that information gathered circulates throughout the system. This is the ecology of mind; it is a system that cannot be understood through a subdivision of parts, but rather it is comprehended as a unity of relationships. This unity is a ‘nesting of minds

within minds, within minds' (Charlton 2008: 39).

Bateson's concept of 'mind' requires us to open outwards to a larger framework of understanding. The eco-theorist Noel Charlton, in response to Bateson's theory of 'mind', asks the following questions:

Are we really a single entity, controlled and managed by a conscious internal mind? Are there not entities within our bodies that have their own independence? Are our "selves" not significantly shaped and altered by larger physical and social processes that can also be seen as minds? And do we not participate in these larger processes in ways that suggest that our self is much wider in scope and influence than we think? (2008: 33)

By asking such questions we begin to recognize the extent to which Bateson's enlarged and expanded idea of mind functions. 'The mental world – the mind – the world of information processing – is not limited by the skin' (Bateson 2000: 460). Rather, the environment, too, is mind, for it also has the capacity for processing information and self-organizing:

The complex processes that permit the production of our food (the weather and solar energy, soil processes, nutrients, and chemical exchanges), the natural systems that provide breathable air, drinkable water, warmth, clothing, and the experiencing of beauty are also to be seen as minds. The existence of such processes is a necessary condition of our ability to continue living and so, as systems depending on information transfer and the utilization of knowledge (in Bateson's wide senses), they can be seen as processes comparable to the minds we conventionally regard as being resident in our bodily person. (Charlton 2008: 35)

It is important to stress that for Bateson, 'mind' does not necessitate consciousness. Mary Catherine Bateson, daughter of Gregory Bateson and Margaret Mead, comments on how for her father, 'The sea was the sea of the mind, with consciousness only a shallow layer at the top' (Charlton 2008: 32).

Consciousness, therefore, is to be understood as a small portion of our knowledge. This way of thinking transforms our understanding of perception and awareness.^{xxiii} Henceforth perception is not associated with the thought processes of a solitary subject who processes information and thus makes sense of the world in the manner of a phenomenologist. Rather perception and awareness are now figured as modes of interaction in which 'systems' or 'minds' are receiving and responding to stimuli. Bateson does not believe it is necessary for the system to consciously recognize stimuli in order for it to be responsive to it:

An earthworm will shrink away from a touching hand, plants respond to differences of temperature, light, shade, nutrition, humidity, or water supply. Our bodies respond to awareness of temperature change by perspiring or shivering. Awareness of carbon dioxide excess in our lungs and blood supply regulates our breathing. (Charlton 2008: 32)

The examples above demand a 'mind' receiving and reacting to information, but do not require consciousness in order for the responses to be implemented.

Bateson accounts for flows of information and responsiveness amongst systems by introducing a model of circuits and feedback loops. In such a model, action is never singular or isolated, but implicated in a network of circuitry. Nor can the system in which that action or response takes place be extrapolated. Systems must be understood within a complexity of other networks; that is, in the context of relations, as both contained and container or, reminiscent of Charlton's words above, a parceling of systems within systems, within systems. Speaking about the body, Charlton highlights this systemic nexus by way of cells and bacteria:

Our bodies are made up of microscopic, indeed, microcosmic, beings: many billions of cells, enormous numbers of bacteria. Our cells divide and multiply, grow, die, and are replaced largely according to their own internal genetic knowledge, dynamics and process interactions. [...] All of these are self-organizing entities, essentially independent beings that can (and do) enter and leave our bodies. We are walking communities of billions of tiny beings, which cannot flourish without being *in* us and without which we cannot live. (2008: 34; original italics)

Here Charlton considers the complexity of systems operating within the body. As he has it, the body is constituted by streams of self-organizing entities in constant flow. These entities are not contained or controlled by the body; they enter and leave on their own terms, and provide a series of feedback loops that tie organism to environment and environment to organism. Failing to incorporate this unit of totality - 'organism plus environment' - into our thinking risks the survival and sustainability of humankind. As Bateson clarifies:

The flexible environment must also be included along with the flexible organism because [...] the organism which destroys its environment destroys itself. The unit of survival is a flexible organism-in-its-environment. (2000: 457)

When humankind attempts to remove itself from this unit of survival by imagining itself as an isolated, superior species, it places itself against environment. This spurious and impossible act of separation (as Charlton has pointed out the body is always to some extent foreign, a meeting of strangers) produces what Bateson terms 'an ecology of bad ideas' (2000: 492). What this ecology of bad idea consists of is explained in Bateson's famous scenario of Lake Erie being driven mad by human behaviour:

When you narrow down your epistemology and act on the premise “What interests me is me, or my organization, or my species,” you chop off consideration of other loops of the loop structure. You decide that you want to get rid of the by-products of human life and that Lake Erie will be a good place to put them. You forget that the eco-mental system called Lake Erie is a part of *your* wider eco-mental system – and that if Lake Erie is driven insane, its insanity is incorporated in the larger system of *your* thought and experience. (2000: 492; original italics)

In this example, Bateson makes no distinction between culture and nature, both are implied in each other. Indeed, it is precisely the attempt to separate human beings from their environment that is the cause of Lake Erie’s madness. According to Bateson, Lake Erie is ‘insane’ because our current epistemology is based on the premise of autonomous self-interest, in which humans, as both individuals and species, refuse to acknowledge their dependence on the world in which they exist. Implicit in Bateson’s thinking then is the need to develop a different relationship with the planet; one that is open to the larger frameworks and systems that produce and sustain life. Put differently, the imperative is to move away from an anthropocentric obsession with human matters alone, and instead to develop a more bio centric ethic. An ethical way of being that would be based on a wider sense of ecology, which, according to Bateson, is found in ‘the study of the interaction and survival of ideas and programs (*i.e.*, differences, complexes of differences, etc.) in circuits’ (2000: 491).

In this section, I have been arguing that Bateson’s concept of ecology is premised on the relationship and interplay of networks and systems that we need to both acknowledge and celebrate if we are to survive as a species. In the next section, I want to look at how the Austrian choreographer Michael Kliën applies Bateson’s ideas in the hope of producing an ecological form of

dance. This is a necessary move in my own attempt to argue for a dancing ecology, in which yoga can train the body to respond, physically and mentally, to the systems that constitute us, and our world.

Shifts

In the third lecture from *What Do You Choreograph At The End Of The World? 3 lectures and more*, Steve Valk paraphrases Michael Kliën's conception of choreography by commenting:

The perspective you have offered represents a paradigm shift in thinking about choreography bringing it very close to something like a "mode of being" in the world, the choreographer as "as architect of a fluid environment he himself is a part of, etc..." (2007: 221)

Choreographer Michael Kliën uses the systemic structures and patterns expressed by Bateson to elucidate his ideas of dance and choreography. With this in mind, it is instructive to spend a little time understanding what Michael Kliën is referring to when he uses the terms choreography and dance.

Kliën, in the wake of Bateson, constructs his work from within a fluid ecology. Correspondingly, his relationship with choreography is one of constellations, dynamics and patterns:

Choreography is not to constrain movement into a set pattern, it is to provide a cradle for movement to find its own patterns... over and over again... to prevent a body... whether bound by skin or habits... from stagnation and enable lightness, a primal energy and possibilities only to be found once relations start dancing. (Kliën and Valk 2007: 222)

Here choreography and dance can be seen as a way of exploring how a body might break from prescribed patterns and habits, and generate instead a sense of freedom and lightness in movement. The aim is to allow bodies to find their own patterns, again and again. Kliën's notions of dance and choreography are not bound by a traditional cultural framework; rather they are ways of activating potential in the hopes of generating sustainable human relations - relations that take in Bateson's concept of environment plus organism. As Kliën and Valk state:

If the world is approached as a reality constructed of interactions, relationships, constellations and proportionalities and choreography is seen as the aesthetic practice of setting those relations or setting the conditions for those relations to emerge. Choreographic knowledge gained in the field of dance or harvested from perceived patterns in nature should be transferable to other realms of life. (2007: 220)

For Kliën, choreography is much more than a dance practice, limited to professional dancers and their studios; it is a way of thinking and practicing ecology. That is to say, it is a process that aims to produce transversal leaps beyond disciplinary specialisms, and to create conversations, translations and dialogues between disparate fields. In this way choreography might be best seen as a prototype for a more general approach to existence and life itself, a device for structuring and deconstructing material. In a public think-tank called Framemakers, partially initiated by Kliën, professionals from a diverse range of disciplines were gathered to discuss the role of choreography and dance in terms of its wider relevance to 'the social sphere' (Kliën and Valk 2007: 221). During the think-tank:

The term choreography was transposed to the field of human relations, as a way of seeing the world, the art of interacting and interfering with the everyday governance of relations and dynamics, expressed in physical movements or ideas. (Kliën and Valk 2007: 221)

What Kliën and Valk are articulating here is the sense in which choreography exists as a kind of overarching form, a pattern or coding that binds the structure, or what we might experience in ontological terms as a way of being. Importantly, this way of choreographic being does not separate thought and action. As Kliën and Valk comment:

I have always had a sense that a thought is a physical act and I have always been discontent with people in the dance world who want to get over the Cartesian split by just talking about the body. This is a bizarre notion. You propagate the same idea, just from the other side. You actually widen the gap. How can you only talk about the body when you want to address the whole thing. [...] Thought can be everywhere. Thoughts are between us. For things to come into being it is a matter of thought. (2007: 215)

Kliën and Valk distance themselves from a purely bodily aspect of the dance world and instead show how physical and mental ideas operate as a combined system. For them, the point is not to reverse Cartesianism by privileging the body, but to find a way of bringing mind and body together. For Kliën and Valk, it is through this combined unit that we have the capacity to choreograph a way of being in the world. In their view, choreography is a choreography of thought, or, in more precise terms, a structure that allows thought to emerge, to come to the fore. Critically, Kliën and Valk underline the notion that thought is not some cerebral process limited to abstract signifiers; rather, it is materiality, a force or energy that is instigated by movement. Kliën et al state:

Dance is a display of elemental life-force. [...] Dance is an ephemeral state of qualities and properties full of non-committed potential for change: a flexible and nondetermined condition, a specific, excited state of mind where change becomes possible and effortless. (2008: 27-28)

In this instance, dance is posited as a catalyst for becoming, a method for harboring the potential for change. By producing 'an excited state of mind', dance generates a body that does not perpetuate patterns, but creates them.

Kliën et al explain:

We are inscribed with the capacity for original thought and the possibilities to bring about change. We can create and facilitate the conditions for something to happen, for patterning and re-patterning to occur. Doing so is the act of the everyday choreographer – the negotiator, the navigator and architect of fluid ecologies we are all part of. (2008: 12)

This paragraph merits further explanation. For in it, Kliën and his collaborators not only talk in Batesonian terms about the need to cultivate ecologies of patterns and fluidities, they recognize the capacity in everyone to dance and choreograph. For what choreography carries with it, is a sense of ordering with the intention to create. Henceforth, the role of the choreographer figures as 'an active agent of change ... within an ever-changing environment' (Kliën and Valk 2007: 221). Although, Kliën recognizes the capacity for everyone to choreograph and dance, he is also aware that for this to be actualized, humankind needs to be shifted from its engrained customs and stultifying habits. Kliën et al believe we are enslaved not by our imagination, but by our limited capacity for perception.

We have enslaved our imaginations, limited the world of minds to a world of frozen instances. Imagination draws from perception and this spells out our limits. Never limited by imagination, only by perception. (Kliën, Valk and Gormly 2008: 21)

As Kliën and his collaborators explain, perception is fundamental to affording shifts in the way we imagine, live and experience the world. Our perception needs to be sensitized to the fluid ecologies that we are in and at the same time a part of. A rigid system is one that is caught in stagnation, until it can no longer move and breath, and so it dies. According to Kliën, imagination is required for survival; and that imagination is fundamentally perceptual, a type of process that is provoked by our capacity to feel, sense and experience. Kliën's ideas on choreography, that is, the need to develop greater imaginative and perceptual possibilities, offers a concrete response to Bateson's ideas on flexibility. For both Bateson and Kliën, it is through flexibility that we afford sustainability. However, for Kliën, this is produced by attuning the body to sensation so that it breaks with rigid patterns of thought. In Kliën's thinking then, we might consider the imagination as a kind of material that is forged through a bodily encounter with the world that one is always situated in and part of. In order to explore further how the imagination can be seen as an ecologically progressive faculty, I turn to Kliën and Bateson's ideas on the necessary relationship between flexibility and sustainability.

Sustainability

The concept of sustainability that I am drawing on in this thesis is borrowed from Bateson's non-controversial and widely accepted version. For Bateson, sustainability refers to notions of flexibility, health and survival.

So here we are floating in a world which consists of nothing but change, because if there isn't any change there isn't any knowledge that there isn't. Only by the creation of change can I perceive something, yet in this world we talk as if there were a static element in the world. (Bateson 2010, on DVD)

Treating ourselves, and the world, as static elements is, in Bateson's words, 'an abstraction and causes an imbalance' (Bateson 2010, on DVD). Bateson believes that a healthy systemic structure is one based on flexibility; if we try to bring rigidity to a system or take a system out of the loop structure it is embedded in then there are repercussions throughout the system at large. For Bateson, problems arise because humans think in a manner that does not correlate to the way 'nature' works: 'The major problems in the world are the result of the difference between how nature works and the way people think' (Bateson 2010, on DVD). Instead of distinguishing humans from other terrestrial organisms, he approaches the body as a system amongst numerous systems. In order to sustain human life on the planet then, we need to think and act in dialogue with the systems of nature.

In keeping with my own argument, and drawing on Kliën's notion of embodied imagination, this means that we must shift the way we think, the way we live, and the way we respond. I believe these shifts need to be initiated through bodily movement. If movement and experience is not

incorporated into our thoughts and vice versa, then any change that might be initiated will be fleeting and without effect. For me, and here again I am close to Kliën, it is about becoming numerous bodies, not just one; or in the words of Michel Serres:

the individual agreed to become a fish, this morning, in order to slip between the piers of the bridge, with fast waters, but he must be able, this evening, to become a fox again, when researching and thinking, or a grasshopper, if dancing. (2011: 55)

In Serres' poetic meditation on the potential of human beings to become many things - many animals - the individual stays supple, open and adaptable, rather than rigid and fixed in how s/he inhabits their body. To navigate the narrow piers of the bridge, she must become like a fish, but when dancing, she is like a grasshopper. The body remains capable of performing and responding in many different ways. Here, the ideas of ecology that Bateson refers to are reconfigured and adapted to the body through our attachment and experience of the world. Whether it is the body struggling against or co-operating with systems of nature (a nature that does not care for us), it is at all times embedded in Bateson's notion of 'environment plus organism'.

Humans have a tendency to establish an illusionary positioning in the world. We have constructed a narrative that embellishes humans with superior qualities and technical abilities - a narrative that places human beings at the apex of a hierarchical setting. Bateson's framework of organism plus environment challenges this narrative, as it opens us to the complexity of patterns and systems at play in the world at large. If we are intending to sustain human life, we cannot distinguish ourselves from these patterns and

systems. Kliën et al suggest that 'To enquire into this reality of changing patterns and the forces at play, is to enquiry into the choreography of life, examining what makes us dance and why' (2008: 11). What we create is based on our perception and imagination. When our perception is constrained and boxed in, our world duplicates this. For Kliën, as for Bateson, such a situation is effectively unsustainable, since it produces hierarchical thought and stymies any possibility for change to emerge. As a consequence of this denial of time, neither transformation or evolution can appear. We are back in the toxic swamp of what Bateson refers to as 'an ecology of bad ideas'. Kliën et al explain:

As hierarchies prevail in the conscious ordering of humans and narrow cause-and-effect thinking rules medicine, sex and urban planning, it becomes increasingly self-evident that the limits of our imagination are intrinsically linked to the limits of our perception. Trapped in linear time, perception takes its bearings from sensation and then maps the landscape of our imagination. The patterns we subsequently perceive become our repertoire for building. But the perceived will always be a reduction and our reductions are no longer sustainable. (2008: 20)

As Kliën, Valk and Gormly maintain, perception 'trapped in linear time' produces hierarchies and ultimately a state of disconnection. In this limited repertoire we become fixed and unable to think outside the boundaries we have erected for ourselves. Our capacity for action is greatly reduced, since we find ourselves victims of pre-existing forms of sensation that are no longer tenable in a dynamic and changing world. Kliën's ideas here are directly informed by Bateson's 'economics of flexibility' (Bateson 2000: 502-13). Bateson defines flexibility 'as *uncommitted potentiality for change*' (2000: 505). However, despite Bateson's optimism, all too often this open-ended

invitation to change is not acknowledged and what we see instead is the regurgitation of set patterns and self-imposed limits. Bateson himself refers to a 'natural selection' of ideas, in which the ideas that survive the longest are those that are repeated, again and again. When ideas are repeated they enter into the 'phenomenon of *habit formation*'. Once an idea becomes habit, it is no longer subject to the same amount of critical inspection. From these habitual ideas, philosophical premises are formed and over time these ideas become hardwired or programmed within our thinking structure and eventually stand unchallenged.

As a consequence of this 'hardwiring', further new premises are created that do not break with the ideas or structures of the past, even when, to use a Batesonian term, the past is 'insane' or catastrophic. Take for instance our current ideas on climate change, we are unable to tackle the issues at hand without being able to shift the premises we work from. At all times, we reduce ecology to capitalism. It is as if no other option were possible. We have lost the capacity to imagine. Bateson explains:

these hard-programmed ideas become nuclear or nodal within constellations of other ideas, because the survival of these other ideas depends on how they fit with the hard-programmed ideas. It follows that any change in the hard-programmed ideas may involve change in the whole related constellation. (2000: 510)

When 'hard-programming' occurs flexibility is limited; we have committed ourselves to an idea that is, quite literally, set in stone, rather than allowing for adaptability. According to Bateson, this has produced a pathogenic way of being:

We are discovering today that several of the premises which are deeply ingrained in our way of life are simply untrue and become pathogenic when implemented with modern technology. (2000: 510)

Building on Bateson's insights by, quite literally, embodying them in dance, Kliën argues for a choreography that would attack the illusions of longevity and stability, the perenniality of certain 'bad ideas', by developing a sense of physical and mental contingency and open-endedness. In his view, corporeal and psychological fluidity and 'fruitful uncertainty' are values to be cultivated as direct responses to the nightmare of reductionist thinking. Put differently, these values are values that create a sense of flexibility in the system:

Concrete realities do not exist. I will refuse to choreograph institutions into being, which bury fruitful uncertainty beneath false or sterile assumptions, the lazy dogma of reductionist thinking, illusory perceptions or presuppositions. In the universe I know, there is only the contingency of fluid and free-floating forces. (Kliën, Valk and Gormly 2008: 17)

For Bateson and Kliën, stability is not to be understood as something timeless, eternal, set in concrete, rather the stability of structures is created by an ability to adapt and be flexible. This stability is founded on non-committed movement in a world that celebrates and acknowledges the fluidity of forces.

Like dust from the feet of a traveller at the end of his journey, it is from the mucky ground of being that I bring new form to the surface, to imbue life, to create a blossom, to realize potential and flirt with infinity. Perpetuity is a fleeting glimpse: true stability embraces ebb and flow. As an architect of the invisible, I, like you, set entities into relationship with one another. Sometimes this involves no more than the reshuffling of context; enough "re-framing" for an idea-body to get unstuck, rough and tumble, from its habitual pattern of circumstance and repetition. (Kliën, Valk and Gormly 2008: 18)

In Kliën's explanation of choreography as an assemblage of stuff, a deliberate construction of chaos, 'perpetuity', which he seems to associate with the eternal play of endless change, is considered as something we can never know or grasp. He says perpetuity is revealed through a fleeting glimpse; it is not something that can be held on to or appropriated. To want to capture or fix eternal change is to betray its very meaning, to produce an unsustainable ecology that denies the movement of life itself.

Against this, Kliën argues for an ecologically informed choreography that 'embraces ebb and flow', and which is endlessly recreating itself through the play of chance and circumstance. As he has it, this reshuffling of context, this 're-framing', is what allows bodies to get unstuck, to break with habit and become new. This cultivation of different forms of perception, through the choreography of bodies, is fundamentally imaginative. It leads to the possibility of living differently, living better, living ecologically. As Kliën et al state:

Yes, I lament the poverty of our restricted endeavors. They advance such a reduced understanding of nature's abilities. A crude, simplistic reading of her spectrum of possibility, mapped prosaically on the banal surface of our limiting minds: imprints, relentlessly computed and reproduced in the architectures of our everyday existence. (2008: 20-21)

As Kliën's lament makes perfectly clear, it is in our ability to perceive, that is to say, our ability to imagine, that will open us up to a healthy ecology. This healthy ecology is defined by Bateson as one in which human beings can learn to live with the environment, attuning themselves to its flexible patterns, and becoming capable of change when change is required:

A single system of *environment combined with high human civilization* in which the flexibility of the civilization shall match that of the environment to create an ongoing complex system, open-ended for slow change of even basic (hard-programmed) characteristics. (2000: 502; original italics)

If we are trying, as many green thinkers and ecologists are, to imagine a sustainable and resilient world, then it seems vital that we embrace Bateson's notions of flexibility. When something becomes fixed or static, it dies; it has no recourse to transformation and self-correction. Whilst things that remain uncommitted in their motion are, by contrast, always sensitive to new arrangements and stimuli. In Kliën's terms, they are a body-mind open to new perceptive, and thus imaginative, possibilities.

Transposing Bateson and Kliën

The above exposition of the ideas of Bateson and Kliën informs my understanding of the ecological potential of yoga. That is to say, I am interested in exploring how yoga might sensitize us to systems and new assemblages of being. However, whereas Bateson and Kliën, despite the latter's interest in choreography and dance, tend to provide a largely conceptual version of ecology, I want to consider yoga's contribution to a dancing ecology through a more detailed and concretized study of how a specific body moves.

Peter Blackaby in his recent book, *Intelligent Yoga: re-educating mind and body* (2012), considers an 'intelligent' yoga practice to be one of self-

exploration; a practice organically guided by the body, in which the body is not compromised by the asana, rather the body accommodates the posture. This is a practice open to transformation, not one that is constrained by a backward-looking perspective rooted in history. As a teacher of yoga, and speaking from a personal account, I do not consider myself as a master or guru who holds the truth or the answers, but rather I set the conditions for an experiential practice to emerge. As Blackaby comments, 'Telling someone what they are feeling is quite different to asking someone to take notice of what they feel' (2012: 17). The experience of a body expressing an asana is unique. I can guide someone into a posture, but the experiential practice of body and sensation belongs alone to the experiencing individual. Therefore, 'intelligent' yoga, as Blackaby might say is not prescriptive in its practice; rather it cultivates an emancipated pedagogy of self-awareness, aiming at what the feminist theorist Eve Kosofsky Sedgwick in her beautiful essay on Buddhism calls ' [self] *recognition* and [self] *realisation*' (2003: 168; original italics).

Irrespective of his sometimes too limited humanist focus, Blackaby's approach to yoga is ecological in that he considers the relationships between systems. He recognizes, like Bateson, the necessity that 'If we want to study life and health [...] we need to make more connections and fewer separations' (Blackaby 2012: 23). He seems optimistic that thinking in the West is shifting away from a reductionist viewpoint towards one that is more encompassing of the ecosystems that the human animal finds itself in and dependent on. Like the early environmentalist Rachel Carson, he exemplifies this by a referral to the use of DDT:

the use of DDT was very successful in killing mosquitoes and lowering malaria rates, but it was then realized that DDT was also killing much of the wildlife that fed off the insects, so practices changed. Climate change is similarly exercising our thoughts, and many of us are now amending our behavior in response to what we believe may help mitigate its effects. (Blackaby 2012: 20)

Interestingly, Blackaby's reference to the biocide caused by chemical insecticides reflects Bateson's own critique of DDT when the latter discusses how the notion of 'interlocking *circuits* of contingency' are necessarily part of the same process (Bateson 2000: 146). For Bateson, solving one problem – crop yields – through the use of DDT, only caused problems elsewhere. This is not a good method for promoting ecological health. Rather, what emerges from these examples is a notion of how life and health are based on an interdependency of systems. Like Bateson, Blackaby understands health not as a permanent state that is self-contained and isolated within the human body as some physiological idea, but as something that integrates and adapts to the surroundings and situations that it finds itself:

An essential feature of health, which is what we are talking about in its deepest sense, is that we are adaptable and able to rise and respond to changing circumstances, both physically and emotionally. (Blackaby 2012: 18)

It is within this physical and emotional capacity to respond to the world beyond the isolated human organism that yoga functions. Blackaby contends that:

the goal of the yoga student is to feel comfortable in the body, breath and mind, and to integrate these aspects of themselves in such a way

that there is little or no conflict between them. (2012: 18)

By aiming for an integration of systems, each of which entangles the human body in the systems of the world, the yoga student inhabits the body in a way that affords health. In order to look more closely at how yoga affords health, Blackaby has established three main categories that the benefits of yoga fall into:

benefits to the musculoskeletal system, expressed through a more balanced action of muscles on bones which reduces strain at the joints; an improvement in the responsiveness of the respiratory system, enabling it to meet the needs of changes in effort, emotions and posture; and finally a greater sense of well-being that has something to do with the way we engage with the nervous system, both internally and externally. (2012: 21)

These categories – musculoskeletal, respiratory, neurological - set out by Blackaby overlap and infiltrate one another. When we experience the body in yoga, we experience an integrated body: one of body, breath and mind -

improvements in movement tend to improve breathing, improvements in breathing can help movement, and both will have an effect on our sense of well-being. (Blackaby 2012: 21)

These overlapping systems sketched out by Blackaby correspond, somatically, to the 'interlocking *circuits* of contingency' that Bateson refers to. Our attention or awareness to one system cannot be singled out. When I bring attention to my breath, I might find that by breathing a yogic breath (a slow, rhythmical, controlled breath that is drawn into and out of the abdomen, ribs and chest) tension gathered by my body is eased. This easing of tension provides potential for further movement by my body, which in turn filters into

my mental state and impacts positively on my overall sense of well-being. In this example, I have initiated the transformation by attending to my breath, but as the interlocking nature of the systems denotes, any change, irrespective of its point of initiation, is incorporated and filtered through the system at large. Therefore, if I introduced change through a focus on my bodily tension, my breath and overall state of well-being would still be affected by the process.

Not only is the individual body a multitude of systems, but it is also, at the same time, a component part in a wider communal network of organisms. It could be argued at this point that the pursuit of yoga is insular and self-contained. What could be more narcissistic, for instance, than seeing a yoga teacher with her/his eyes closed, concentrating on their body and 'watching' the flow of breath entering her/his body? However, the cultivation that yoga affords with respect to the awareness of systems and developing a porous body compels us outward. These affordances generate an understanding that supplants any notion of the centrality of humankind and instead compels us towards an ethical and embodied relationship with the world

Yoga and shifting patterns

In order to explore how yoga can break with habitual actions and engrained patterns, I begin by showing how, on the one hand, voluntary movement and, on the other, habitual movement are carried out in and by the body. As the overall concept of this thesis is that nothing acts in isolation, movement, therefore, needs to be acknowledged as a continuous string of processes that

filter through the body in conjunction with mind and environment. In *Intelligent Yoga: re-educating mind and body* Blackaby offers a clear and concise understanding of how voluntary movement functions, and also how it relates to habitual movement.^{xxiv} According to Blackaby, voluntary movement is achieved through the combined effort of the motor and sensory nervous systems. 'Muscular movement is initiated in the motor cortex, the cognitive part of the brain that deals with movement' (Blackaby 2012: 50). This cognitive initiation of movement, Blackaby comments, is monitored by the sensory nervous system. This system acts as a stabilizer, in that it makes continuous adjustments in order to maintain equilibrium,

The sensory nervous system is constantly monitoring the state of tension and stretch that exists in the muscles, tendons and ligaments; it feeds information back to the brain stem and cerebellum. (Blackaby 2012: 50)

Although voluntary movement is initiated by our cognitive decision to do something, Blackaby explains how it is supported by a series of unconscious actions.

What we are completely unaware of when we lift an arm are the various concomitant muscular contractions that have to take place to facilitate arm lifting. [...] So although the action of lifting the arm is voluntary much of what takes place at the same time does so seemingly unnoticed. (2012: 50)

However, despite the role of cognition in voluntary movement, actions and activities that are repetitive in our life establish themselves as habitual gestural patterns. These are learned systems of movement that are performed with little or no conscious thought. Although these habitual

movements are driven or organized for the sake of efficiency, the desire to do something with the least amount of effort, they express themselves, in Blackaby's terms, as either appropriate or non-appropriate muscular patterns. The consequence of either of these patterns is always some degree of tension, as tension is required for movement to take place. There is, nevertheless, a difference between tension that enables movement and unnecessary tension that prevents or encumbers it. The more tension there is in the body, the more the flow of rhythms or energies moving through it are inhibited.

Non-appropriate habitual movements, Blackaby claims, develop for three main reasons: environmental, physiological (pain or injury), and emotional. Environmental reasons occur when we respond in a fixed postural way to our surroundings. For instance, if performed over time, a slumped posture whilst sitting on the settee, teaches the muscles of the body to position themselves in such a way that the body receives support in the posture, even though the position is not deemed conducive to the general functioning of the body. Similarly, in attempts to avoid physiological factors that have developed over time, the body adopts a posture that eliminates these immediate sensations, albeit, to the further detriment of other areas of the body. This can be experienced when we compensate for an injury, such as to a troublesome knee or foot by shifting weight on to the other leg for added support. This compensation might avoid immediate pain, but it contributes to further eventual disturbances in terms of the alignment and function of the body and joints. Lastly, emotional moods and psychological states contribute to habitual movement, because Blackaby remarks, emotions

and thoughts are embodied in specific postural patterns. A feeling of insecurity or lack of confidence, for instance, might demonstrate itself through a slouched inward posture, which can then pervade into our everyday stance and mark our engagement with the world.

However, as both voluntary and habitual movement patterns are learned, they can be addressed and changed for the better. Blackaby contends that yoga is a beneficial way for transforming unhelpful movement patterns in so far as it can produce greater awareness of and flexibility in the body. It does this by cultivating a mindful way of moving:

Through the practice of yoga we are able to address these habits of movement. We do this by paying close attention to the way we as individuals move into the big patterns. (Blackaby 2012: 50)

As Blackaby contends, yoga shifts habitual movements by paying close attention to how we move. That is to say, it encourages us to unite mind and body in an act of concentrated embodiment, a kind of psycho-kinesis. By doing so, yoga exists as a type of somatic pedagogy, a way of allowing healthy appropriate patterns to establish. Our attentiveness to the feel or sensation of these patterns can help to accentuate – and so eradicate - the non-appropriate patterns of movement that contribute to a build up of tension in our daily lives:

When we practice yoga we are not only stretching and strengthening muscles. We are...educating the nervous system in movement. The more we practice, the more we embed, or hardwire, the practiced movements into our nervous system. What we do on the mat will slowly impinge on our lives. (Blackaby 2012: 113)

As Blackaby explicates here, if one is looking to understand and/or modify habitual movements, then the practice of yoga affords the body a way of feeling itself into a healthy range of movement.

In the above explanation, I have been using the word 'feel' to explain how yoga functions. This is because the somatic patterns that we learn are governed by the sensory, not the motor, cortex. As Deane Juhan contributes:

It is [...] primarily in the sensory cortex that we consciously experience the effects of our motor movements. The data which define for us a particular effort of our motor movements, the data which refine repetitions, are sensory impulses, and the memories which preserve an established skill are sensory memories. (2003: 266)

Given the primacy of the sensory cortex, if we want to effect a change in movement patterns, it is more important to feel the movement rather than command it through an act of conscious willing. As Juhan comments:

Learning to evoke and to surrender to a flow of sensory information are in the end far more effective means of learning or altering behavior patterns than are analyzing and commanding particular muscle twitches. (2003: 291)

In his commitment to feeling, Juhan helps to underline the extent to which yoga is a practice of sensory awareness. It disrupts habit by inviting the mind to participate in the world in a way that pays more attention to process than product. The point is not so much to achieve a task as to be mindful about how that task is carried out by the body.

This has desirable benefits for our health, since the effects of yoga impinge on bodily functions that usually exist outside our conscious control:

Indeed, it can be shown that the human autonomic system may be influenced by a wide variety of factors that are within our conscious control. One of the main goals of the ancient arts of meditation and yoga has been the achievement of control over the healthy functioning of internal organs and glands by means of cultivating certain states of mind and physical postures. (2003: 293)

In yoga, surrendering to sensory information affects the autonomic system (digestion, heart beat, blood pressure), as well as the voluntary system.

Juhan shows here that the distinction between the voluntary system and autonomic systems are not so clear-cut. On the contrary, as he suggests, the practice of yoga, by uniting mind and body, affords the body a degree of agency. This allows the yoga practitioner to emancipate her/himself from unsustainable postural habits and movement patterns, and so embrace a more fluid and flexible way of being in one's environment.

Breath as Sustainability

As indicated earlier in the chapter, sustainability, for Bateson, refers to a state of health based on the flexibility of a system; hence, a system having the capacity to adapt and transform in relation to its wider systemic network. As a somatic practice, yoga affords this state of health in the body through a combination of strength and flexibility. Strength, in this context, functions as support to the flexibility acquired by the body. In order to cultivate uninhibited movement patterns, the two qualities need to compliment one another; if they enter into a state of imbalance, the health of the system will be affected. If one relies too heavily on the development of muscular strength, bodily movement

becomes limited through the build up of muscle; conversely, when flexibility fails to be complimented with strength, the body does not have the capacity to maintain the posture afforded by its suppleness. Therefore, when functioning in a state of imbalance these qualities risk the overall health of the system. However, when complementing one another, they afford a state of balance that upholds the health of the organism and hence its ability to transform and adapt.

Sustainability is furthermore afforded by the ability to breathe, for breath is the sustenance of life. As anatomist and yoga practitioner David Coulter comments:

Every cell in the body needs to breathe – taking up oxygen, burning fuel, generating energy, and giving off carbon dioxide. This process, known as cellular respiration, depends on an exchange – moving oxygen all the way from the atmosphere to lungs, to blood, and to cells, and at the same time moving carbon dioxide from cells to blood, to lungs, to atmosphere. (2001: 68)

Here, Coulter addresses breathing as the process that fuels the body with sustenance. It is a process dependent on both motion and exchange that furthermore, is always in relation to the atmosphere; we cannot breathe ourselves. Therefore as a process, it exemplifies the porosity of the body. Inhalation draws what is without in and conversely, in the act of exhalation, part of what is within departs. This act of respiration is considered an autonomic system; we do not need to remain conscious of the breath for it to continue. However, as indicated above by Juhan, the autonomy of the autonomic system is not so clear-cut. The practice of yoga (more specifically pranayama) has the capacity to influence how we breathe.

Our ability to breath is linked to posture; therefore, in addressing one you affect the other. Take a moment to examine your breath - now, as you read - and feel the breathing process in your body. Then, if you are not already, sit upright – allow the weight of the body to travel directly into the sitting bones (rather than, perhaps, the posterior of the body supported by a chair or through the elbows perched on a table), allow the front of the body to be as long as the back of the body, ease the shoulder blades down and again feel the breathing process. Now, rest back, draw your shoulders forward, allow the upper body to slump and return your attention to the breath. These simple shifts in posture perhaps inform you, in some way, as to how stance can affect the breath. There were, perhaps, noticeable shifts in effort, depth, capacity, and/or location of the breath. When we attend to bodily posture, we have the capacity to enable a greater sense of fluidity to the breath; we give breath the space in which to move. In this fluidity, the breath is able to infiltrate and hence fuel a greater portion of our body.

As a process, breathing connects, its circuitry affecting both body and environment. On one level, the exchange inherent in breathing binds body and environment; whilst on another level, it likewise binds mind and body. Mind and body are mutually affective – if I calm the mind, I calm the body and in the same way if I attend to the body, I affect the mind. Juhan confirms:

The circularity of our internal feedback/response system is such that it does not matter whether we begin with the cultivation of an inner mental calm and allow its influence to project out into the muscles, or whether on the other hand we manipulate the sensory-motor reflexes in such a way as to decrease their normal tone and thus induce a calmer inner state. (2003: 294)

Breath links what Juhan refers to as ‘the circularity of our internal feedback/response system’. When the mind is attentive to the rhythm of the breath, it is drawn to the sensations of the body; in the same way, the movement of the body facilitated by the breath influences the mind. For instance, when the body is fueled by a fluid and rhythmical breath, the mind is more likely to be prone to concentration; on the other hand, when breath fluctuates, quickens or shortens, the mind becomes scattered. Therefore, the quality of the breath significantly affects the health of the system in terms of how the body and mind relate.

As respiration is a process of exchange, the flow of breath is tied to movement. When we move, the body breathes; the lungs fill and oxygenated blood flows through the whole organism. It is in this flowing that the breath is able to feed and renew the mechanisms of the system. If we return to Coulter’s citation that every cell needs to breath, it can be concluded that a lack of movement lessens the overall health of the system. In other words, it can be understood that by cultivating a full range of movement we are fuelling the body with breath and hence exchange, keeping it vital.

Part of this vitality is linked to the breath’s regulatory role in stimulating other mechanisms within the body, also usually considered to be autonomic - such as, heartbeat, blood pressure and body temperature. Hence by gaining a degree of control over our breath, we have the capacity to induce further benefits to the body. Yoga historian James Hewitt contends:

The daily session of Yoga breathing increases vital capacity, energizes, exercises the lungs and the respiratory muscles, oxygenates and purifies the bloodstream, removes phlegm, cleanses the sinuses and the *nadis* or nerve channels, soothes and tones the

nervous system, improves thoracic mobility and broadens the chest, improves digestion, massages the abdominal viscera, and calms and concentrates the mind. In addition, the regular programme of pranayama brings success in establishing healthful breathing habits [...]. (1977: 109; original italics)

The daily session of Yoga breathing Hewitt suggests is fifteen to twenty minutes of breathing that incorporates both a cleansing breath (Kapalabhati or Bhastrika) and a slow controlled breath (alternate nostril or Ujjayi). There is no one way to breathe, rather, like our body, breath needs to be adaptable; it needs to be able to respond to the demands of the body and its environment.

Yet, our relationship with breathing does not feature strongly in Western culture. In such, breath remains an involuntary process, breathing life for us. As the philosopher Luce Irigaray^{xxv}, asserts:

The human being is made of matter but also of breath. Thanks to a mastery of breath, a surplus of life can be brought to the body, modifying its metabolism, its nature, its inertia. The human being can transfigure it, transubstantiate it, overcome a part of its heaviness. Western man has generally neglected, even forgotten, this ability. (2002: ix)

Irigaray contends that by neglecting the breath we misplace the ability to cultivate life. It is through the breath, she articulates that we produce our first and last autonomous gesture; it is in birth that we are made to breathe for ourselves. However, this autonomous gesture receives scant attention in our world. As Irigaray states:

But we breathe badly, and we worry little about the air that surrounds us, our first food of life. We put ourselves under stress in order to force ourselves to breathe: we carry out athletic performances in polluted air, for example. But we do not really take charge of our life, of our respiration, of our air. (2002: 73)

This oversight that Irigaray alludes to, in terms of taking charge of our respiration, is a contributing factor to the malaise of our current ecological crisis. Perhaps due to its autonomic nature, breathing, although essential to our life, does not feature strongly in Western pedagogy. Even though, as I have pointed out, breath not only binds us to life, but furthermore functions as a circuitry of the body, as well as, a link for body and environment. Therefore, being conscious of our breath, and breathing, is accepting responsibility for both ourselves and others. As Irigaray asserts:

Breathing in a conscious and free manner is equivalent to taking charge of one's life, to accepting solitude through cutting the umbilical cord, to respecting and cultivating life, for oneself and others. (Irigaray 2002: 74)

Irigaray places breath as solitary and yet shared; an air that passes between us that when breathed well and autonomously cultivates life. Breath then functions, like Merleau-Ponty's touch, in developing an ethic of care that comes out of being embedded in the world.

In her book *Between East and West: from Singularity to Community*, Irigaray calls upon her personal experience of yoga as she tries to distinguish between what Western culture and the practice of yoga (with its tradition) has given her and not given her, respectively. Irigaray comments:

What I have learned from yoga – beyond or on this side of my Western culture – are things about existence that are both very simple and very subtle. (2002: 50)

Yoga attunes us to the simple and subtle things that make up our existence. Things that in the bustle and chatter of everyday life become displaced, but when cultivated, act as provisions for a different way of perceiving. Irigaray comments:

Because the majority of people in our age do not treat with care the time of breathing, it is necessary – in any case, it is necessary for me, but I think that this necessity is general – to go for walks or to remain a moment each day in the vegetal world in order to continue to breathe and to live outside of the surrounding social exploitation. (2002: 50)

Irigaray's distinction between the vegetal world and one of social exploitation relates, for her, to that of the living world and patriarchal traditions, respectively. She develops this distinction in terms of breath, or more specifically to the relation between respiration and acts of speech. Respiration, for Irigaray, refers to the natural rhythms and energies of the universe. The breath functioning as a link between body and life, each enriching the other; whereas, the act of speech, for Irigaray, 'finds itself subjected to ritual, to repetition, to speculation' (2002: 54). The act of speech distinguishes the body from the natural world - a world of rhythms – and chooses instead to organize and define the world in words, cutting the body out of its bond to the universe. In the world of speech, Irigaray states:

The body [...] is submitted to sociological rules, to rhythms foreign to its sensibility, to its living perceptions: day and night, seasons, vegetal growth ... This means that acts of participation in light, sounds or music, odors, touch, or even in natural tastes are no longer cultivated as human qualities. The body is no longer educated to develop its perceptions spiritually, but to detach itself from the sensible for a more abstract, more speculative, more sociological culture. (2002: 55-56)

The acts of participation that Irigaray mention are experiences that celebrate the moment, and in such, bind us to the rhythms and energy of the universe. Yoga reminded her of these human qualities, as she goes on to state, 'Yoga taught me to return to the cultivation of sensible perception' (Irigaray: 56) - a perception that is found in the rhythms of body and universe and to which we are linked through the breath. This is the perception of a dancing ecology, where rhythms that flow throughout the universe are echoed in and through our bodies. In the final chapter of this thesis, I will investigate the ecological significance of these rhythms and flows as they produce themselves through the practice of yoga by engaging in an act of auto-ethnographical practice.

Chapter Four: Research through practice

What follows is intended as a guide that clearly articulates my shift from theory to practice. In this final chapter, I express my yoga practice as a way of revealing notions, such as perception, ecology, agency, and reciprocity that have so far been established in my writing. In so doing, I aim to relate the ideas of a dancing ecology through the materiality of my body. It is an exploration into what the body can teach us and open us up to. After initially noting shared concepts and terminology between the theory of this thesis and my practice, the Chapter unfolds through a series of headings: 'Outlining a Methodology: practice alongside theory', 'My yoga practice', 'Tadasana', 'My Body Sensing a Dancing Ecology', 'Self-explicitation interview technique', 'Self-explicitation interview', and lastly, 'Response'.

The first section, 'Outlining a Methodology: practice alongside theory', supplies an explanation for why I have chosen a sensory auto-ethnographic framework. 'My yoga practice' contributes an understanding of my personal practice and looks more closely at my reasons for choosing a standing posture. 'Tadasana' considers the body in relation to gravity and is followed by 'My Body Sensing a Dancing Ecology' in which I relate a detailed journey of my movements in the asana. I then come to question how I might perceive to move forward with my practice. This is done through a method of introspection. 'Self-explicitation interview technique' details Pierre Vermersch's method of introspection and is followed by 'Self-explicitation interview', which provides extracts of my own dialogue applying his technique. 'Response' ends the chapter, and is an exercise in reflecting back on the

interview in order to identify ways of enhancing my practice and hence my awareness of a dancing ecology.

In particular, the sections relating to my practice of Tadasana and the self-explicitation interview, have entailed adopting a descriptive register that is clearly indicated by the use of italicized text. These different registers help to denote the significance of my somatic practice in terms of enriching my negotiation with the world. In my experience, the practice of yoga has cultivated a capacity to draw attention to the present moment, the dynamics of body and environment. By this I mean a material experience of my body moving in relation to my immediate surroundings; such as in acts of walking where I am aware of the tread of my feet upon the ground, the sway of my arms, the dynamics of respiration, and the rhythms and vibrations that confront me. What comes forward, for me, in these experiences is an embodiment of patterns. Yoga's ability to guide my body through appropriate movement patterns has generated a transformative outlook on the nature of my movement in the everyday. It is, for me, a practice of undoing that affords enhanced awareness and a greater degree of choice in my ability to participate with life. It is this practice of undoing that connects me to the dancing ecology I am trying to relate.

Hence, this Chapter functions as a thread, linking the singular work of subjective reflection or introspection with the more encompassing dynamics of a dancing ecology. It explores the theoretical notions of perception and experience that have been established in this thesis through an auto-ethnographic model. I have done this with the intention of unfolding the practice of a moving body alongside theoretical academic scholarship. I

thought it key to ground the abstractions of language into the materiality of a singular body's practice. The aim is to emphasize a dancing ecology not only in terms of concepts, but also in terms of subjective experience. Notions, such as, habit, flexibility and sustainability lend themselves to subjective experience, as well as to language. In drawing awareness to this correlation through a dancing ecology there is an intention to suggest that by inhabiting the body in the same way that we think and live in the world, we might be affording the sustainability of the human race.

In his book, *Variations of the Body*, philosopher Michel Serres explores the domain of the body as a site of metamorphosis, knowledge and imagination. Taking an alternative perspective on academic development, Serres contends that his career as an intellectual was not motivated by the 'seated professor', rather, it was inscribed in his body by his 'gymnastics teachers, coaches and guides'. In whatever activity we engage in, the body remains the medium through which we experience. Yet, it is a body that moves, changes, exchanges and adapts to such an extent that Serres asks, 'How do we define a body given over to so many poses and signs: when and under which form is it itself?' (2011b: 52). It is this propensity to adapt that allows Serres to celebrate the potential of the body. He ponders:

What can our bodies do? Almost anything.

[...] with the hand, the foot, the heart, nerves and muscles... in dexterity, strength, flexibility, adaptation and wind... sailors, mothers, mountaineers, acrobats, surgeons, athletes, wrestlers, travelers, magicians, virtuosos... outmatch, in performances of all kinds and in every strictly physical discipline, the entire animal kingdom whose species specialize in definite gestures... that the diverse ethnic groups are scattered across the planet, confronting the most extreme climates which only evolution, over millions of years, enables the beasts to endure... that each genus only executes a rigid and limited program,

while, freer, humans are constantly planning unexpected feats ...
(Serres 2011b: 36-37)

After affirming the immeasurable potential within the human species, he goes on to say:

So know its incredible capabilities [...] name a more enduring living creature! [...] Only animals know bounds, those set by instinct; without instinct, men pitch their fragile and mobile tent, with neither solid wall nor protection against the limited.

Who knows what the body can do? (Serres 2011b: 37-38)

Tellingly, what opens as a virtuosic answer to a rhetorical statement, is an answer documenting the resilience, capability and adaptability of the human body that ends in a new, more opened-ended question. It is a question that triggers exploration and play, one that recognizes the world and its inhabitants as unfolding and evolving. It is through experience, invention and creativity to conditions that humans continue to learn and build upon the potentials and capabilities of the body. Hence, the body is not something definable, rigid and set.

Yet our ways of living tend to reflect just this: set by routines, limited in movements, constrained in thought, lacking in imagination. The outcome is a body over which there is little control or agency. What is wagered here is a dissociation of body and action; whereas, when approaching movement with awareness they are integrated. Rather than thinking myself as going to work, I feel myself going; encouraging myself to consciously participate in the journey. Opening up to the embedded experience of my body in the world – asking myself what propels me forward, how do I move, what unnecessary

tensions have I accumulated, what do I come in contact with, what does my body feel? This sensitization to the world is challenged by the drive for homogenization, a shielding to the exposure of the body, a leveling off, substituting, limiting and simplifying of experience. Connection to the body then becomes abstracted, the body is not fully engaged, perception is minimalized and the potential for conscious participation is not realized. As Serres states:

We no longer know how to read the body the way our friends without writing can, our friends who make use of it the way our ancestors did wax or ourselves paper. Should I master this reading, I'd be able to decipher upon your wrinkles, like an open book, your history and its tribulations, upon your dance, your desire, and upon the masks and statutes of your culture, the encyclopedia of its discoveries. We've lost the medium-body. (2011b: 82)

Serres recognizes the body not only as a register of our history, but as a way of propelling us forward to live a 'work-producing life'. Our bodies tell the tale of who we are and what we have done, but we have lost the language by which to read them, the sentient. It is through my practice of yoga that I try not only to decipher the language written into my body, but also to be creative in my dialogue with it.

Outlining a Methodology: practice alongside theory

My research through practice is an attempt to 'read' the body in the singularity of experience. The Chapter unfolds as a conscious participation with my moving body. My engagement with yoga is intended to demonstrate a form of

reflexivity that acknowledges and communicates my corporeal, proprioceptive and kinesthetic experience. The intention of this Chapter is to contribute in an embodied way to the theory and writing that is ongoing in this thesis. The phenomenology of Merleau-Ponty provides the framework for an ecology of perception, the inclusive nature of the body in the world and the singularity of experience; whereas Gregory Bateson's ideas further emphasize the notions behind a dancing ecology through his understanding of the systemic nature of our world. When I engage with the theoretical thinking of Gregory Bateson my understanding of it comes first through the body. His terms of habit, flexibility and stability offer a natural cross over to the terminology common to yoga. In order to express this subjective experience of theory, I proceed with a sensory auto-ethnographic methodology. A methodology that in ethnographer Sarah Pink's words 'is based on an understanding of the senses as interconnected and interrelated [...] an approach to ethnography that both seeks out knowledge about the senses and uses the senses as a route to knowledge' (2009: 2-3). Therefore, it is a methodology that takes into context the domain of body as both a source and way to knowledge. Sensory-ethnography comes out of an increasingly interdisciplinary context, a context that prevails within this thesis, as I have drawn upon a range of thinkers and practitioners that although coming from various disciplines, find common concerns in their focus on the body, perception and ecology.

For Pink, phenomenology serves to further the methodology of sensory ethnography, as she explains:

Merleau-Ponty's ideas are relevant to the formulation of a sensory ethnography because he placed sensation at the centre of human

perception. For Merleau-Ponty, sensation could only be realized in relation to other elements. (2009: 26)

The perception that affords these sensations subsumes the whole body. Our senses work as a complex system in continual exploration of our surroundings. When I feel something, the sense of touch does not work in isolation, but is feeding off all the sensory inputs happening throughout the body, so that touch is an activity of the whole organism in its environment informed by the organs of taste, hearing, smell and sight. This complexity of sensation for Merleau-Ponty can only occur because the body is a being in the world, so that in touching, it is touched; participation with the senses then, is participation with our environment. Therefore, through a sensory auto-ethnographic method I am seeking out knowledge about my senses that concurrently provides me with knowledge about the world I experience in and through them. I have chosen this methodology because I am reflecting on my own experience, with the hopes of 'creating and representing knowledge' (Pink: 8), however, I am not an ethnographer, I am a yoga practitioner engaging with ethnography, therefore yoga is the foundation of my research.

Yoga cultivates a sense of being present, that through my body I engage with the moment of experience by directing conscious awareness to my movements. It focuses my attention: on how I move, how one limb moves in relation to another, how I move in relation to gravity, where I can surrender and release. Through this practice I locate a body that is freer to partake in its orientation to the world. It allows me to remove the clutter or excess baggage that I have unconsciously hoarded within me, every layer hampering my body's capability to move and hence respond. It is like my body dressed in

layers of clothing, the more I put on, the more my movement becomes constrained. Through the conscious participation of yoga I am enhancing my sensitization to my body and world. I am opening outward. In this enhancement,

what was immobile and frozen in our perception is warmed and set in motion. Everything comes to life around us, everything is revived in us [...] We are more fully alive. (Bergson in Moore and Yamamoto 2012: 27)

Here, philosopher Henri Bergson relates to this enhancement through a metaphor of dormancy; a thawing that brings to life for us the vitality of all things, a dancing ecology.

The practice I engage with is not limited to the idealized body pristine in appearance, toned and developed through years of physical training, rather it is a practice available to the everyday body full of limitations and impairments. Nor does it rid or heal the body of its aches and pains, but works with them so that their hold over the body is challenged. It is a practice that should not be thought of as confined to an aesthetically pleasing venue of wooden floors, natural light and uncluttered space. Rather, it is a practice that is carried forward into the everyday, a way of inhabiting the world. One that is committed and curious as to the manner in which we attend to ourselves, and the world.

My research as practice is twofold. Firstly, I reflect on my practice of Tadasana through the theory that has arisen in my writing, the intention of which is perhaps best illustrated metaphorically by a body of water. For one, water represents, to me, a fluidity of movement, a body that remains unified

as it adapts its formation in response to a wider more comprehensive network of systems, and furthermore it is an element that clearly exposes the affects of these other systems on its surface – the crashing of waves as wind builds up, the reflective quality achieved in stillness, the pull of gravity bringing low and high tide. Therefore, when you read through my practice of Tadasana think of the pose as a body of water and the theory that is exposed within it as the surfacing of white caps as they come up from the water and return again to it; all one integrated system, in which one facet helps reveal another, so too, theory and practice integrate in their meaning.

Secondly, I explore my practice of Tadasana using a method of introspection modeled on the explicitation interview technique developed by psychologist and researcher Pierre Vermersch. According to two of Vermersch's students:

This interview approach allows individuals to access dimensions of their lived experiences and actions of which they are perhaps not immediately conscious. The purpose of conducting this kind of introspective interview is both to gain insight on what actually happened in a given situation or activity, as well as to shed light on implicit knowledge that the actor has in regards to said activity. (Harbonnier-Topin and Simard 2013)

It is through this technique that I hope to disclose knowledge of my practice that I am not immediately conscious of. The interview process stipulates enquiry into the direct experience of the action through questions of 'what' rather than 'why'. Questions posed in this way aim to remove preconceived notions and judgments that cloud the activity under observation and in so doing open up new perspectives or clues to the action. As I am applying the technique to myself, it develops as a self-introspection interview.^{xxvi} Through

this technique of questioning, I hope to relate an understanding of how the practice of yoga cultivates an enhanced perception of our intersubjectivity in the world. I intend to demonstrate that yoga does not remain separable, but rather becomes integrated into an everyday enhancement of our experience of the world, or as choreographer Michael Kliën states (in relation to choreography), it 'sets the right conditions'.

My yoga practice

I feel my yoga practice in two distinct, but interconnected ways. One is based on a practice contained within a studio environment, where there is a clear structure of arriving, asana practice and relaxation. Within this mode, there is a conscious recognition that I am 'doing' yoga - my mind is focused in the present, I observe the breath and I am aware of my body moving through a succession of asanas. The other, incorporates yoga into the movement of my daily life. This approach is fragmented, imaginary and playful. It comes to me throughout the day, momentary fragments when either I draw my attention to the specifics of what my body is feeling/doing or the echoing of a rhythm or pattern interrupts me. They are moments of walking or standing when I inquire into how I am breathing or what I could do to ease the tension in my body. Sometimes these fragments are ways of playing with the patterns of my movement or posture, changing my stride or looking for space in my body, for example locating space at the back of my neck, and always relating it back to how it feels at that moment, listening. At other times, it is a pattern that

interrupts me, for instance recognizing the echoing rhythms between my pelvis and shoulders as I climb the stairs. The yoga I was taught and practice, has overtime blurred into my everyday experience. The yoga classes I attended were, in Ingold's term, my apprenticeship. It was my way of learning and gathering the necessary tools to enable me to understand the practice of yoga as a way of living with and perceiving my body and surroundings. This apprenticeship instilled in me a technique of questioning that contributes to an awareness of how I inhabit my body. This awareness, which initially seemed insular knowledge, ultimately opened me out to the world by cultivating a conscious enhancement of my senses. Both of these facets of my practice are bound to a body learning through play, by which I mean exploring the open fields of a dancing ecology, initiating a different focus, never knowing and always asking.

It was my initial intention to explore three separate yoga asanas in the research through practice element of my thesis – Tadasana (mountain pose), Adho Mukha Shvanasana (dog pose), Shavasana (corpse pose). I felt that by looking at three postures I would be able to develop an overview of a yoga practice and demonstrate the body engaged in different modes of awareness. The asanas I planned to explore exhibited three distinct ways in which the body orientates itself and perceives the world. I foresaw Tadasana demonstrating the everyday posture of how humans move through the world. It demonstrates the uniqueness of our posture and our relational orientation to the world – standing on two feet, legs engaged, spinal column erect and forward gaze. In Adho Mukha Shvanasana the body's relationship to gravity is redistributed. This posture creates two lines of energy – one radiates from the

pelvis through to the feet and the other travels from the pelvis through the spine into the hands. The orientation of this posture resembles that of a quadruped. The outward looking gaze of the human shifts so that the line of vision is now to the rear (between the legs) from an inverted head and eyes. Shavasana, on the other hand, is a posture of discovery through release. In this posture, contact with the ground or support is located through the posterior of the body. It is a posture of undoing, releasing and surrendering in which the efforts and tensions that help propel the body in movement can be withdrawn. Yoga practitioner Erich Schiffman describes the posture in the following way:

to be completely tension-free: not uptight anywhere, not contracted, not compacted or compressed, not deflated or depressed, not shielded, not in a posture of self-protection or self-defense, but voluntarily undefended and relaxed – and therefore expansive, spacious, clear, clean, wide open, and wide awake. (1996: 296)

This tension-free state does not focus on how the body moves through the world, but rather highlights a sense of being in the world – awareness is not on doing, but undoing and being. In Shavasana vision becomes something other than ocular. The eyes close and the interface between body and ground becomes heightened; instead of working with or against gravity the body is able to succumb, a heaviness and expansion of the body can be experienced. This supine and relaxed position of the body encourages the breath to flow with natural ease and fluidity, circulating throughout the system to maintain a state of health and balance.

However, as the written work progressed and my notion of a dancing ecology developed, it became clear that what I was trying to develop could be

demonstrated through one asana. For me, Tadasana epitomizes the essentials of yoga. It is a posture both common to our daily life, one that is at the foundation of all our upright movement, and yet a posture of limitless discovery. When I attend to the body in Tadasana, I acknowledge what I feel and recognise how, as a unified body, I participate with the world.

Yet the time and space required for prolonged attentiveness is constantly being eroded by the structures of our life and economic demands. We have lost sight of the value placed in experiencing and being with something. Performer and therapist Miranda Tufnell and writer and artist Chris Crickmay, in their book *A widening field: journeys in the body and imagination*, express this succinctly in the following way:

What appears?

When we first enter the wood the noise of our arrival drives everything into hiding. Only as we are still and wait silently do we begin to see its inhabitants, the myriad worlds existing within it. A spider swings itself up through the air on an invisible thread...a shadow of a crow passes above...the leaves brighten as the sun comes out...a rustling as a squirrel darts along a branch. (2004: 7)

Tufnell and Crickmay go on to apply this poetic wondering to a sensory body embedded in the world.

So the sensing, perceiving world of the body awakens only slowly as we are still. The more I sink into the physical presence of my body, the more fullness of being and particularity of what is outside and around me becomes apparent. As I breath and wake up to the detail – my body seems to soften and become permeable. And the concerns and worries that filled my mind loosen and give way, opening me into another more fluid and vital ‘world’, of textures, colours, sounds – layer upon layer of living detail that touches me in each moment – a sudden illumination of sunlight on my skin, the warmth or chill of the ground under me, the rise of my breath joining the movement of a breeze. As the field of my attention spreads out I begin to notice a sense of

response moving within me – responses which my body continually makes but of which I am usually unaware. (2004: 7)

It is this widening field I hope to locate through my exploration of Tadasana. Through this posture I will ‘sink into the physical presence of my body’ and become more aware of the ‘fullness of being and particularity of what is outside and around me’ and in my silence and stillness I will experience ‘what appears’.

Tadasana^{xxvii}

Tadasana reflects the unique way the human body holds itself in the world. As Tim Ingold, in his book *Being Alive*, explains there have been three developments in evolution that have allowed humans to stand out distinctly from other non-human primates – the enlargement of the brain (most specifically of the frontal regions), the dexterity of the hand in terms of the function of the thumb in relation to the fingers, and lastly, the anatomical changes that permitted humans to stand and walk on two feet. It is to this last development, that I refer to when exploring and recounting my experience of Tadasana. As humans, we have challenged gravity by drawing ourselves upward from the earth, balancing the head on top of the vertebrae, taking our weight through a curving ‘S’ shaped spine, standing on two feet and allowing the legs to straighten. This upright stance challenges gravity and demands a constant interplay with it. Steve Paxton, experimental dancer, choreographer and founder of Contact Improvisation, aptly suggests:

You've been swimming in gravity since the day you were born. Every cell knows where down is. Easily forgotten. Your mass and the earth's mass calling to each other... (<http://myriadicity.net/ci36/satellite-events/the-small-dance-the-stand.html>)

This relationship that Paxton refers to – ‘your mass and the earth’s mass’ – is a relation to the force of gravity. It is the grounding of our orientation to the world. It is a constant factor in every movement the body makes and to everything around us. By standing upright we are drawing ourselves against the force of gravity, so that we are always in Paxton’s words ‘falling toward our feet’.

Tadasana requires the body both to use gravity and to resist it - the ability to stand upright is dependent on forces working in opposing directions – with my feet rooted in the ground, I can give my weight to them, I can let go and surrender, using the force of my grounding to lighten my upward lift. My body is able to find length through the combined forces of pushing into the ground in order to lift away from it. In Tadasana the body is not simply standing upright, but developing the sense of forces that ground it through the feet. The italicized text that follows is the shaping of my yoga practice; it is my body sensing a dancing ecology.

My Body Sensing a Dancing Ecology

So it is that I feel myself into Tadasana. For me it is a posture that expresses finding space in the body and opening up to it. It is a posture that I always

engage with from the ground upwards. I do not start with my feet firmly planted, but make the conscious effort of lifting and placing one foot and then the other. Feeling my way into the asana and letting my feet take root. Sometimes I work from the heel to the toes, others from the toes to the heel, slowing uncurling, unfurling my feet unto the ground. For me, it is in the placing and spreading of the feet that the potentials for the posture are unleashed - so much to feel, so much energy to engage with. I must make the most of this meeting of surfaces – foot to ground, ground to foot. There is tactile communication between the ground and myself. My feet become my hands, my toes fingers feeling my way, reaching out and clasping that through which I give my weight. I am in dialogue with the ground. It is not that my feet and the ground become one, rather there is a dynamic relation ongoing between them. To ensure the stability of my stance my feet remain active, arches lifting. I lift and spread all of my toes, feeling the pulses of energy travelling through my feet. When I release them, it is to grip the floor. I am aware of the touch and non-touch, where surfaces meet and don't meet. It is into this ground that I must give way, that surface that prevents me from falling into the earth. What is happening in my feet, this spreading out, exploring, giving way and engaging with is a microcosm of the posture. What occurs in my feet is also explored by the whole of my body.

Attentiveness: sometimes it is something in my wider surroundings that all of the sudden makes me question how my body is actually feeling at that moment and how it might be (or not) reflecting its immediate environment. Other times it comes from within, a desire to pause and stand, finding my

balance in stillness and from there opening out to my surroundings. It is always that, a body in an environment, but it is not always a body aware in the moment. As I move in this world, my body is often doing one thing and my mind another, they need to meet in order to be attentive.

Attentiveness to my body begins through a release, letting go in order to allow my body to be heavy by finding my weight, my mass, my relation with gravity. Feeling that ceaseless adjustment towards balance - nothing is ever still, just movement, a continual dance where balance is not one point but many. There is subtle movement forward, backward, side to side, playing with gravity, looking for my imaginary midline through which I can feel my weight dropping into the ground. I draw upon this support. There is a line of energy radiating from my body into the earth, as well as, from the earth into my limbs.

It is a yoga workshop, we have come as practitioners to learn, explore, and play around the theme of investigating movement with yoga. The room is large, slightly cluttered and filled with an array of bodies. The floor has a coarse layer of carpeting; my mat is spread out on top of it. There are many things happening, many systems at work, but no matter how disparate the body or the system, we are all unified, working in some sort of relation.

Systems: there is a connection to everything, a breath that travels amongst us. I stand because I have something to stand upon. I stand because gravity permits it. I am a being in the world, governed by the world in the same way

as other systems. Differentiated by them, but in relation to them; distinct and yet porous.

My legs tense and my thighs turn out slightly, finding in these movements both a sense of engagement and release. The dynamic relation with the ground affords my upper body extension and lift. What becomes compacted by gravity's calling suddenly through a sense of engagement finds lightness and space to open into. The breath spreads through my torso. My awareness moves to my pelvis. I align my hips. As I draw my sacrum down, I draw my abdomen inwards towards the spine. There is connectivity to the body, when one dimension moves another responds. Here the movement creates a sensation of extension in my lumbar spine, triggering further expansion throughout my spine and neck. There is a shift in my balance. I lift my sternum upwards and outwards, draw my shoulder blades back and down, allowing my arms to hang from my shoulders with a soft engagement in my hands and fingers, an engagement of release. My breath all the time responding, circulating as the body opens. I tuck my chin in and draw the crown of my head upwards, finding space at the back of my neck. Amazed that such a small movement could feel so substantial. My gaze is soft and my awareness inward, and yet outward. Every relational aspect of the body is bound and maintained in relation to my surroundings.

My eyes shut and I play with my imagined midline, that anchor suspended from body to earth and earth to body. My weight travels towards my toes, I draw back to an imagined centre. I draw my weight towards my heels, again,

coming back to my centre. I explore balance by circling my weight around my outer limits. With my feet firm to the ground and my body erect, I lean as far forward as I can without falling over and circle around hugging the outer limits of my balance, circling first to the right and then to the left. Feeling all the time the call of gravity, that fine degree between leaning out and falling over.

Is there a midline between my surroundings and myself? Just as there is a midline down the body, where both sides are at the same time supporting one another and yet relying on one another - is there a space between my body and my surroundings where the same relationship is occurring? Maybe what Gilles Deleuze might refer to as a fold in my body where something is occurring in a space between – in the interplay of surfaces between body and environment. Not a precise point, but in the plurality of sensory interplay, where substances meet with and respond to one another. Tadasana is a constant interplay of forces, a continual recognition of breath, adjustment and expansion.

I open myself to sensations, extending my perception. I try to follow the sensations of my surroundings inward. How far into the body do they reach and how long do they linger? A cold draft envelops the back of my body, as a door is held ajar. I hear it, feel it, and am aware of my body responding to it. I pick up on the sounds of incessant howling coming from a dog. There are shifts of light behind my closed eyes. I have a feeling of inner warmth from the physical effort and engagement of the body, yet there is a chill enveloping my skin. I am aware of objects in the near vicinity, the shifting and swaying of

other bodies, the rhythms of breath and how as systems my body might connect or fold into another body, the space I perceive between. I sense vibrations within and without. There is the humming of white noise. Sounds, vibrations and breath are passing through me. I perceive space above and space beneath me. I lose sight of my boundaries. I am with time rather than watching it pass. As I breathe the world enters and I exit, the porosity between my surroundings and myself. My breath is not my breath, it is a weaving, a sharing, at once in me and yet dispersed. Tension leaves the body, but it returns, a constant fluctuation. I focus on my breath to bring release. That elasticity built into the breath, respiration - a pulling outwards a collapsing inwards. Through the breath, I am feeling my way, expanding, contracting - it manipulates the body, a demonstration of range, a feeling of vitality, a dialogue with the external and internal. My body presses out to the world and the world presses back on me. There is no in between, rather the world and my body are an ecology. Somewhere in that rhythm I find an ability to surrender. Instead of a body in control, I become a body in dialogue, willing to surrender, willing to feel. I am easing the boundaries, feeling the skin, penetrating and penetrated, a fluid, dancing ecology. It is a body engaged in the moment, standing, pausing, attentive, falling into the play of systems. What I feel is my experience of the world, it is unique and yet it is material. It is here, it is gone, it has transformed, I have transformed, moving, feeling, engaging, present. I will never know my body, but I can engage from it.

As systems we are relational, the movement of my head, is not one movement, but a ripple of dialogue amongst systems. It is as much a

movement of my head as a disbursement of particles, a shift of light, a rearrangement. Am I listening with all my organs of perception? The body is a vehicle of sensation. What can't I feel?

There are the questions that feed my practice, that stop me from being complacent and habitual in it. As I release from the pose, I stay aware of my body and through it my constant bind to the environment, I stay with my commitment to feeling. Where in my body does release originate? Is it from my feet, knees, spine, sternum, or head? What gives way first? Once initiated, how does my release progress, how does it trickle through my body. For example: I feel the sternum drop, my shoulders round forward, the curves of my spine re-adjust, my chin lifts, the engagement with the forces in my feet lessen and my knees soften. Is it the same pattern of release each time? Does one side release before the other? What in my body releases/relaxes? What feels heavy? Where have I lost a sense of lightness? What remains of the asana? How long does it stay with me? What other systems are at play? How do they affect me? How do I affect them? How do the forces in my body and the environment relate? Do they meet in harmony? Do they collide? If I examine the midline of my body, do I have a dominant side? How does it feel when I intentionally dominate with the other side? How do I usually stand? When I stand grounded and balanced in everyday life, how does that allow me to feel? Where does it direct my gaze? When I engage with awareness, what else happens? How do I feel the environment? How do I block it out? How much can I open up to what is being filtered out?

It is this question of what is filtered out that leads me on. It is because of and through my body that I am able to experience the world. It is a body that is persistent in its exploration of difference. Therefore it is a continually expanding/transforming document of knowledge. How can I participate more fully with this learning? What is hidden from me that my body knows through experience? It is therefore with these questions that I turn my explorations towards a form of introspection.

Self-explicitation interview technique

Pierre Vermersch, the originator of the explicitation interview technique that I am working from, comes out of a phenomenological background based on Husserl and his successors. His concern is how to reference the singularity of the lived experience. He queries:

Can one extract essences without reference to a lived experience?
Can one make honey without flowers?

It seems to me that in trying to answer this question one is perforce engaged with a reflective grasp of the very act of reference, of what it circumscribes, of what it is justified by, of what it is supported by. (Vermersch 1997: 2)

It is this 'act of reference' where Vermersch locates his technique. His retrospective technique focuses on the mental and material processes that occur in the action. Vermersch structures the system of action or lived experience with two complementary facets. One facet represents the connection of the subject to her/his experience and through this facet filters

notions of identity, external factors and the wider meta-position of the subject. The other facet represents the practical completion of the action and all that is related to it. Whilst at the periphery of these facets, subjects contend with factors such as context, justification, judgment, and intention, all of which cloud their verbal recollection of the specific action. The aim of Vermersch's technique is to pierce through these circumventing contentions to uncover the act itself.

Vermersch argues that introspection is a method that complements the ideas of phenomenology by providing a specific singular practice. The intention of the explicitation interview is to gain access to subjective experience. He contends that the interviewee holds information about her/his action that they are not conscious of and through the verbalization of this action, in the interview situation, new knowledge can be established. In his article 'Introspection as Practice', Vermersch explains how the practice of introspection unfolds. He says it begins with a 'feeling of poverty', that there is little to say about the action, except for platitudes or generic verbalizations pertaining to the content of the activity. Hence, it appears that the subject has little to say. However, Vermersch states:

In truth, this initial poverty is only the typical system of reflecting activity, that is, of a cognitive activity undertaken with the view to developing conscious awareness, therefore, to relate to something which has not yet become the object of conscious awareness. (1999b: 22)

This initial verbalization of the action consists of content that the interviewee is already conscious of or, at most, information that they are momentarily pre-conscious of. What follows from this initial poverty is a stage of reflectivity that

takes time, and what comes out of this reflecting activity is data that the interviewee was previously unconscious of.

The principle obstacle is that the subject who relies on what he can have access to most easily and most rapidly, that is, reflected consciousness, is then convinced that he knows nothing or at best a few banal generalities. The practice of introspection, therefore of reflecting activity, shows that the filling in 'takes place by stages and in accordance with a rhythm which is different from that of reflected activity and that certain conditions are necessary: suspension of the familiar activity making way for a momentary vacuum so that a new fulfillment can be effectuated, access to the lived experience which serves as a point of reference in line with a genuine presentification of the past situation (whose criterion is the presence of sensorial impressions resulting from the reliving of the experience). (Vermersch 1999b: 22)

Vermersch believes the initial difficulty of introspection can be overcome, that ways need to be invented to gain access to this data that is not readily available to the subject. It is within this framework of gaining access that his explicitation interview technique is situated, a method for drawing out and establishing a degree of precision in terms of the subjective experience. The subject is the only one capable of living through the experience, and the aim, for the subject, is to achieve a precision of information through the description of the action; one that avoids generalizations or the subject's a priori knowledge.

For the explicitation technique the subject is asked to recall a specific lived experience. The interviewee is then asked if they are happy and willing to proceed with the interview, this confirmed, the experience is then re-lived through a verbalization of the action. It is through this verbalization that the interviewer facilitates access to the precise sense or feel of what the body did during the initial lived experience. This is achieved by continually returning the

interviewee back to their initial lived experience through questions that refer to 'what' happened, rather than 'why' it happened. In doing so, it is intended that the interviewee has the potential to surpass the factors that cloud their recollection and can instead glean information about the lived experience that they were previously unconscious of.

It is possible to structure this technique in the form of a self-explicitation interview (and serves as part of Vermersch's training); here the individual takes on both roles – actor and mediator. As it is my intention to somehow express the enhancement of sensory perception that yoga affords, I have chosen to engage with research modeled on Vermersch's self-explicitation interview technique. Through this technique I hope to learn from my body information that I am not yet conscious of in order to disclose more precisely how, through the singularity of my practice, I inhabit the world. In the application that follows of this technique, the lived experience I focus on is the moment of precision when I feel my body still^{xxviii} in Tadasana.

The dialogue that follows is in the form of extracts taken from my self-explicitation interview. They are a selection of verbalisations in which I act as both interviewer and interviewee. The writing was compiled over time and developed through a process of transcribing, reading and reflecting back on what was noted. In this process it was possible to identify key words or statements in the text that demonstrated imprecision or circumvention of the act in question. It was from these words or statements that I was then able to format further questions in order to develop my exploration of the action.

Self-explicitation interview

Mel, are you happy and willing to proceed with the interview you have set?

Yes.

Tell me what specific action are you intending to focus on?

I would like to explore that fragment of time when my body falls into place in Tadasana. I hold and move through this asana constantly, both in my practice and everyday life. I embody it as well as teach it. So I am curious to discover what my body can tell me about my lived experience of the asana.

You spoke of the experience as falling into place, can you talk about what that means?

I never feel I am in the asana, I always have to find my way to it - adjusting, focusing. So when I practice Tadasana, I either lift and replant my feet, one at a time to the floor, or sway with my body until I feel a sense of weighted balance.

How do you feel falling into place?

Falling into place is swaying, subtle movements that play with gravity and my vertical plane. To fall into place I have to find an alignment that challenges gravity the least. It is in the distribution of weight.

The mass of my body flows into my feet. Swaying through the ankle – the shin tightens, the knees tense the toes are being driven into the floor, especially

my big toes, the inner arch of my ankles drop; when I draw the mass of my body back, the weight comes away from my big toes and inner sole and moves slowly over the tops of the feet to my outer ankles and outer heels, shins tighten, my toes lose their hold on the floor, the big toes lift, the balls of my feet are holding onto the ground, or my inner edges are, the out edge flattens to the floor. I can feel considerable shifting in the first and second phalanges and metatarsals. I feel that I am holding onto my breath. There is a bit of tension in my wrists, a drawing up of the hand. Somewhere in that sway there is a point I feel the body quiet and come to a sense of ease, where my standing becomes floating. I stay focused, otherwise I lose the connection to what I am feeling. The breath lifts the torso. I breathe and the breath in the torso lifts and lightens me. It draws up through the centre and bellows out at the ribs. I feel a spreading outward and a lifting. My spine connects me to my lower limbs, but the space between feels vacuous. There is movement in the thoracic spine, a change in the curvature, a change in compression.

When I stand in tadasana I find myself playing with finding balance from front to back – there is not much shift from right to left. It feels uncomfortable to come back on the heels or I feel the shift in balance difficult to trust. I feel like I might topple back. I am shifting my weight towards the heels, but then I draw forward through the toes and front of the feet.

Can you tell me about the actions – lifting and replacing your feet or swaying? I draw my heel from the floor, and usually I lead with the right foot, I engage the foot by spreading out my toes, this movement pronounces the ball of my

foot which I place back to the floor. When I lift and spread my toes, my big toe flexes the most, whilst the little toe parts away from my other toes and extends. When the ball of my foot comes in contact with the floor it through the first metatarsophalangeal joint, the ball of the big toe, and from there the contact spreads out and down. There is strength, tightness, effort in my big toe that is complemented by my little toe. I roll the outer edges of the feet towards the floor, as I do so the inner arches lift. I feel the ground distinctly on the inner and outer edges of the balls of my feet. My arches engage, the tops of my feet tense up and I feel the inner foot lifting away from the floor. I feel weight in my heels. Solid on both feet, there is a connection with my hip joints and pelvis. In the legs there is a rounding of tension, a feel of energy circulating from my inner leg to my outer leg that links to a movement in my sacrum, a tension to my perineum.

What do you feel just before you come into Tadasana?

I am standing, but there is a lack of presence in my feet, I am not conscious of them. There is a feeling of heaviness in my pelvis, some sort of gathering. There is a lack of attention to the body, to how the structure works, to what it is doing. There is a feeling of compression, a compactedness - the chest resting on the body. I make adjustments - drawing the abdomen in and up, lengthening the tailbone, lifting the sternum, lengthening the neck, dropping my shoulder blades, allowing my arms to feel heavy and drawn downwards – I have the sensation of finding inches of space in my body. And although I feel solid in the feet, I also feel I am suspended from above; that my head is being

pulled upward and the rest of my body dangles from my neck, until I reach my feet, which have a clear sense of where they are, a tactile meeting.

How do you bring attention to your feet?

I spread my toes, extend them and push through the balls of my feet. With this movement there is grounding, a working with the surface under my feet - not pushing into the earth, but meeting it, using it to hold on, gripping it with my feet and toes. I take my weight into my heels and the angle of my body changes. This disturbs my sense of balance, I have to adjust, I soften. My feet are active. My arches are lifted. Thinking about it, I feel a shift from the inner leg to the outer leg through the knees, pressure shifts off the inner ankle. There is a shift in my torso.

As I try to re-live the moment of my experience, I feel the posture take shape through my feet, shoulders and head. There is a sensation of being drawn upwards countered by a pushing into the ground and spreading out of my feet. The image I have is of the spine, I can feel space being created. There is an adjustment in my torso. With the adjustment or shift in my torso, there is a sensation of lightness, space and freedom. My breath creates openings. I feel my breath pressing against my back, spreading.

If you picture yourself in Tadasana, what do you see?

I see myself from my feet and lower legs. I am not looking at myself straight on, but from a vantage point or from the vicinity of the ground. The image is from the rear. The legs are strong. I am drawn to the pelvis and the shoulder

blades. I see the pelvis from the inside. I am aware of bone and support. I return to my feet. I see my toes lifting and spreading.

What do you mean by strong?

Direct. There is something very direct in the contact of body and ground.

There is an effort. My thought is directed to what my body is doing. I engage with the effort. The directed effort brings release.

How does your body feel release?

The breath moves. I can hold my body upright. An image of my shoulders just presented itself. There was a dropping. The image was of release. The shoulder girdle lengthened outwards.

When you talked of feeling the posture taking shape, you mentioned lightness and space. What happens when you feel lightness and space?

The legs are tight, they are tensed. I imagine my breath travelling up the front of my body and then breathing it out down the back of my body. The sternum lifts or actually I lift the sternum as I follow this imaginary breath upward. I feel bone. Some connection between arms and ribs. A pressing inward. The abdomen expands. A space opens between my ribs and pelvis. I draw the abdomen in. There is a connected movement of drawing the abdomen back and the sacrum down. The more I stay with the posture the more it demonstrates itself as two things: tension, bone, solidness – openness, space and ease.

Can you talk about tightness?

It feels as if I am holding on. But there is a shift. I feel the breath in my chest and ribs - movement. If I visualize my breath I see it travelling up and down the front of my body, hugging the centre; pressing the abdomen outward and gentling edging its way to my sternum and throat, circling around my ribcage, and feeling it drawn down behind the abdomen. If I visualize the movement of the breath, it is almost like it curves behind. I feel it in my back, like my back is breathing just as my abdomen does, a gentle outward expansion that pushes up into the shoulders and down towards my pelvis. The breath does feel overly expansive. It feels quite contained. There is a close-knit movement or suction in the core of my body. The breath feels like a ball rolling forward and backwards. The abdomen expands upwards and outwards, as the diaphragm descends along the back of the body. It feels like an internal pelvic tilt, a slight rocking motion. There is a definite shift when my mind focuses on the breath. It seems to work as a prompt to release, or undo, or to ease off. The thought softens the abdomen.

When I try to re-live my experience of Tadasana, I am confronted with a feeling of bone and breath. I have a distinct visualization of my shoulders and ribs, a feel of mobility that there is a potential for my torso to rotate from side to side and an image of space - by space I mean room or freedom, a lightness that enters with my breath. Lightness because that rhythmical expansion and contraction is exploring the space my body holds, a spreading out, an opening out, a meeting with the outside world. This feeling which seems to be contained in the upper torso is complemented by a feeling of pressure or

heaviness or mass being supported through the lumbar spine. A feeling that travels down into my sacrum, a downward pressure that descends into the joint of my hips. A sense that I am resting in it; relying on it. And my head, what a heavy mass to sit on a pivotal joint. If it deviates from the vertical plane, my body somehow has to carry the weight of it. My head is my anchor upwards. I am suspended by my head, the heaviness dissipates. I feel a strength or hardness to my abdomen, a constriction.

Response

I found the self-explicitation interview technique a challenge. Reading and reflecting back on my verbalisations revealed to me a continual skirting around the edges, a banality that at times I was able to pierce. But even in the piercing, it always seemed to me that there was more to be discovered. Although I do not feel that I necessarily ascertained information embedded in my unconscious from the technique, I was able nevertheless to create new knowledge. The repeated questioning and re-living of the moment allowed me time to stay with one very precise moment – a moment of de-centering in which I feel the porosity of my body, a transformation from being contained to being somewhere in the container. It was the act of verbalisation that pressed me to clarify what my body was doing. I hear the verbalisations fluctuate between descriptions of the act and poetic wonderings. I know that each section continues to hold words that circumvent, that flutter at the outskirts of precision. I feel the interview technique reveals itself like a yoga practice, an

endless terrain of digging in deeper, challenging habit, removing assumptions, questioning, feeling and staying aware.

It gave me a different understanding of the asana. By re-living the moment, I was constantly feeling my way into the posture and in that feeling, I was following the binding of body and environment, following it inward, acknowledging rhythms and forces that I participate with, that I rely on. This knowledge continues to feed into my practice and the wider realm of how I inhabit the body, how I live in the world.

The interview technique uncovered for me how the posture expresses itself in fragments of awareness – my torso, pelvis, bone and breath. There remains the potential for me to piece these fragmentary parts together in order to develop more fully a feeling for the systemic structure, the network of systems and the circulating feed-back loops that bind it all together. It also highlighted for me the extent to which embedded in my standing posture is the propulsion for forward movement. Whilst standing there is a resistance in my body to succumb to stillness. I remain positioned for forward movement, whilst my intention is to find a way to pause. This resistance I feel is located in the vertical plane of my body.

Reflecting back through the writings of my interview, I could decipher two areas of my body that offer resistance to the posture of Tadasana. One area being at the front of my foot, in the curve that flows through my ankle linking leg to foot, somewhere in the meeting of my tibia and talus. Here is this curve, in this joint, I hold on to forward movement. The other area I sensed was in my pelvis, more precisely, perhaps, I associate it with the iliopsoas muscle. Here, I believe, there is a holding back from lengthening, again, as if

set for forward movement, not truly pausing or being still. These areas of resistance, although focused on the intimacy of my body, offer to me a wider knowledge of how I engage with the world. It is in these subtle acts of resistance that I could perhaps locate a further fluidity. A further ability to negotiate with the world I am embedded in.

Furthermore, I found it enticing that the visual images I evoked of myself were not only from behind, but also from the ground up, as if I am seeing from the earth outwards, being eye level with where my body takes root. If I were to call an object to mind this would not be how I see it, or recall it. There is something in the familiarity of my body that allows me a different perspective. By such the invisible is perhaps brought into vision. Here vision is not intended as an ocular mode of perception, rather it is as an understanding of my body and an understanding of what it moves from.

Whilst the initial recounting of my subjective experience of Tadasana offered an expression of my body in negotiation with wider systems; the detailed introspection that followed, focusing on a precise moment of my action, afforded me insight into engrained patterns. It is these engrained patterns that limit my ability to dance, to be open to creativity and play. Therefore it is through challenging these patterns that I can locate a sense of embodied agency and hence open myself more fully to a dancing ecology.

Conclusion

If return to the opening of this thesis and Bateson's quote - which refers to the idea that as people deeply acculturated as we are, it might be hard to imagine our relations with the environment in any other way, then this thesis can be read as a response, a way to perhaps instigate this shift in relations. For throughout my writing I have attempted to demonstrate how the practice of yoga can enhance a subject's perception of their environment, cultivating a sentient interrelationship between body and world and in so doing provide a greater sense of play and creativity in our negotiation with the world. It is in this interrelationship that an awareness of a dancing ecology can be sparked; the notion that, as organisms, we are very much immersed in the world. This immersion then suggesting that our relationship between body and world is one of continual transformation and emergence.

Bateson's provocation for change is carried forward into notions of sustainability and resilience. For me, this involved both a sense of body and planet, and that by cultivating the rhythms and dialogues reflected by our interrelationship a quality of care is established. In the recognition of the relations between the physicality of my body and the forces at play in and around me, connectivity emerges. In the light of our current ecological crisis humans are being asked to conceive, imagine and bring into being new ways of living. This thesis establishes the potential to create a more sustainable future for the human race by opening up to an enhanced sensory experience of the world. This requires looking beyond our own species, beyond false notions of centrality, towards a dancing ecology. An ecology that celebrates

the movement, adaptation and transformation of all things, addressing how everything connects and that how, as humans, we are a part of these connections. It was through my self-explicitation interview that I exposed the porosity of my body and the potential to unify fragmentary movements. As Serres points out, if sustainability is our agenda then we need to think in terms of ecology and not environment:

forget the word *environment*, commonly used in this context. It assumes that we humans are at the center of a system of nature. [...] The Earth existed without our unimaginable ancestors, could well exist without us, will exist tomorrow or later still, without any of our possible descendants, whereas we cannot exist without it. (2011a: 33)

Hence, humans are dependent on the world for our survival, this dependency calls out for an ability to change and transform, to take account of the body in our experience the world.

It is therefore why my enquiry into a dancing ecology was supported by a sensory auto-ethnographic methodology, one that enabled my yoga practice to be both the source of and the route to knowledge. I wanted to give my individual practice a voice with the intention that it would speak materially of the theory that I was fleshing out. For it is a practice that necessitates engaging with the materiality of the moment; an appreciation of my body in play with gravity, my feet rooted to the ground and mindful of the movement afforded by the relationship of body and surroundings.

Whereas Kliën speaks of a dancing body, I speak of yoga as a way of enabling the body to dance. As such, I regard yoga as a practice of undoing limitations, those that have been built up by social, biological and psychological factors. Through yoga habitual patterns of mobility are disrupted

and varying degrees of movement are opened up. This freedom of movement is what affords a new way of perceiving and living in the world. Asanas require the body to move beyond the set patterns constructed and perpetuated by our habitual life. This movement reveals possibilities that can be carried forward into the everyday, so that the body is recognized as not *this* or *that*, but always as being in a state of vitality. This un-hindering of body and breath reflects on the relationship between body and world to the extent that care develops for that which one moves amongst and the air which one breathes. By attending to the body, one attends to that which one moves in. As a practice, yoga recognizes forces at play in the body are also forces at play in the world. What begins as an awareness of movement and sensation has the potential to afford a new perception of the world.

Although, my thesis has provided a way of recognizing how the practice of yoga can be correlated to an ecological framework. In order for a new way of being to come to fruition, yoga must be recognized as only part of the necessary network. Yoga's ability to enhance our sensory engagement, our ability to be present to the everyday body, needs to be supported by a greater socio-political agenda, one that takes into account the body's role in forging our perception and our ability to create. The move towards sustainability needs to be incorporated by a world that reflects a desire to move and remain vital; value given not just to what the body does, but how it participates. It is in a practice based on fluidity, such as yoga, that potentials of presence and agency develop, affording the possibilities to create something new; a recognition that through breath there is a thread uniting

body and life and that in the fluidity of bodily movement this connection is strengthened, enhancing the ability to partake in a dancing ecology.

Endnotes

¹ In *The Complete Yoga Book*, yoga historian James Hewitt begins the section

Confusion will be avoided if we at once point out that there is Yoga as an end-goal and Yoga as a system of techniques and disciplines to reach the end-goal. Not only that: there are several systems, and therefore several Yogas... Strictly speaking, Yoga is Indian and Hindu; and for the Hindu mystic the supreme goal in living is absorption in *Brahman* – ‘I am that.’ (1977: 3)

The schools of Yoga continue to proliferate and expand, and it is not my intention in this thesis to discuss the different disciplines of yoga; and neither am I concerned to trace its history and evolution in the twentieth century. For a more detailed overview of the positioning of modern yoga practices and their respective origins, see Singleton (2010).

However, what I do want to do is to avoid possible confusion, and to clarify terms. Briefly, what I refer to as Hatha Yoga, for the benefit of this thesis, derives from *ha* meaning ‘sun’ and *tha* meaning ‘moon’. ‘Yoga [the word] comes from roots meaning ‘union’, and, the English ‘yoke’ is etymologically related’ (Hewitt 1977: 3). Therefore, Hatha Yoga can be seen as an integration of two supposedly opposing entities - sun and moon, body and mind. Generally speaking, in the west, Hatha Yoga is a practice of *asanas* (bodily postures), *pranayama* (breathing techniques), *mudras* (gestures or seals) and *bandhas* (locks). In the context of this thesis, I look specifically at the practice of *asana* and *pranayama* as techniques for enhancing perception. Perception is always corporeal, and occurs in the exchange between body and environment. Where *asanas* root the body in the world, creating a sense of ‘groundedness’ and drawing attention to corporeal habits, possibilities and limitations, the breath or breathing of *pranayama* allows for a more subtle, and fluid, but no less vital interface between self (organism) and environment. Together these techniques form the basis of my practice of yoga in this thesis (see case study in Chapter Four).

Returning to Hewitt’s statement above, the absorption that the Hindu mystic seeks through enlightenment, is for my purposes brought down to earth and reconfigured in terms of a recognition of the connectivity linking body and environment. There is no spiritual path at play within this thesis, but rather an attempt to think of Yoga as an ecological practice producing new forms of perception, and disclosing hidden interdependences between human beings, bodies, and worlds. For me, as for the anthropologist and cybernetician Gregory Bateson, these interdependencies, are always immanent, not transcendent. In *Steps to an Ecology of Mind*, Bateson is concerned to stress that ‘mind’ – or what he also calls ‘mental determinism’ - is situated within the world, not something that transcends it:

mental determinism is in no sense supernatural. Rather it is of the very nature of the macroscopic world that it exhibits mental characteristics. The mental determinism is not transcendent but immanent, and is especially complex and evident in those sections of the universe which are alive or which include living things. [...]

Immanent mind has no separate and unearthly channels by which to know or act and, therefore, can have no separate emotion of evaluative comment. (2000: 472-73)

I see the 'subtle awareness' (Saraswati 1996: 2) that yoga is often said to give rise to in similar terms, as Bateson.

ⁱⁱ For a related but different notion of progressive ecology see Lavery and Whitehead (2012: 112)

ⁱⁱⁱ For a good discussion of environmental dance see Stewart (2010), Kramer (2012) and Lavery and Whitehead (2012).

^{iv} My use of the pronoun 'we' throughout this thesis is intended to denote the human race.

^v Martha Eddy, founder and director of the Center for Kinesthetic Education, states in her article 'A brief history of somatic practices and dance' (2009) "In the 1970s Hanna coined the term 'somatics' [...]" (Eddy 2009: 7). The term was established in order to unite a widening field dedicated to the study of individual experiences of the living body. From a variety of methods common features were observed:

Each person and their newly formed 'discipline' had people take time to breath, feel and 'listen to the body,' often by beginning with conscious relaxation on the floor or lying down on a table. From this gravity-reduced state, each person was guided to pay attention to bodily sensations emerging from within and move slowly and gently in order to gain deeper awareness of 'the self that moves'. Students were directed to find ease, support, and pleasure while moving – all the while paying attention to proprioceptive signals. Participants were also invited to experience increased responsiveness as they received skilled touch and/or verbal input as 'fresh stimuli' from a somatic educator or therapist. (Eddy 2009: 6-7)

It is within this framework of common features that I place yoga as a somatic practice. Yoga as a discipline centers on the breath, and by drawing attention to the present moment asks for the practitioner to 'feel and listen to the body'. Yoga classes typically start with a moment of transition, where the practitioner focuses the mind onto the body and breath, and is encouraged to recognize how the body feels. This draws the individual away from goal-orientated pursuits and instead places the emphasis on process. Instead of being caught then in achievements, such as arriving at point B from point A, the individual is allowed to dwell in the journey from A to B, in other words, the process. Asanas are practiced in a non-judgmental manner that allows for an acceptance and a deeper understanding of the body. Verbal guidance is often given by prompts, such as, to breath into an area of tension, release from tension, or give into resistance. Furthermore, 'skilled touch' may be used to highlight bodily awareness for the individual and through this sensation of touch, the receiving body responds. It is through such common features and the engagement with a first-person perspective of the body that I posit yoga as a somatic practice.

^{vi} I am using the term soma to refer to the body as perceived through a first-person perspective. Thomas Hanna in his chapter 'What is Somatics?' (in Johnson 1995: 341–52) lays out two distinct viewpoints from which humans can view the body. The first is from an internally self-aware viewpoint; the second, is a third-person perspective of an externally observed body. In other words, I can observe myself from within or someone else can view my body from without. The information gathered from either viewpoint does not equate, as Hanna explains 'the two separate modes of recognition are irreducible' (in Johnson 1995: 342). The internally self-aware viewpoint is personalized and established through immediate proprioception, whereas, third-person perception is contingent on facts and interpretation. The soma is the body observed from this internally self-aware viewpoint.

^{vii} I am aware that in the terminology of my title (ecology of perception) and perhaps throughout my writing, that James J. Gibson shadows my thesis. I had originally focused on his notion of an ecology of perception. His theories allowed me to relate perception as an active relationship between body and environment and secondly, that the sensory organs did not function in isolation, but worked as a total system. However, as the writing and practice of my thesis unfolded, it became problematic to integrate Gibson clearly into my writing. I found my focus on Gibson was causing me to splinter away from the emphasis my thesis was now developing. I therefore decided to relate the ideas of an active perception through the phenomenology of Maurice Merleau-Ponty, as he, like Gibson believed that perception was tied to movement.

For an excellent reading of Merleau-Ponty's critique of vision see (Jay 1993: 269-338).

^{viii} The nine lenses in Reeve's book are: 'The Body as Object', 'The Body as Subject', 'The Phenomenological Body', 'The Somatic Body', 'The Contextual Body', 'The Interdependent Body', 'The Environmental Body', 'The Cultural Body' and 'The Ecological Body'. I find it limiting that in Reeve's attempt to acknowledge the body she has chosen the visual metaphor of 'lens'. By doing so she restricts the full perceptual capacity of the bodies she is addressing. The word conjures up a picture or image, something captured and defined, rather than something corporeal, transforming and creative.

^{ix} I register this caution because non-Western countries such as Japan, China, India, and Brazil have shown precious little concern for the environment in their desires to modernize and to become part of the global economy. As such, it is not 'Western daily life' that is the problem, but rather daily life under capitalism, be that industrial capital and/or neo-liberalism. It is a flaw in Reeve's thesis that she does not pay sufficient attention to economics. In this respect, she gets dangerously close to romanticizing the life-styles of non-Western peoples who would, presumably, in her opinion, have a more ecologically progressive relationship to their environments. Whether this is the case or not is, at best, debatable.

^x Interestingly, Bennett's idea of 'vibrant materiality' does not simply apply to pristine notions of 'nature', it also applies to waste materials such as battery acid, discarded trash, plastic bags:

A dead rat, some oak pollen, and a stick of wood stopped me in my tracks. But so did the plastic glove and the bottle cap: thing-power arises from bodies inorganic as well as organic. (2010: 6)

The notion of thing-power that Bennett is referring to is the ability of inorganic material to be 'self-organizing' and hence variable and creative in its existence.

^{xi} Nigel Stewart perceives 'environmental dance as a means not just of deepening an appreciation of the natural world, but of generating new ecological knowledge and of exploring environmental values' (2010: 32). In his article 'Dancing the Face of Place: Environmental dance and eco-phenomenology', Stewart proposes 'environmental dance' as a collective term to express the 'plethora of dance and somatic practices concerned with the human body's relationship to landscape and art' (2010: 32). He divides the term into three categories: (1) 'site-specific dance works that are improvised at, or choreographed for, particular indoor or outdoor rural or urban locations; (2) 'dance theatre works for the stage that mediate some aspect of the natural world or the qualities of a particular place'; and (3) 'approaches to somatic education, dance training and movement research that occur wholly or partially outside of the studio' (Stewart 2010: 32). In his article, he concentrates on the third category, through a reflection on improvisation exercises used in the development of *Water Log*, a piece he made in collaboration with US dance artist Jennifer Monson.

^{xii} It's interesting that much of the ecological dance performed in the US and UK has tended to draw on a version of pastoral environmentalism developed in the US. This is often associated with poets such as Thoreau and, more recently, Gary Snyder. As opposed to UK or German environmentalism that has often been concerned with animal liberation or anti-nuclearism, ecology in the US, and in the popular imagination, has often focused on wilderness, landscape, and countryside. For a good discussion of different environmental histories see Ursula K. Heise's *Sense of Place and Sense of Planet* (2008).

^{xiii} It should be noted that in my thesis I have been selective in my reference to Halprin's work; it does not refer to the entirety of her performances, neither does it take into account her work with Lawrence Halprin that took place in city spaces.

^{xiv} Abram continually cites Merleau-Ponty as a key influence in the *Spell of the Sensuous*. See also the article by Abram (1988).

^{xv} There are other forms of phenomenology, for instance Sartrean phenomenology that does not posit this sensual and pleasurable engagement with the world. For an excellent description of different types of phenomenology see Moran (2000) and Jay (1994)

^{xvi} For a further discussion of space and phenomenology see Edward S. Casey (1998)

^{xvii} Merleau-Ponty was particularly drawn to the work of Paul Cezanne, and believed that modern painters were attuned to the play of the visible and invisible. As philosopher Mark Wrathall puts it: 'We can restate Merleau-Ponty's view in this way: art, and the pictorial arts in particular, is uniquely well qualified to help us understand our perceptual engagement with the world. This is because the artist is somehow able to become attuned to the means

by which the world is composed for our visual perception, and then is able to orient us through the pictorial work to the process of composition. That means the work of art performs a kind of phenomenology insofar as it shows us something in such a way that we can understand it more perspicuously than we did before. (2011: 12).

^{xviii} See Serres (2011a: 27).

^{xix} See Rodaway (1994: 55-60).

^{xx} There is much in common between Mauss's tripartite schema here and Felix Guattari's notion of 'three ecologies' (2008).

^{xxi} For further discussion of feed back loops see Bateson's essay titled 'Double Bind, 1969' (2000: 271-78).

^{xxii} For a list of Bateson's six criteria for mind see (2002: 85-119).

^{xxiii} Perception is not to be confused with sensation. The verb to sense has two connotations, one to have a sensation and the other to detect something. Although sensation occurs in unison with perception, the latter of the two does not necessitate consciousness. In fact the sensory organs function in a state of constant exploration, an exploration that is not founded on consciousness. Perception therefore relates to the detection of stimulus information, whilst conscious sensation is the feeling that accompanies the information. Hence perception can occur without sensation, but not without stimulus information. For a more detailed reading of the distinction between perception and sensation see Gibson (1968) and also Rodaway (1994).

Also note that the meaning assigned to awareness here differs from the way I use it in relation yoga. Charlton is using the term to produce a sense that the system is responsive to information stimuli, whilst I adopt the term to emphasize the unison of mind and body.

^{xxiv} For a more detailed explanation of voluntary movement see Juhan (2003).

^{xxv} It is clear that Irigaray's philosophy stems from a very dense feminist trajectory, which, in the remit of this thesis, is not something I enter into dialogue with. Furthermore, I also stop short of her path towards spirituality and eternity. However, with that said, the attention she gives to yoga, and in particular the breath, needs to be addressed.

^{xxvi} It should be noted that Vermersch's interview technique requires years of training, training that I have not had. Therefore, the self-explicitation (guided self introspection) method I use is to be understood as one modeled on his technique. During the 2013 Dance and Somatic Practices conference I was a participant in an explicitation interview mediated by Helen Simard, a researcher trained in the Vermersch technique. It is on the lived experience of this particular interview, complemented by further research into Vermersch that my model is based.

^{xxvii} There are numerous variations of and names for the asanas. Therefore in order to establish a clear understanding of what I mean by Tadasana, I have given a reference for the posture, followed by a brief description in the form of instructions. The Tadasana (mountain pose) I practice is based on the example that appears in *Yoga* (Stewart 1992: 24); here one stands upright with their feet slightly apart, weight evenly distributed through both heels, legs firm, abdomen drawn in and upwards, sacrum drawn down, and chin tucked in to elongate the neck.

^{xxviii} The awareness cultivated in yoga is one of the present and living moment. The practice of asanas is a way of ‘understand[ing] yoga through the experience of the body’ (Desikachar 1995: 7). The asanas engage the mind with the movements and sensations of the body. There is no clear start or finish to an asana. Rather they are processes of moving towards stillness. The stillness I am referring to is not a cessation of movement, but rather a state of unimpeded movement and energy. The yoga practitioner Erich Schiffman offers a useful definition of stillness:

Stillness is like a perfectly centered top, spinning so fast it appears motionless. It appears this way not because it isn’t moving, but because it’s spinning at full speed. ... Stillness is dynamic. It can be experienced whenever there is total, uninhibited, unconflicted participation in the moment you are in – when you are wholeheartedly present with whatever you are doing. (1996: 3)

According to Schiffman, stillness is not, as sometimes considered, a state of rest, where nothing happens. On the contrary, it is a state in which the body, just as the world, is engaged in constant motion. Stillness, for Schiffman, does not refer to an absence of movement, but rather a body so perfectly attuned and present that its movement and continual adjustment goes unnoticed. It is not a point one reaches, but a continuous process in which the practitioner is engaged. In yoga, stillness is about being present through a unified body and mind, receptive to the sensory perceptions of the body, responsive to the flow of this information and maintaining just the effort required to support the body. The body is active, the mind attentive and the breath responsive to our participation with the world.

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