Radical Human Ecology

Intercultural and Indigenous Approaches

Edited by Lewis Williams,
Rose Roberts and Alastair McIntosh

Human ecology – the study and practice of relationships between the natural and the social environment – has gained prominence as scholars seek more effectively to engage with pressing global concerns. In the past 70 years most human ecology has skirted the fringes of geography, sociology and biology. This volume pioneers radical new directions. In particular, it explores the power of indigenous and traditional peoples' epistemologies both to critique and to complement insights from modernity and postmodernity.

Aimed at an international readership, its contributors show that an inter-cultural and transdisciplinary approach is required. The demands of our era require a scholarship of ontological depth: an approach that can not just debate issues, but also address questions of practice and meaning.

Organized into three sections – Head, Heart and Hand – this volume covers the following key research areas:

Theories of Human Ecology
Indigenous and Wisdom Traditions
Eco-spiritual Epistemologies and Ontology
Research practice in Human Ecology
The researcher-researched relationship
Research priorities for a holistic world

With the study of human ecology becoming increasingly imperative, this comprehensive volume will be a valuable addition for classroom use.

Below the clamor of a bustling world, this volume imparts the seeds of a radical alternative for human ecology. They lie beneath the surface: amid the whispered voices at the margin, in the praxis of traditional spirituality, along the dusty road of post-modernism, and from the ivy halls of science. This is not the human ecology of a prehistoric fireside or an academic symposium. It is an unconventional and timely pedagogy of hope.
From the Foreword by Richard J. Borden, Rachel Carson Chair in Human Ecology, College of the Atlantic and Past-President/Executive Director, Society for Human Ecology

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RADICAL HUMAN ECOLOGY

We dedicate this book to the elders whose indigenous wisdom has so inspired its making. We especially remember elders Ngāroimata Cavill, Betsy McKenzie, and John MacGregor.

He taonga whakamānawa tēnei ki a Ngāroimata Cavill (nee Ngātai), he kuia nō Ngāi Te Rangi. Ahakoa tōna tū rangatira ki tōna Ngāiterangitanga, i reira hoki te ringa kaha o te atua e whakamahana i a ia me ōna tikanga ā-wairua. E Aunty Ngāroimata, te tupuna māreikura, i a koe e hikoi ngātahi ana me ō tūpuna huhua, ka noho tonu ko tō wairua mo ake tonu atu.

In loving memory of Ngaroimata Cavill (nee Ngātai) Ngāi Te Rangi Kuia, who while of her Ngāiterangitanga knew so well that god dwells in all peoples, places and spiritual traditions. Aunty Ngaroimata, beloved tupuna, while you now walk with the ancestors, your wairua stays with us forever.

In memory of elder Betsy McKenzie.

"I guess I'm an Elder, there are people here that are older but they are forgetting the stories." Thus my grandmother and Elder spoke with humbleness when I asked her if she was an Elder. Her stories were rich and full of meaning and often laughter; and her door was always open. She was a traditional healer, a knowledge keeper, an Elder of the church – as her eyesight failed, she continued to read the Bible in Cree syllabics using a magnifying glass. She lived in both worlds – the Woodland Cree and the Western … and now she walks in another world but her wisdom stays with those of us that had the privilege of learning from her. *Ninanaskomoon Nohkom.*

To John MacGregor, crofter, hostel warden and weaver of the great Harris Tweed at Gearrannan (Garenin) on the Isle of Lewis: I always saw you as an elder to us younger folk, a mentor in the ways. You shared Tradition's treasures and respect – indigenous and pilgrim voyager alike. And as you'd say with your great laugh, when pointing out that moorland resting spot, of family friend returning back to soil beneath the grass, long past her steadfast milking days but tethered to appreciation yet: "How now, brown cow?" *Mile taing. Leis gach beannachd.*

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Intercultural and Indigenous Approaches

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Foreword

This book has a clear and compelling aim: *hope!* This underlying message resonates in the voice of every contributor and throughout the entire volume – from beginning to end. Hope is always about the future. But the path we are on points increasingly towards a future of peril. If the world is to reclaim a path of hope – and a future that is hope-*full* – truly fundamental changes are needed. These are the kinds of insights that inspire this book, as well as the opening word of its title. In short, a radical reorientation *can* restore hope – through a deeply reflective and revitalized human ecological perspective.

Human ecology might be an unfamiliar phrase to some individuals. Others may see it as abstract or confusing. But for a growing number of people, it has become an unambiguous and unifying expression for the intersection of the two major realms in the living world. In the words of Paul Shepard – "the central problem of human ecology may be characterized as the relationship of the mind to nature."

The first human ecologists, in my opinion, were not scientists or scholars. They were storytellers. It is unlikely we will ever know how the art of telling stories began. Perhaps the primal roots, as some suggest, lie in imitative dance or rudimentary drawing. But one thing is certain. At some point, our forbearers began to develop an aptitude to symbolically encode remembered and imagined events. These mental representations also became shaped into vocalizations, capable of reproduction and meaningful exchange. Oral communication was a world-changing palette for binding human experience, memory and imagination.

The evolutionary threshold around this "second world," as Loren Eiseley called it, irrevocably transformed social and environmental relations. The mindscape of an interior consciousness liberated our ancestors from the ever-present moment. Time and space could be mentally transcended and endlessly refashioned within the crosscurrents of emotion, desire and buried intention. Those primeval images of the living world – and early human sense of their place in it – are lost forever in the mists of time. Nonetheless, the need to create and recreate life stories still dwells in the depth of our psyche. It may well be the enduring urge and perennial birthmark of the human condition.

In its present-day meaning, human ecology aims at comprehensive approaches to human-environment interactions. The scope of its domain is nearly boundless – from the emergence of humans on earth, across the here and now, and into the furthest reaches of our imaginable future. Its subject matter cannot be subdivided according to academic tradition. Its mandate is unequivocally broad and integrative, and thus demands a multiplicity of perspectives in search of connections among otherwise segregated ways.

Most of my professional life has been at the confluence of these streams of inquiry. The journey began in the late 1970s when I left a large research university to join the faculty of College of the Atlantic, a small private institution committed to the interdisciplinary study of human ecology. For two decades I served as the college's academic dean. In the early 1980s I joined a small group of scholars and practitioners in the creation of an international Society for Human Ecology. These roles have furnished countless occasions to explore and engage with diverse meanings of human ecology. The frame around human and ecological perspectives, as I have come to know them, stretches across rich terrain. A growing and substantial literature of human ecology can be found in libraries, yet at least as much comes directly from people working on this common project and sharing the pleasures of doing it.

My initial connection with this book dates back to the summer of 1984. I had just received a research grant to travel around Europe in search of other human ecology programs. My trip took me to a dozen European academic institutions, including the University of Edinburgh and the original site of the Centre for Human Ecology at 15 Buccleuch Place. I arrived, as I recall, unannounced. Ulrich Loening, the Centre's director, greeted me enthusiastically as a professional colleague; moreover, I was welcomed as his houseguest for several delightful days. My research, if that is the proper term, has been an ongoing *in situ* exploration of the history of these ideas ever since.

If human ecology does anything, it should strive to maintain the human dimensions of its own narrative. So it was a great pleasure when I was invited to read the chapter drafts and write these few lines of forward. The authors of this volume have allowed themselves to become an unavoidable part of the story. Mixing personal anecdotes and self-reflections with scholarly content can be risky. But also, as anyone experienced with the give-and-take of small-group seminars knows, it is the most effective mode of teaching.

My initial duties as an academic dean were aimed at building a non-departmentalized, interdisciplinary program of human ecology. Longstanding academic traditions had carved reality into compartmentalized approaches to knowledge. The main challenge, at the time, was to figure out ways to arrange affairs so my colleagues might overcome their specialized backgrounds and work together in creative and collaborative ways. We could not divine, back there, what the forthcoming decades of post-modernism would bring to the equation. Between then and now, most academic disciplines have been reduced to baggy shadows of their former outlines. Along the way a new generation of critically minded scholars have repopulated the academy. Their interests and skills often appear discordant with a human ecological vision. A further set of epistemological and ontological challenges would also arise from a growing acknowledgement of traditional and sacred ways of knowing. These widely diverse strands, taken together, might well have further dissolved human ecology. Thankfully, this is not the case – as a careful reading of the chapters that follow will disclose.

Below the clamor of a bustling world, this volume imparts the seeds of a radical alternative for human ecology. They lie beneath the surface: amid the whispered voices at the margin, in the praxis of traditional spirituality, along the dusty road of post-modernism, and from the ivy halls of science. This is not the human ecology of a prehistoric fireside or an academic symposium. It is an unconventional and timely pedagogy of hope. The promise remains, I believe, as much as when Paul Shepard, a half-century ago, counseled that: "human ecology will be healthiest when it is running out in all directions."

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Introduction
Human Ecology: A Pedagogy of Hope?

Lewis Williams, with Rose Roberts and Alastair McIntosh

> If human consciousness can be rejoined not only with the human body, but with the body of the earth, what seems insipient in the reunion is the recovery of meaning within existence that will infuse every kind of meeting between self and the universe, even in the most daily acts with eros, a palpable love that is also sacred.[1]

A central message in this book is that the ultimate challenge facing Human Ecology and humankind is an onto-epistemological one – both as this concerns our experience of reality (including what we think we are), and what we count as "knowledge." We are, profoundly challenged to remember and recall that which many of us have actively dismembered; to reclaim the unitive, depth dimension of being – the Life World that so interconnects us.

At this critical juncture in history, it seems we human beings are being called to re-engage with the poetic forces that lie within us; those that enable us to hold a vision of what is real and possible in these troubled times. Perhaps, it is only a re-coupling of reason and logic with eros, the human power or life force energy that arises from our deepest and intuitive ways of knowing that might offer us and Human Ecology as a pedagogy of "hope," a way forward through what may seem an impasse of our human condition.

As Nayyar Javed points out in this volume, much of contemporary human consciousness is like "foam on the surface of deep ocean." We act as if caught by the reductionism of modernity, many of us unwitting recipients of a kind of superficial mono-culture of mind, whilst paradoxically we cling to our limited identities and positionalities. We stick like glue to our worn-out story line of exponential growth, as the earth bleeds oil, ice caps melt, rivers shrink and life recedes. We continue to evade our deep ocean, the deeper resonance of being.

Yet, the ocean stirs, speaking her mind, calling us back to our deepest primordial knowing. Out of her depths emerges wave upon wave of ecological movements – coming from all directions – criss-crossing, overlapping, colliding, and even cohering. Many of their progenitors would not recognize or name themselves as Human Ecologists as such. They simply act for our larger earth and human community because they feel drawn to do so. Their relentless pursuit of ecological justice undoubtedly draws significantly on the vital qualities of intellect and reason, but somehow pulses from a different place. It is, rather in response to the collective trauma of our peoples, species, soils, and oceans, right down to the very lived, breathed molecules of our atmosphere – a kind of empathic resonance that pulses from the depths of human receptivity.

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1 Susan Griffin, The Eros of Everyday Life, in Chalquist, C. (2007) *Terrapyschology*. *Reengaging the Soul of Place*. Published by Spring Journal Inc, New Orleans, Louisiana.

Human Ecology Today

This book is a response to a different calling than that of a standard human ecological research text. To start with, the reader might note that at over half of the contributors are women and a similar proportion could be considered as being from indigenous or marginalized groups. This is not accidental. It is our contention that like the rest of the mainstream academy, human ecology is caught in a web of reductionism and scientific materialism. This risks rendering it impotent before the global scale of the ecological crisis.

In many respects human ecology is as old as human existence – for as long as we have been capable of contemplating our relationality with the rest of life. Indeed if conceived as an intentional practice of "mutuality" with other living presences (both animate and in the Western sense inanimate), human ecology has existed as a form of Native Science (Cajete, 2000) – along with all the rigors of any form of systematic inquiry – which has supported the sustainable development of Indigenous Peoples for thousands of years. What society has not had as one of its primary concerns for reflection, law-making and action the relationship between peoples and their places?

It is therefore noteworthy that in an academic context it becomes necessary to specify that modern scholarly debate is framed by Western definitions of the discipline. Historically speaking these are very recent. In the Western sense, Human Ecology has its roots in Ecology, which as a discipline was technically born when Ernst Haeckel used the word "oekologie" in 1866 to describe the study of an organism's relationship to its environment (Haeckel in Esbjorn-Hargens and Zimmerman, 2009: 159). Initially grounded in the physical and biological sciences, ecology was largely concerned with the study of the ecosystem as distinct from human beings – unsurprisingly, the discipline largely mirrored the predominant Cartesian dualistic conceptualization of reality of the times, as man stood "apart" from nature looking on. The 1940s and 50s gave rise to the birth of human ecology when mounting concerns about the impact of people on the environment (Sears, 1954) culminated in the inclusion of human beings into the equation. Over time, the entrance of other key disciplinary protagonists – namely, sociology and human geography – was largely responsible for the field's growing account of the reciprocal impact of the environment on human society.

The influence of the Chicago School of sociologists was pivotal – thinkers like Robert Park, Ernest Burgess and Roderick McKenzie – but it is the 1940 paper by James Quinn drawing on the work of all these that perhaps most succinctly crystallizes not just the debate of the era, but also, the foundation that it provides us as editors in linking this volume to the coherence of an epistemological lineage. The central issue was whether human ecology was a subset of geography, biology or sociology; the epistemological pigeon holes of the time. Crediting the work of the Natal scholar, J.W.Bews, Quinn plots them out. Each is represented on paper by a circle, the three being arranged as a triad. Human ecology is then drawn in the middle as a fourth circle, its edges intersecting each of the other three. As such, one's first impression is that human ecology is a discipline composed of subsets. But Quinn, in a visionary manner, saw that the whole was greater than its parts. Here is how he described it and the italics are his (Quinn, 1940: 719):

> Human ecology, according to this … conception, does not constitute an inclusive synthesis such as was proposed by Bews. The chief difference lies in the fact that it covers only the *relationship* component of the Bews triad. It does not include studies of environment per se, such as meterology; and it does not embrace studies of man's biological body per se, such as anatomy. In contrast, it comprehends only those parts of various sciences which study *relationships* of man

> and environment … This … stands as the single point upon which all students of human ecology agree.

What followed in various guises could mostly be seen as elaborations of, or at least, as being broadly cognate with this theme. A very partial list of names might include Paul Sears, Kenneth Boulding, Margaret Mead, Paul Shepard, the Ehrlichs, Ian McHarg, Aldo Leopold, Garrett Hardin, Gregory Bateson, Arne Naess, Donella Meadows, Carolyn Merchant, Edward Goldsmith, Richard Borden and Stuart Brand. The Anglo-Saxon bias will be evident and many listings would have forgotten the women. That is precisely part of the problem that the current volume seeks to redress. To achieve narratorial control – to have a voice of influence – it is generally necessary to have "made it" in some other field, preferably reductionist.

The result is that we are left today with a discipline that is very much a "work in progress." Yet it is an exciting time. Human Ecology's vast and burgeoning approaches encompasses numerous sub-disciplines (including eco-theology, ecological anthropology, bio-cultural ecology, global ecology, ecological economics, eco-feminism, eco-technology and political ecology) with recent scholarship (Esbjorn Hargens and Zimmerman, 2009) estimating over 200 emerging schools of ecology, environmental studies and ecological thought! This begins to beg the question of *what it is* or *what is it not?*

The most persistent definitions over time have conceived of human ecology as (1) "the study of relations between men and their environment" (Quinn 1940: 162) and (2) more latterly as an academic discipline that deals with the relationships between humans and their natural, social and created environments (Mumtaz and Williams 2007: 4). We contend, however, that the predominant and implicit conceptualization of such enduring definitions remains grounded in Cartesian ontology which largely reflect human ecology's failure to correctly perceive humanity as an implicit part of biodiversity, embedded in a vast web of mutual and symbiotic interrelations.[2] In summary contemporary genres of human ecology (in all their diversity) tend to reflect three historically embedded and related characteristics: an emphasis on scientific rationality and reductionism, a concern with materiality and externalities, and an underpinning onto-epistemological mono-culturalism. Overall, they continue to reflect very Western orientated ways of dealing with predominantly Western-originated problems. But is this good enough? Do such approaches access the depth of relationality that is required for an authentic human ecological relationship? That is what many of the papers in this collection seek to wrestle with.

We do not wish to be prescriptive in what human ecology can or cannot be. Rather we offer two related definitions; the first which articulates an obvious indigenous onto-epistemological perspective whilst the second underscores human intentionality for ecological well-being in terms of what could be or should be through "problem-solving, creative action and ethical concern" (Borden, 2008: 95). Firstly, human ecology may be defined as *"the study and practice of community: community with others (Society), community with the earth (Soil) and community with the divine (Soul)"* (McIntosh, 2008: 48). Secondly, in recognition of humanity's innate capacity to envision and participate in shaping a more ethical future, we invite readers to also consider the study and practice of human ecology as: *"the ability to understand, respond to, and work towards what is in the best interest of and will benefit all human beings and life on this planet"* (Spariosu, 2005: 6).

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2 This misperception, as evidenced by the amount of human ecology discourse currently orientated towards scientific prediction and technological human adaptation to issues such as climate change rather than deeper cultural shifts more concerned with subjectivity and behaviour, is in part responsible for our continuing emphasis on human "centred" and materialist forms of development.

Deepening Relationality

This book aims to inspire, provoke, and to challenge what many assume Human Ecology to be and the voices that represent it. Given the discipline's traditional identification within the harder edged disciplines of the social and physical sciences and emphasis on exteriority we are therefore, equally, if not more so concerned in this volume with interiority – that is consciousness, spirit and the metaphysical underpinnings of material reality. As is the implicit message in some of the texts assay, it is this more encompassing pre-modern or indigenous perspective that is potentially capable of holding a larger reality within which Scientific modernity might sit. We are intent on privileging them at this very juncture in history because of their inherently unitive potential and rather radically different orientation regarding humankind's responsibility for taking care of and respecting our relationships with all living things – animate and in the Western sense, inanimate. As Alastair McIntosh seems to suggest in his first chapter, if we do not call back the soul into the endeavour of Human Ecology, it, and we, are as good as dead anyway.

The overarching objective of this book, therefore, is to begin a conversation that seeks to decolonize various taken for granted assumptions about what Human Ecology research should be. This is not so much a subversion of Western empirical methods from which the discipline has grown, as a radical reintegration. We are all people who deeply value "science," but who wish to see it re-grounded into wider, culturally based epistemologies. In this instance we are concerned with traditions that privilege worldviews based on metaphysical interconnectedness: in plain language, paradigms that are open to there being a spiritual grounding to reality.

There are of course many views of what Human Ecology should be or could be. For some the situation that we are confronting is so grave that our present circumstances have been described as a "planetary hospice" (Williams et al., 2008). *Is it the job of human ecology, then, to help the planet die comfortably?* Or, *is the work of human ecologists to re-centre interiority and knowing of the metaphysical aspects of reality, alongside the seemingly more tangible, objective, material concerns of every-day life?* Or *is the work of human ecology more about de-centering human consciousness and activity in ways that open the space to the possibility of a much more encompassing form of ecological alliance and intelligence?* Each path has quite different implications for Human Ecology practice and those engaged in human-ecology related practice – as will be evident in the contributions to this book – represent a range of opinion concerning its aims, epistemologies and approaches.

The reader will note the obvious autobiographical emphasis of this text. This is in keeping with the radical reorientation of human consciousness which this text implicitly argues is so necessary for Human Ecology and humanity generally. The overtly techno-rational approach to ecological dilemmas on a larger scale represents a colonization of human consciousness and perception by Western Scientific empiricism with repercussions of a magnitude almost beyond description. Any corresponding discussion of Human Ecology which views people as co- participants with the rest of the earth community in shaping this planet's future inevitably begins to address the topic of human agency. Here it becomes evident that the deeper recesses of human agency are inevitably located in our onto-epistemological relationship to the world – in other words our experience of reality and the corresponding experience of the relationship between ourselves and our larger Life World. We argue that the decolonization of consciousness so radically needed in light of the dominant positivist, capitalist, techno-rational discourse requires starting at the centre of one's experience– the deeper resonance of being. Indeed as has been so aptly emphasized by Richard Borden, the key problematic of Human Ecology, and our larger world, is no longer "Can nature absorb the

impact of humans?" Rather, increasingly the question has become "Can human consciousness comprehend our relations with the living world?" (Borden, 2011: 48).

Background to this volume

The genesis for this book lies in part in the heart of the Canadian prairies. In 2008 a small group of international scholars and activists (members of this group who are contributors to this volume include Goodman, Javed, McIntosh, Moreno, Morrison, Roberts, White and Williams) met to discuss the potential of Human Ecology; what it might be and what it might become.[3] Over some 10 days, we both engaged with the many faces of Saskatchewan's communities around contemporary ecological issues and retreated amongst ourselves to story-tell, dialogue and ponder how an international Human Ecology network – specifically one that took an indigenous and intercultural approach – might contribute to the growing global and collective effort to address our ecological ills. With the exception of one or two, we by no means represented eminent scholars in "the field." Rather, we were a collective of scholars and activists from a number of diverse interests, disciplines, cultural identities and psycho-spiritual histories, and geographies, deeply concerned with the well-being of our human and more than human communities. We were united not so much by our belief in conventional approaches to Human Ecology which have largely eschewed Western Scientific and techno-rational "solutions"; rather, our common ground lay in our shared belief that our ecological predicament is essentially a crisis of epistemology and relationship.

As the initiator of this international gathering, Williams was at the time an Associate Professor, with the Department of Native Studies and Director of the Prairie Region Health Promotion Research Centre, at the University of Saskatchewan. In the course of her work she had been struck with how marginal indigenous ways of knowing were both to the academy and those in the business of promoting health throughout the province. The predominant Western, sanitized version of public health had almost disengaged from its own life-giving origins – the science of the earth community. Rather it seemed to lie limply aside, like a cauterized, half deadened limb, cut off from the very blood flow and heart beat of that which sustains us. However, for the indigenous communities of Saskatchewan, and particularly the more remote Saskatchewan and other northern Canadian Aboriginal communities, this dismemberment was far from habituated. They experienced the effects of humankind's materialist fundamentalism on an everyday basis. The depletion of their earth and waters, through uranium and oil extraction, the shrinking of wildlife through the everyday effects of climate change, loss of traditional food and medicinal sources through the global reordering of economic and knowledge systems, and the alienation of their youth from the land itself, manifested through an epidemiology of elevated suicide rates, self-harming, addictions, unintentional injury, diabetes and cancers. The affliction of land and its people was undeniably shared.

The other impetus for this international Human Ecology Learning Week and Retreat was the "Reducing Mental Health Disparities: Translating Knowledge into Practice – Practice into Knowledge Project"; an applied, interdisciplinary research initiative with Canadian Aboriginal and racialized immigrant and refugee women living in Canada, which investigates ways in which global conditions similarly impact on the agency and mental well-being of these women. Significantly, this project sought to draw on the culturally based and often indigenous knowledge systems of the participating communities in how these structured issues of identity, belonging, and well-

3 See www.kinincommon.com

being. However, traditional Cartesian mind-body conceptualizations of well-being implicit within the mental health promotion literature (including those that provided an ecological or settings-based approach) were proving inadequate to the task. Rather the project sought a deeper and more encompassing range of onto-epistemological perspectives, capable of radicalizing conventional ecological perspectives on mental well-being, which tended to primarily focus on the psycho-social and materialist aspects of ecology – that is, social and built environments. The discipline of Human Ecology held potential.

Around this time the XV International Conference of the Society for Human Ecology (SHE) was held in Rio de Janeiro, Brazil. The conference was impressive; representing a vast international array of "scientific" and interdisciplinary endeavour, with strong local academic, government and non-governmental participation. Among its many themes were indigenous/local knowledge and sustainability, agro-ecology and sustainable rural development, human behaviour and ecology, geographic information systems and remote sensing, environmental and cultural pollution, traditional people, biodiversity and cultural diversity and advances in ethno-ecology and ethno-botany. It was clear, however, and also noted by Katherine McCarter, the then executive director of the Ecological Society of America, in her key note speech that Human Ecology had only recently begun to integrate the humanities and social sciences into the discipline as a whole. Initially grounded in the Western, physical sciences, and focused on natural systems it had just begun to conceptualize the environment – human or nature – culture interface worthy of study in its own right. Despite the very welcome advance of the more aesthetic disciplines into the field of scientific ecological endeavour, however, the Cartesian split of self-other, humans – environment, and nature-culture remained implicit in the discipline's onto-epistemological underpinnings.[4]

Meanwhile, on the other side of the Atlantic in Scotland was a group of Human Ecology scholars and activists who had constellated around the Centre for Human Ecology. As will be evident from the contributions to this volume by several of its former and current faculty and students (Loening, McIntosh, Wilding, Smyth and MacKinnon), this initiative has been significant to date with respect to its integration into traditional Human Ecology of leading edge paradigms such as eco-feminism, post-colonial studies and spirituality. Perhaps even more significantly in relation to this Human Ecology research reader, the land-based activism of some of its members on lands which have been successively colonized – both by the English and the Scottish gentry, and more recently by transnational business interests – led some of these academics to critically rethink some of the more taken for granted notions of indigeneity and begin to apply these to the Centre's scholarly pursuits. These developments have undoubtedly underpinned a significant portion of the scholarship within this volume. The indigenous scholarship emanating out of North America which will be obvious within this text has unquestionably complemented and sustained these developments. Finally, a good number of contributors to this volume are activists/scholars who sit on the fringes of the academy and Human Ecology. They do so, because they seek to bring a creative kind of ecological praxis to their work, influencing the academy from the outside in. They may be regarded as part of the Deep Ocean of activism.

4 It should be noted, however, that the recent XVIIIth International Conference of the Society for Human Ecology (April 2011) demonstrated some overall shifts in ecological discourse. Phrases such as the "need to reorder human relationship to the bio-sphere," the "importance of incorporating a depth ecology" and the imperative of the generic human ecology discourse "freeing itself of Cartesianism" were evident in keynotes and group dialogue throughout the conference.

Key Themes in this Book

This Human Ecology Research Reader aims to (1) bring about a radical reintegration of indigenous ways of knowing, which inevitably include the sacred, (2) to locate greater onto-epistemological agency within the Human Ecology researcher and scholar, (3) to provide a number of practical interdisciplinary and intercultural applications of Human Ecology praxis throughout the world, and (4) to provoke conversation on how we might stimulate the academy to engage with Human Ecology not merely as a theoretical entity, but as a living, breathing, post-colonial activist movement.

Our agenda is to join forces with those who seek to radicalize Human Ecology – that is to go to its roots, to dig deep, and to stir the very soil of the assumptions on which it rests. Only through a re-examination of some of its fundamentals which have provided the discipline with its very form and structure can we be hopeful for Human Ecology's future as a living and vital approach capable of attuning and responding in ways which breath life back into our relationships. In this respect the demands upon the reader in this volume may be considerable. As scholar, student or practitioner in Human Ecology a vigorous journey can be expected, of which some key themes are as follows.

We are concerned here with the "indigenous," a term which remains highly contested, and is throughout this volume differentially treated by various contributors. This volume attempts to get underneath its commonly understood meaning as a political and cultural identity category,[5] although we contend that this understanding, including the honouring of treaty obligations and agreements, remains vitally important to the safe keeping of our planet. Our digging below the surface, is more concerned with this as a perspective and practice of deep interconnectedness that includes and is capable of being held by all peoples and for many of the contributors, other than human persons.

Alastair McIntosh names this as a pre-modern view that is capable of holding, epistemologically and ontologically, both its successors – modernity and post-modernity. For McIntosh, the challenge of this radical form of Human Ecology to the academy is that it invites us to integrate our perception of Earth, as the physical exteriority of reality, with Spirit as its metaphysical interiority. This queries the ontology and epistemology of the mainstream Academy. Williams in her partially auto-biographical exploration of what it means to reclaim our Deep Life World picks up on this point. For her, the re-incorporation of our innate capacity as human beings to remember our indigenous ways of being and seeing, means that we must re-adopt the radical forms of empiricism that are the providence of the metaphysical and shamanic. The construction of knowledge therefore also starts to become a key theme within this volume, both as this specifically concerns the indigenous as with Lakota ways of experiencing our ecology (Mehlmadrona and Mainguy) and the intercultural more generally as with Goodman's peace-building research.

In what is perhaps seminal work within this volume, the German-born and Irish-based ethnologist Ullrich Kockel calls for a renewed and critical understanding of indigeneity, particularly in Europe. Kockel shows us that deep in the pedagogical roots of German speaking Europe are embedded the twinned concepts of Heimatkunde (the deep knowing of a place, including its material and spiritual elements) and Heimat (a historical ecology of belonging – literally the place we are from or towards). A place of birth, suggests Kockel, only becomes a Heimat once we have "lived ourselves into it" and human beings can create Heimat far away from the place where they are born. The possibility of Heimat offers hope for the dislocated and dispossessed in our contemporary diasphoric postmodern condition with which Human Ecology is inextricably bound.

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5 Those who have been colonized within their own territories and are at this juncture in history the main keepers of traditional ecological knowledges.

More sequentially, and by way of a summary of what follows, we have structured our material according to the "3 Hs" of the pioneering Victorian Scots human ecologist, Patrick Geddes, who echoed Johann Pestalozzi in calling for an integration of "head," "heart" and "hand."

Organization of this Text

Part I ("Head")*:* "Theories of Human Ecology" opens with Loening's call for humanity to engage in a deep questioning of the ethics of the how, where and why we live as we do. For Leoning, the "attitude of Human Ecology" is vital – it must be one which is willing to risk calling conventional wisdom into question in order to stir deeper forms of human creativity capable of addressing the ethics of how we relate to our global commons. Alastair McIntosh continues Leoning's challenge to the academy, perhaps more bluntly, with his aforementioned chapter "The Challenge of Human Ecology," whilst Kockel's "Being from – Coming to" takes up some of the epistemological issues raised by McIntosh in his interrogation of what it means to really live one's self into the soil. This section concludes with a compelling account by Makere Stewart Harawira of the gift of "indigenous ontologies in perilous times." The next "Great Work" of humankind she shows us – as we stand collectively poised to either plunge into the abyss of our own destruction or take a great leap forward in human consciousness – is the integration of indigenous ontologies as the animating force in the necessarily deeply transformative journey that we must make if we are to avoid our own demise.

Part II ("Heart")*:* "Radical Epistemologies of Relationship" takes up Harawira-Stewart's invitation as it invites the reader deep into the scholarship of integrating indigenous ontologies into ecological praxis from a range of cultural perspectives. It tends to do so, from the inside-out, including auto-biographical elements which to varying extents interrogate the very onto-epistemological foundations on which conventional approaches to Human Ecology rest. The range of cultural-spiritual perspectives is deliberate, for a key premise of this volume is that elements of indigeneity exist within all cultures and postcolonialism's gift to Human Ecology as a movement is the reintegration of these into the foundations of Human Ecology as legitimate bodies of knowledge. As effective ecological endeavour is necessarily a collective global effort, *all* cultural groupings must see the basis for their human agency reflected back.

Williams anchors this section with an in-depth account of what it is to radicalize one's relationship to the world. In her outline of an alchemical Life-World perspective, she tackles the subject of human agency, out-lining an "Ecology of Human Agency" which draws on indigenous, modernist and critical post-modernist theoretical perspectives. For her, Human Ecology is at its foundations a shamanic practice. In the two chapters that follow Smyth and McKinnon continue to develop the theme of authentic relationship as they seek to interrogate, decolonize and develop firmer onto-epistemological groundings from which to tackle ecological issues. Both touch on the marginalization of indigenous perspectives from within mainstream Western cultures that are no longer formally considered indigenous. Along with Williams, they demonstrate the applicability of in various ways weaving together the inner and outer arches of attention through "Living Life as Inquiry." In her chapter "Exploring identity, belonging and place-making as a transition activist" Smyth boldly asserts that she will no longer give permission for materialists to marginalize our deepest source of wisdom – our spiritual knowing. Her narrative exposes her own negotiation as an Irish-born women living in England and Scotland of complex issues of identity, place and belonging and the subsequent application of this wisdom to the Transition

movement, a prominent sustainability initiative throughout the UK and other countries. Smyth warns of the emerging greening elite within environmentalism if we fail to pay attention to issues of social class, deracination and our rich but neglected indigenous psycho-spiritual histories. Iain McKinnon's equally rich auto-biographical work makes links between fundamental problems in formal education systems and our ecological crisis through comparing two very different learning experiences. He provides an evocative account – undoubtedly very relevant to the experiences of other young indigenous scholars – of his own negotiation of the powers that be within formal education, both as these colonize and deracinate, and as they can potentially liberate. For McKinnon the type of Human Ecology learning to which he has been exposed has ultimately been a pedagogy of powerful connection and reconnection with our shared relational essence.

In her account of the mystical tradition of Sufism as "the other," both in relation to Islam and the West, Javed reveals to us not only elements of indigenous ontology, but extends an invitation to authentic relationship with the nature of being. Whilst she is clear that we must get beyond our discursive identities to uncover a meaningful and unitive human collective, more capable of tackling our ecological issues, she is equally discerning of the ways in which "power" continues to structure contemporary ethnic, gender and class relations.

Keith Morrison enters into the potential of Eastern Orthodoxy as a mystical and indigenous form of spirituality to facilitate transition to sustainable lifeways. For Morrison, Orthodoxy is the lost heritage of the West. It can provide a bridge back to the early Christian world; one from which the West can recover parts of its own indigenous knowledge, therefore potentially achieving solidarity with other indigenous peoples and cultures. To those reared on versions of Christianity that denigrated indigenous knowledge this may come as a surprise, but most people raised in the West are not aware of the marked differences between Eastern and Western Christianity going back to the thousand-year-old split between the two. They are certainly not aware of the profound ecotheology immanent in much Orthodox thought and liturgy.

Through its articulation of the Lakota Philosophical system, Mehl-Madrona and Mainguy's paper "Aboriginal Connectivity and Human Ecology" picks up where Williams' left off with the shamanic nature of our Life World. The construction of knowledge is none other than the intersection of the energetic ecology of relationships – between people, places, spirits, rocks, trees and ancestors – all of which speak. Knowledge or the perceptions of constructions of the world is created through a participatory, iterative process. As Mehlmadrona and Mainguy articulate, major funding agencies in Canada are now considering these ideas of knowledge in formal policy documents. This section concludes with a discussion by Rose Roberts of her traditional Northern Cree culture in Northern Saskatchewan. In relating some of the traditions and stories of her people, Roberts issues us with a gentle reminder that our very survival is dependent on Mother Earth's bounty and beneficence.

Part III ("Hand"): "Human Ecology Practice" takes us firstly into the academy where McIntosh discusses the realities and intricacies of teaching radical Human Ecology. Such teaching and student supervision which moves us into the nature of human reality and being human is not to marginalize reason or science. Rather it is to ground these approaches in the essence and reality which has always been there – the pre-modern essential bedrock. It invites augmenting grounded theory with what he calls "discernment methodology" to serve as a yardstick of poetic constellation in seeking what constitutes "meaningful" data in human ecological research.

Goodman's chapter "Human Ecology as Peace-building" picks up on the theme of how we know. She situates peace as "wholeness" within a process of dynamic tension. Like Human Ecology, peace-building for Goodman is concerned with relationships and is implicitly linked to

the construction of knowledge – that is with processes which support paradigms of wholeness and relationship including our ability to listen deeply to what the earth is telling us.

Weiss' chapter "Migration, Aboriginality and Acculturation" connects to Goodman's peace-building theme as this is reflected in the acculturation of racialized immigrant peoples within contemporary Australian society. He is particularly concerned with this process as influenced by dominant society's positioning of Australia's aboriginal peoples. He contends that through creating an ecology of culture – that brings diverse cultures together in ways that are grounded in the local ecosystem and therefore builds on the knowledge of its indigenous inhabitants – one is in fact creating a culture of peace. For Weiss, work of this nature is deeply necessary to heal the toxic relationship that had inevitably occurred between many of Australia's western newcomers and the continent's indigenous inhabitants. Judy White also takes an ecological lens to migration and acculturation this time as it pertains to the immigration experience for racialized immigrant and refugee women living in Canada. She reminds us of the potentially important contributions that these women have to make to our societies and public policies from a human ecological perspective. For our common good, acculturation and exchange of different ways of knowing should never be one way.

Next we turn to Asia, where Zhang and Lovrod articulate the interrelations between global capital and development in China and the reconfiguration of gendered hierarchies through rural – urban migration for work. Drawing on discourses of eco-feminism they show how sustainability policy might look different if women, who form the base of the production pyramid were to have access to public voice in ways that welcome their values and experiences. Similarly, Van Dursen Varga and Moreno provide us with a compelling account of the impacts of capitalist expansion on the indigenous and rural peoples of the state of Maranhao in the Amazon region of Brazil. Here also, the development hierarchy becomes obvious when we consider that protection of indigenous areas requires the alleviation of pressure on rural peoples who are in turn under pressure from land owners and transnational development groups.

Eimear O'Neill tackles the thorny multilayered issue of trauma head on; an issue which is latent or underlying in other contributions to this section. Irish-born O'Neill demonstrates the potential of her artful heuristic research methodology to unlock and transform trauma at multiple levels towards increased human creativity and potential for ecological well-being. Such forms of cultural psychotherapy are significant, not least because they offer hope in a world where trauma constricts and contains our ability for human agency at this urgent time.

Through his articulation of first, second and third person action research and its relationship to Human Ecology praxis, Nick Wilding takes us on a vigorous journey of using this methodology to develop a community of practice for rural resilience pioneers in the United Kingdom. This is significant work in that it is ultimately about how we sustain the more emergent, organic and self-organizing ecological initiatives that come not from the academy but from the ocean of human being. He asks towards the conclusion of his essay, how this work might be scaled up to a broader system of influence. Sustaining work of this nature is about how one sustains and grows a community of practice; an issue also touched on by Williams' evolving Participatory Action Research which focuses on indigenous and intercultural approaches to ecological well-being. This work addresses the question of how we collectively apply ourselves to knowledge sharing in a time of post-colonial trauma. It picks up on Makere Stewart-Harawira's call for partnership, connectivity and knowledge sharing at the deepest levels as we go about the "Great Work" of recovering indigenous ontologies into knowledge for ecological action. As starts to become apparent in Williams' chapter such work of ecological alliance is inevitably complex as it requires holding highly divergent realities and psychosocial her-stories whilst negotiating the ways in which issues of identity, power and culture structure people's agency and ecological well-being in the here and now. It is as if the

ecological imperatives of our times now require us to collectively find our way into a global form of indigenousness in a world etched with peril and potential, grief and hope.

We, the editorial team, conclude this volume with a brief discussion on where to from here for Human Ecology. We have tried to offer an invitation for deepening engagement as we invite the reader, to consider the various genres of inquiry that might illuminate the path. The journey, as we see it, is towards radical re-emergence into the fullness of community. As Makere Stewart-Harawira in her chapter points out: to " … represent our highest self and allow us to reach for the stars."

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PART I
Head: Theories of Human Ecology

Chapter 1

The Attitude of Human Ecology

Ulrich Loening

Human Ecology explores not only the influence of humans on their environment but also the influence of the environment on human behaviour, and their adaptive strategies as they come to understand those influences better. . For us, Human Ecology is a methodology as much as an area of research. It is a way of thinking about the world, and a context in which we define our questions and ways to answer those questions. (*"What is Human Ecology?," Environmental Change Institute, Oxford University)*

A Human Ecology perspective reminds us that we really are part of a complex living world. It seeks new relations – not instead of disciplinary ones, but in addition to them. Its interdisciplinary mandate invites crossing boundaries.

This requires a different kind of imagination, in pursuit of fresh combinations of ideas. Its aim, as Alfred North Whitehead (1951) once put it, is "wider points of view."

Whenever someone leaves the comfort of a familiar world view, it is a first step towards Human Ecology. There may not be many who do so – but always enough, we trust, to carry its future. (Richard J. Borden, A Brief History of SHE**,** *Human Ecology Review*, 15(1), 2008)

Introduction

I remain deeply concerned that Human Ecology did not arise in the course of the last 200 years, alongside the general development of the sciences from the Renaissance onwards. There was a progression in scientific outlook. Copernicus put the planet in its place in the solar system and Kepler and Galileo the solar system into a large universe; and after Darwin and Wallace put humankind into place within all of life, one would have expected and hoped that the science of humans in their ecological position in life would also become a major study. But it didn't.

As a result, people still ask: what is *Human Ecology*? Most people readily appreciate what gorilla or elephant ecology is about; but not when applied to humans.

If we think of the study of Human Ecology as essentially the same as for any other animal, we raise doubts: study humans as though they were animals? If Human Ecology is about How, Where and Whether humans live on the Earth (Wally N'Dow 1995), it answers the question but omits the ways in which humans are imaginative, creative, conscious, spiritual and questioning. To include these special attributes of humans, I suggest we might add to N'Dow's questions an additional one, *Why*, because the human seeks answers to what life is about.

Beyond the basic needs of higher animals, for subsistence, protection, affection, participation and freedom, humans need time for idleness and creativity, understanding, and identity (Max-Neef 1989). To these, Max-Neef suggested adding transcendence. The big questions in life have to be understood somehow, and answers have had to be either discovered or invented.

Throughout history and prehistory, for at least 100,000 years, countless numbers of religions have provided answers to creation, birth and death and the future. Now the heritage of these instincts and myths, together with the attitude of modern science, shape *How* we live.

The Scope and Approach

Regardless whether the world is in trouble or not, it is important to understand these influences more deeply. This requires that we question every aspect of *How* and *Where* we live. In doing so we need to pose another more immediate and practical question: another *Why* in addition to the above one about the meaning of life: Why do we do things the way we do? That is a core question for Human Ecology.

The basic assumptions, dogmas, conventions and habits of any culture are opened for re-assessment and rethinking. Analyses of the ways humans live must be as comprehensive and as ruthlessly honest and rigorous and as any other philosophical study. This requires new thinking and new methods suited to the task: C.H. Waddington's *Tools for Thought* (1978) is one such work that makes us rethink our philosophical approaches and provides some means for doing this.

Waddington dubbed conventional dogma as COWDUNG, COnventional Wisdom of the DomiNant GroUp'. Dogmatic, religious and political pressures threaten Human Ecology just as conventional dogmas threatened Galileo. Indeed Garret Hardin (1985) called Human Ecology "the conservative, subversive science." For both purposes of conservation and of change, Human Ecology stretches to become a prescriptive applied science as well as the descriptive one of human nature and its impacts. Ways to conserve life can only succeed by questioning some of the ways by which we live, and criticising those that have turned out to be unsustainable.

In this exercise of re-evaluation, the arts and humanities have as great a part to play as the sciences since they reflect human behaviour patterns that determine our environmental impacts. The humanities together with the sciences have to be encompassed within Human Ecology (Stewart 1981). This global vision could perhaps have been achieved during the Age of Enlightenment in the eighteenth century, when the much broader *natural philosophy* led to new understanding that expanded human appreciation of the miracles of nature.

Perhaps the *natural philosophy* of the eighteenth century could be joined with the scientific/technical knowledge we have gained, to bring this combined wisdom to guide *How* we live. E.O. Wilson (1998) described such a synthesis of the disciplines and filling of the gulfs between them as *Concilience*. Human Ecology then becomes an attitude for synthesis.

The Background

We can trace the historical emergence of Human Ecological attitudes alongside assessments of human relations to nature and environmental impacts.

Plato was well aware of the ecological impacts of deforestation. He wrote in the Critias:

> Contemporary Attica may be described as a mere relic of the original country. There has been a constant movement of soil away from the high ground and what remains is like the skeleton of a body emaciated by disease. All the rich soil has melted away, leaving a country of skin and bone. Originally the mountains of Attica were heavily forested. Fine trees produced timber suitable for roofing the largest buildings; the roofs hewn from this timber are still in existence. The country

> produced boundless feed for cattle, there are some mountains which had trees not so very long ago, that now have nothing but bee pastures. The annual rainfall was not lost as it is now through being allowed to run over the denuded surface to the sea, it was absorbed by the ground and stored … the drainage from the high ground was collected in this way and discharged into the hollows as springs and rivers with abundant flow and a wide territorial distribution. Shrines remain at the sources of dried up water sources as witness to this. (Quoted in Thirgood 1981)

It might be amusing to note that goats must have been left to roam those mountains; in which case the *country of skin and bone* and *nothing but bee pastures*, would have produced just *milk and honey*. That biblical phrase might actually describe late stages of ecological degradation in the Promised Land, in which case Moses leading his people to the *land of milk and honey* would have been an early example of political spin!

We can compare Plato's text with any modern environmental science text:

> It is important to recognise, too, how tightly linked are the resources of soil, water and forest. Deforestation produces erosion and water pollution and makes run-off erratic, reducing the availability of water and causing more erosion. This process can become irreversible by altering the environment so drastically that reforestation is impossible. (Ehrlich et al.1977)

The eighteenth-century Enlightenment was a period of social, but not yet environmental concern. Charles Darwin's grandfather, Erasmus, gathered round him a group of people (The Lunar Society, Uglow 2002) to discuss all matters of natural philosophy. They saw that power (Watt's steam engines) commerce (Bolton's factories in Birmingham) and the arts (Josiah Wedgwood's pottery) could lift people out of poverty and they stimulated the start of the industrial revolution, but they could not foresee the urban poverty that emerged later.

The growth of applied science and industry soon had its critics in the Romantic Movement and then in political/economic critiques. John Stuart Mill (1848) clearly appreciated the connections in a manner that remains relevant now:

> If the earth must lose that great portion of its pleasantness which it owes to things that the unlimited increase of wealth and population would extirpate from it, for the mere purpose of enabling it to support a larger, but not a better or a happier population, I sincerely hope, for the sake of posterity, that they will be content to be stationary, long before necessity compels them to it. (Mill 1848)

The quote clearly links population with economics and resources; it distinguishes quantity (large) from quality (happier) and fundamental human needs from assumptions about the need for growth. Then:

> I cannot … regard the stationary state of capital and wealth with the unaffected aversion so generally manifested toward it by political economists of the old school. I am inclined to believe that it would be, on the whole, a very considerable improvement on our present condition … It is scarcely necessary to remark that a stationary condition of capital and population implies no stationary state of human improvement. (Mill 1848)

From the nineteenth century onwards a succession of now well-known thinkers expanded environmental awareness: those that moved our thinking in relation to nature and wilderness like John Muir, Henry David Thoreau, Aldo Leopold, H.J. Massingham; those that highlighted the

increasing impacts of industrial growth like Rachel Carson, Alvin Toffler, Kenneth Boulding, Paul and Anne Ehrlich, Barry Commoner; those that critiqued *Where* humans live by putting ecology into city planning, like Patrick Geddes, Ebenezer Howard, Lewis Mumford, Ian McHarg.

Alongside these were ecologists of natural systems, who gradually brought humans into ecological study, like Eugene Odum (1997). A classic was Human Ecology (Stapledon 1964) written in 1946–1948. These are just a few of the people who opened up new ways of looking at our world and warned that we were facing trouble by degrading our environment.

The Scottish Ecologist Frank Fraser Darling recognised the deep roots of environmental degradation writing in 1951 in his American journal (in Boyd 1986):

> The phenomenon of accelerating devastation and increasing population has, in effect, been inevitable from the moment man began to break ecological climaxes and upset equilibria without allowing them to rebuild … Most of us are not prepared to defer to this final logic, that the very achievement of humanness dooms us, and that civilisation is an ultimate contradiction.

The year 1972 then became an important one for ecological initiatives. Meadows et al. (1972) published the Limits to Growth, as a report to the Club of Rome, which had identified the interrelated global problems of development, environment and resources as *The Problematique*. *Limits to Growth* – followed by *Beyond the Limits* (Meadows et al. 1992) and the 30-year update, (Meadows et al. 2004) – modelled the resources and human activities that demonstrated *the frontiers of the possible*, it spelled out not doom but challenge. This was much misunderstood.

Although the idea of limits to growth seems recent, all four of the great economists (Adam Smith, Malthus, Ricardo, and Mill) of the eighteenth and nineteenth centuries were aware of economic limits (Zweig 1979).

Edward Goldsmith, as editor and founder of *The Ecologist*, published the *Blueprint for Survival* (Goldsmith 1972) just before the Stockholm International Conference on Environment and Development, which linked conservation of environment with human development, after Maurice Strong had persuaded Third World nations that environmental conservation was essential for development. Strong also asked Barbara Ward (1972) to write *Only One Earth* as a lead into the conference. The United Nations Environment Program was founded as a result. In that year also, Waddington founded Edinburgh University's School of the Man-made Future, whose function was to teach the Problematique, and the Centre for Human Ecology.

Yet as a subject, Human Ecology has still not become a generally accepted attitude or study. There are still very few university courses in Human Ecology; the Centre for Human Ecology was closed in 1996 and restarted two or three times; others have been closed, such as the Masters course in at the Free University of Brussels. Some Human Ecology courses are (surreptitiously!) tucked into other areas within a university. The College of the Atlantic had been founded in 1969 to give Human Ecology degree courses, there being no other universities that did that.

International efforts after 1972 were stimulated by the oil crisis of 1973 which at least created awareness of limitations of energy. Then the 1980s became a period of intense ecological reappraisal. The Brundtland Report, (World Commission on Environment and Development 1987) (only about 65 of the 900 acknowledgements gave their affiliations as universities) re-emphasised F. Fraser Darling's prognosis by opening with "Humanity's inability to fit its doings into this [nature's] pattern is changing planetary systems, fundamentally." And then: "The next few decades are crucial. The time has come to break out of past patterns. Attempts to maintain social and ecological stability through old approaches to development and environmental protection will increase instability. Security must be sought through change."

Now, more than 20 years later, these challenges remain. Jared Diamond (2005) documented how humans have degraded their environments throughout history and prehistory and civilisations have moved or died out as a result. People have always exterminated whatever was eatable wherever they migrated, over thousands of years. This has not happened in Africa where humans first evolved, at least not to the same degree, until now with massive poaching activities. This raises old questions about *Where* as well as *How*. One needs to find ways to limit human aggressiveness towards nature.

The overall picture that emerges shows how the present is a unique period in the whole history of the planet (not just of human history). Never before have there been so many of any one large animal species to inhabit the Earth, never before has any one species had such a large impact. By any of the usual criteria that we apply to other animals and species, the human species can be said to have reached plague proportions. But also, never before has there been a species that could consciously control its own further development and evolution and been consciously aware of that position. Human responsibilities for the future are thus awesome.

Even if this were not so, even if human life on Earth was integrated in equilibrium with the biosphere, Human Ecology would still be a vital subject, to understand how it all worked.

Human Ecological behaviour is determined by the combination of our natural and cultural heritage, by science and its applied technologies and by the social structures like religions and economics.

> *I* think I have found the missing link between animals and civilized man. It is us. (Konrad Lorenz, date unknown)

Heritage

The potential to multiply far beyond the capacity of their environments is universal among all species. This must include humans; the command to *go forth and multiply* probably has a deep-rooted biological basis, although White (1967) attributed our ecological ills to the Judeo-Christian heritage. Whether due to natural or cultural heritage, any discussion about population limits or controls evokes strong emotions – we find it hard to look at the situation dispassionately; our instincts tell us that it is unethical to question the values of having larger families. Other features of our behaviours may also have their roots in our natural heritage.

Many other animals that live in social groups like humans compete and often fight with other groups. War thus seems to be deeply naturally ingrained; and further entrenched by cultural development extending over more than 100,000 years, during which it paid to covet your neighbour's wealth. Any early philosopher sitting on a rock thinking out the future would have had his cattle stolen by a neighbouring gang (George Mc Robie, at a talk). What we now like to think of as civilised behaviour did not pay then. *Civilisation* and cooperative ethics evolved slowly.

Communities must have invented thousands of religions over the millennia, of which we have almost no knowledge but we must assume that they were needed, and evolved together with art and music (Dissanayake 1992) to hold the community group together. For most of the time, these old religions must have been valuable ways of controlling individuals' behaviour within the group, and of maintaining ways of life sustainably. There are many examples about how tribes and communities organised the fair and sustainable distribution of their resources. Many old surviving myths and beliefs are based on sound experience and many modern ecologists admire vernacular communities (Goldsmith 1996).

However, the competition and aggression between tribes or communities is age-old. Hardin (1968) in his famous essay "The Tragedy of the Commons" assumed that any individual within a community acts selfishly in grazing the extra cow on the commons, at the cost to the rest of the community. This essay gave a powerful international rationale for privatisation (enclosure) of the commons. This incorrect view about local communities does, however, apply on the larger scale between tribes and within the international community.

The irony is that the perceived damaging free-for-all that international agencies tried to cure has by that very process of privatisation become far more damaging on the global scale where there is as yet little or no control. The Tragedy of the Commons applies internationally but not to local herdsmen. For example, the international law of the seas, taking many years of consultation, even now does not prevent gross over-fishing with little effective control. Similarly all other global commons are under threat, the most politically apparent just now being the atmosphere, which is different in kind from all other resources disputes, because it is truly a Global Commons.

The heritage of bad has been handed on more effectively than the heritage of good. The ancient patterns of communal management from vernacular societies are being lost, while the old aggressiveness between communities has become the inappropriate heritage for the modern globalised world. The task for Human Ecology is to understand this more deeply and to suggest ways in which human behaviour can *grow up* to match what is needed now and which aspects of this heritage are appropriate for modern technological humans.

Some old traditions have indeed become extremely dangerous; as Koestler (1967) pointed out, individuals are unable commit acts of extreme violence and evil unless backed by strong communal myths. Few wars were more gruesome or more passionately pursued than religious ones, especially by those with high ideals of brotherhood and love. Many of those disputes are triggered by shortages of resources. It is a sad indictment of society that war is still an honoured, if regretted, method of making decisions. Territoriality remains a primal force, and we can expect more wars in the future over space and resources, (Malmberg 1980). This becomes part of the question about *Where* humans live.

Poverty is similarly deeply imbedded in natural heritage. Most animals have a *pecking order* of some sort, which leaves those at the bottom, poor. To *make poverty history* will require fundamental changes in society, that revise millions of years of evolution and hundreds of millennia of human cultural development. Now that the world population has grown so large and is still growing, the physical limits to alleviating extreme poverty have made the task more and more difficult, perhaps impossible. If the majority poorest consume less than 1/100th of the minority rich; the global commons can no longer provide adequately on a per capita basis. This may yet be the problem with the current international negotiations on climate change, such as the Contraction and Convergence proposal (Meyer 2000), which has been widely accepted in principle but not followed in practice.

This mixed heritage of natural and cultural instincts determines *How* and *Where* we live. The ways in which we make decisions, and the influence of the heritage, is the subject of psychology.

Psychology spans the gulf between the humanities and the sciences, and becomes a vital area for probing our Human Ecological attitudes. I am not competent to write about this vast field, but it clearly has a main part to play in the attitude of Human Ecology. The evolution of consciousness is central. Understanding this is now advancing with new insights into the workings of the brain, and the processes of decision-making. Psychology raises questions about who am I, the conscious individual or my unconscious self?

Science and Technology

> I have travelled all over the globe, and studied many different cultures; finally I discovered a culture that still believes in magic: it is us, we believe in technical solutions to our problems. (Harry Dickinson, Dept of Electrical Engineering, University of Edinburgh (died 1984) personal communication)

I must emphasise that the English use of the word *science* is much narrower than that in many other cultures and languages. The Russian Academy of Sciences for example includes the social sciences and economics. The German *Wissenschaft* really means the management of knowledge. These continental uses of the word *Science* are therefore more akin to the Enlightenment *Natural Philosophy*.

Francis Bacon in the early seventeenth century defined the means for scientific investigation and held that *Knowledge is Power*. It remains a question why it was the white man in Europe and not others in some other parts of the world like the Far East, who developed science in this way with its applied technologies. It led directly to white domination of the world (Mendelssohn 1976) as well as to human domination over nature. That may or may not have been its primary purpose, but the Baconian power of science for the betterment of mankind certainly was.

Those other older civilisations seemed to reject European science. Still now, the Western scientific attitude has probably not sunk deeply into many other cultures. We should not necessarily blame scientific advance for the colonial conquests; but science and technology did make them possible. Other than Henry the Navigator's Sagres group in Portugal in fourteenth to fifteenth centuries, science was not invented for that purpose.

The other major impact of science was of course how it changed perceptions of the Earth as the centre of the universe, as indicated in the Introduction. From science first cataloguing the diversity of nature, the knowledge and understanding shifted to seeing the interactions between species; this led to the science of ecology and now extends to the Gaia theory that life itself created the present conditions on earth. Now the lesson from ecology is that humankind does not stand above but is imbedded within life on Earth, in the Biosphere (as indeed many vernacular cultures have always believed).

Since, whether by design or not, science has served to overcome nature's constraints, we are left with a serious dilemma, expressed by A.V. Hill (1951), "If ethical principles deny our right to do evil in order that good may come, are we justified in doing good when the foreseeable consequence is evil?" Hill was referring especially to growing population pressures. There is now widespread disquiet about the rapid advance of science, exacerbated by various events, from the atom bomb to highly intensified farming and pesticides and so on (indeed that is how the popular environmental movement was born, with Rachel Carson's *Silent Spring*), and more recently Mad Cow Disease, the mishandling in the UK of the Foot and Mouth outbreak, GM crops, and various worries like the triple MMR vaccine (probably a media fabrication), and embryo research (especially in the US).

A.V. Hill's dilemma clearly has widespread ramifications. Science has fulfilled its promise of understanding (some of) nature and of applying that to controlling nature. Now that we are beginning to understand how we are connected within all life on earth, that we are a part of (and not apart from) the biosphere and its services, it would seem time to apply that new understanding too. This would shift one motivation of science away from that of power as Francis Bacon saw it, to that of how to fit our activities into the eco-structures of the planet (WCED 1987).

This demands another scientific revolution; a revolution of attitude, of new priorities to pursue. This is not to question the scientific method, as refined and developed over these 500 years, with its investigative approach from creation of an idea to measurement, testing, experiment, hypothesis and confirmation or refutation. These are common sense ways of thought. I am not suggesting

some wacky alternative science. I am suggesting that scientific motivation has to take into account not only what is immediately relevant, but also all that is conceivably relevant. I am suggesting that the scientific endeavour joins together its many specialities as described by Wilson (1998) in *Consilience*. And then, that it takes into its motivation social and ecological imperatives, as indeed already presaged by Waddington (1948).

In doing this, of course science must remain *objective* (in the popular sense, not actually philosophically possible) and free from interference of its process by either dogma or vested (corporate) interests (otherwise we would return to a pre-Galileo state). The choice of what aspects to pursue and what direction of application to take, is a social and ecological matter which cannot be decided by science alone, however objective. The development of agriculture illustrates this very distinctly, in which high intensity modern farming, GM crops and organic farming are all players with equally sound and thorough scientific rationales behind them, and the choice of which ones to apply cannot be made on scientific grounds alone (Loening 2009). Human Ecology includes that new scientific motivation.

Economics

As mentioned above, this comes under the heading of science in some other countries, at least within the social sciences. Yet any conventional scientist who examines economics as though it were a science would be aghast, such that a student doctoral thesis on it must surely be failed. Of course economics is highly rigorous and consistent within its own discipline, but it fails when one looks in from the outside. COWDUNG applies even more to economics than to science. Economics deals with a human construction, not with nature. Human constructions can be questioned and changed, nature cannot.

The assumptions that underlie positive economics can be seen to be myths when pitched against the realities of nature. The myths were summarised among others by John Peet (1992). Earlier, Frederick Soddy and George Georgescu-Roegen had shown how economics must ultimately be based on physical reality, the laws of thermodynamics – summarised by Daly (1996). How can it possibly be reasonable for any economic means of distributing value, not to account of the ultimate material sources of value, which are ecosystem services?

The Solar energy that flows through nature and society degrades. But money does not degrade in flowing. Ordinary economics and the laws of thermodynamics are thus fundamentally irreconcilable (Daly 1996). Money is no measure of a true economy. Most ecological costs of human activities are treated by economics only, if at all, as externalities. Economists see environment as within the economy, when actually economy is enclosed within environment. For example the external costs of agriculture, including the costs of pollution, are greater than the normally accounted costs of crop production (Pretty et al. 2000). If one tries to estimate a value of the world's ecological services, it comes to at least three times the world's aggregated GNP (Costanza et al. 1997). Further, discounting the future means that many valuable activities like planting trees are not economically worthwhile. One pound invested in planting a tree at 5 per cent per year compound interest, would need to yield timber worth £17,293 after 200 years! Therefore short rotation forestry plantations are the only economic possibility. This encourages logging old growth forests, which means that foresters remain still nomads! Actually, the ecological and social values of trees are among the most valuable things we have; that is the Human Ecological conclusion.

Ecology Applied to Humans

There are many lessons from all branches of ecology that can be applied to *How* and *Where* humans live and perhaps to assure that they continue to do so. Here are some pointers.

Holling and colleagues (Gunderson and Holling 2002) studied many natural ecosystems over several decades. They showed that sustainability may not mean stability or constancy and that seemingly stable resources could collapse unexpectedly. Holling coined the term *resilience* for the property of being able to resist or recover from challenges and *brittleness* for the often invisible fragility of a system brought closer to collapse by abuse.

All ecosystems studied that were managed for their resources, however carefully, became more brittle over time and sometimes finally collapsed. Fisheries are typical where the collapse can be sudden and unexpected. One wonders whether, despite all the technical advances in medicine and agriculture, the insidious spread of some new diseases is a symptom of increasingly brittle environments.

Garret Hardin (1985) summarised 12 key principles of Human Ecology that advise us *How* to live. Thus *One can never do merely one thing* means that any *magic bullet* drug or pesticide to cure a disease or pest is an impossibility because *there is no such thing as a side effect*; all effects are effects, whether we happen to want them or not. The same applies to products; there are no by-products, only things we don't want. A most important principle is that *no system can long survive the effects of unopposed positive feedback*, from which it follows that *Thou shalt not transgress the carrying capacity* or *negative feedback can be a positive boon*. We will return to this at the end.

To try to reach a more systematic understanding of what is wrong with *How* we live, I made a table to compare *Man* with *Nature*, corrected by students and colleagues to *Industrial Society* and *Nature*, as below. While the original was just descriptive, (Loening 1993) the updated table now serves as a check-list for evaluating technologies. I use agriculture for most examples, since this is the most widespread and damaging of technologies.

Table 1.1 Man with Nature

	Nature	**Industrial society**
1	Driven by solar energy	Driven mainly by stored fuel, fossil or biomass
2	Works in cycles	Works linearly
3	All materials are recycled, there is no waste	Resources are consumed to waste
4	Competition and cooperation in ecosystems	Conquest by overriding natural systems
5	No great excesses	Large excesses
6	Complex: increases biological diversity	Simple: decreases diversity
7	Global stability	Global changes
8	Multiple feedback controls, mostly negative	Little feedback control, mostly positive

1. Solar Energy. If industrial civilisation still exists in 500 or a 1,000 years time, we can be fairly sure that it will be driven largely by solar power (someone at a lecture interjected, "But it's driven by greed"!). There is plenty of solar energy. Seen on a global scale, fossil fuel use represents only one ten-thousandth of the solar energy reaching the Earth. All technical developments now need to be judged by the degree to which they run on direct and indirect *ambient* energy. Ambient energy is *perpetual* or *continuous* rather than strictly *renewable:* it flows to *waste* anyway, whether we use it or not. Our use makes no direct impact (although there may be some indirect environmental effects).

Fossil fuels are not the only stored natural capital. We also live by the accumulated capital of the biosphere; potentially renewable resources that have accumulated over hundreds to thousands of years, and that have been destroyed, often along with their productive capacity, like soil or forest loss. This is a case of civilisations seeking sources of low entropy, scattering the resource, and moving on!

If science/technology were ever able to release unlimited amounts of power through nuclear fusion or some such means, this would not become a source of freedom from want, but the biggest ecological disaster ever, because nothing would be safe from damage (Meadows 1992).

Most agricultural technologies could change to run by solar power, except possibly the Haber-Bosch fixation of nitrogen. Here the question is whether biological nitrogen fixation can meet needs (Smil 2001). Industrial nitrogen fixation has certainly doubled the polluting flow of nitrate through the biosphere (Nosengo 2003), and half of your protein is made from Haber-Bosch fixed nitrogen. (Haber invented and Bosch engineered the technology for reacting nitrogen of the air with hydrogen to make ammonia, then oxidised to nitrate; this has become the world's largest source of nitrogen fertilisers and of explosives.)

2 and 3. Cycling and waste. Waste is a human concept for what you happen not to want; you cannot throw *your waste away*, there is no *away*; in nature everything is cycled, on time scales ranging from minutes to thousands of years. *How* we live is becoming more and more a linear process, as in farming in which the inputs are fertilisers and so on, plus mechanical power and the ultimate product is sewage. Agriculture is eminently suited to becoming a closed cycle of resources in which sewage is indirectly recycled back to the land (but not like the traditional direct cycles in China (King 1911). (See *The Land Institute* reviewed briefly by Morris 2008.)

We not only act linearly, we also think linearly, by picking on individual causes of individual effects, whereas ecology actually teaches that life systems are complex multiple networks of interactions. GM crops, fertilisers and pesticides, are all examples of linear thinking and application. This is the strength of conventional applied science, but it ignores the cyclical complexities of nature.

4. Cooperation, competition, conquest. In spite of micro-competitive selection pressures, nature works by macro-cooperation. Just consider the world's largest symbiotic system, the mycorrhizal fungi that live with most plant roots and exchange nutrients. Indeed plant life might not have been able to colonise land in the first place without that association. In contrast, industrial society measures its successes by the extent to which natural processes are circumvented, bypassed or short circuited. There is pride in the successes of overcoming the constraints of nature, without us being fully aware of the extent of ecosystem services. Any technology now must stand up to the test of fitting its doings into [nature's] patterns (WCED 1987).

Industrial agriculture is at present feeding the world, but it has failed to take full account of soil symbioses; soluble fertilisers inhibit many soil organisms, and pesticides inhibit some natural plant self-protective mechanisms (Chaboussou 2004). Human Ecology questions the food security and sustainability of these processes.

The same issues of competition apply to our dealings with each other – in the end, human communities have to work together cooperatively.

5. Excesses. The rises and crashes of natural populations are not usually on the scale engendered by man (especially extinction, now 100 to 1000 times the natural rate). Even the excessive use of many *simple* materials such as antibiotics leads to trouble; after millions of years of evolution of antibiotics, our uses of them led to bacterial resistance within a few decades. Society tends to be proud of its excesses – the biggest super store, the fastest cars, *it's only natural* to think like this; but such thinking is now unsuited to progress and survival.

The largest excess is of course the human population. It is difficult to face up to this complex issue and even a small population can do a lot of damage. Environmental NGOs dare not now touch the population question for fear of losing public support. But Human Ecology could promote the concept of optimum population. Meanwhile we might celebrate those countries whose population is falling, like Italy, much of Eastern Europe, and Europe as a whole.

Our attitudes to excessive growth may ultimately determine *whether* humans continue to live on the planet. All the great religions have in many respects become unsuited to the modern world, but they did preach frugality. Modesty is now required of technological developments.

6. Complexity. The complexity of biological diversity is part of the natural capital that has built up over millions of years, and which modern society is now degrading. Nature is more complex than we understand and maybe is more complex than we can understand (as Einstein pondered). Modern western industrial society cuts through this complexity with simple technical processes; these may be *complicated*, like a machine, but they are not usually *complex*, and they override natural complexities, like fertilisers overriding plant nutrition systems (Liebig ed. by Siebenacher 1989). Liebig himself was aware that there is more to soil than his chemistry, but that modesty was not followed.

Similarly big dams in tropical regions destroy the forest ecosystems, as well as the communities of peoples that live there. However, increases in biodiversity can be witnessed in some cases; farm land that is abandoned can re-grow a diversity of species within decades. However, if nitrogen fertiliser is applied annually (with other nutrients too) to such a farm field, the species number and complexity of that ecosystem is reduced, in the end to one or two (see Leigh and Johnston 1994). Most human activities, including forestry, urbanisation, industrial developments, tend to simplify and reduce diversity and increase the *brittleness* of ecosystems. Most farming still depends on the few species that were domesticated 10,000 years ago yet there are many more options for domesticating other species which would lead to greater food security and less ecological degradation (Wilson 2001).

Modern global agriculture has even reduced its own agricultural diversity of those domesticated varieties that have been built up over hundreds of years. So-called Genetically Modified (GM) crops have become an extreme of monoculture (a badly named term; Genetically Engineered (GE) crops would be more exactly descriptive (GM has been a feature of evolution since ever!) and have made irrelevant all the evolved diversity of ways that prevent hybridisation between species. Here is a well-researched and highly regulated technology applied within a sea of ignorance, much as the three soluble fertilisers (N, P and K) were first applied in the absence of any understanding of plant physiology and nutrition and without knowledge of the complexity of soil life

Discussions on food security could with advantage take into account the opportunities given by biological diversity and complexity (see the report of IAAST 2008). The approach of Human Ecology opens the visions, the ecology provides the solutions.

The evolution of humanity itself over millennia had increased human diversity, partly biologically (hence one can distinguish different races by colour and various physical features),

and of course largely culturally, into thousands of languages, religions, artistic developments and so on. Now under the pressures of global industrial *growth*, this rich cultural diversity is also being severely eroded. In place of the global pressures towards uniformity, a celebration of the diversity and differences between our many cultures would enrich human life.

The losses of human cultural diversity are reflected in losses of how we think – mostly along simple lines, dumbed down by the media.

7. Stability. Gaia theory provides the answer to the (thermodynamic) question of how the stability of the global environment is maintained when all its components exist out of equilibrium. The complexities of life itself maintain conditions provided there is enough of it (Lovelock 2009 and his earlier works). Industrial society has interfered with these natural balancing feed-back systems, and caused global changes. Politics and the media have reduced the real complexities of global climate change to excess emissions of carbon dioxide and global warming. So even if global warming were to be minimised by the techno-fix of *geo-engineering*, the problems would remain, the extra carbon dioxide alone causes lots of other damage. The issue challenges all aspects of *How* we live.

8. Fee-back controls. The great success of humanity has been in over-coming the feedback controls of nature and continuing to be a pioneer species by increasing the carrying capacity of the Earth for humans. Positive feedbacks have been the means, in which increases lead to further increases, supported by economic growth and new technologies which in turn create more new technologies.

This has been called *the technological imperative*, summed up as *I can, therefore I do*. This process has been so successful in averting the many prophesies of doom over the centuries that it is now difficult to envisage fundamental change. But to avert collapse, there will need to be major change in how society is organised, from positive to negative feedback. Reducing or stable populations will need to cope with the more balanced age distribution of fewer children and more elderly. Europe, which led the world in technology, economic growth and development, could now lead again towards a reduction in population and the development of appropriate or *wise* technologies (Loening 1990 and Harm van de Veen, in the pages quoted). It is a possible task.

Conclusions

Any new technological developments now have to be judged by some such criteria as in the table. We are now obliged to seek negative feed-backs to our activities to replace the natural feedbacks that we have successfully overcome and which are not and never have been, acceptable. That is the ultimate task for applied Human Ecology.

But this way of thinking necessarily suffers from a lack of symmetry in arguments between proponents of new technologies like GM crops, and the objectors. The direct technical proposal is simpler and arguments for it are simpler than the more complex ecological cases against it or for alternatives. The latter often has to be presented crudely with distortions or omissions to match the proponent's case. Examples abound in the climate change debates, in the older nuclear power debates and in the GM debates (Waltz 2009). The abuse that the COWDUNG of scientific opinion can mount against ecological criticism matches that suffered by Rachel Carson with Silent Spring.

Human Ecology raises questions about *progress*, and further ethical issues. There are popular examples for progress in new directions such as the idea of voluntary simplicity (Elgin 1993). As Elgin says: "All of the world's spiritual traditions have advocated an inner-directed way of life that does not place undue emphasis on material things." And, as quoted early in this chapter, Max-Neef's (1991) inventory of fundamental human needs, with ways of evaluating satisfiers for these

needs provides a route to finding the *human improvement* in Mill's quote above, for which he saw no limit. The New Economics Foundation, the International Society of Ecological Economics and FEASTA, the Foundation for the Economics of Sustainability and many others are developing new economic methods and indicators. Brown (2009) has just published a further *blueprint*.

I have written elsewhere (Loening 2009) how the attitudes of science are also changing and could be moved further in public policy towards *fitting our activities into nature's patterns* making us more *fit to survive*. There have been major international moves in this direction, such as the IAASTD (2008), which concluded that the present methods of intensive agriculture have to reform (see also Tilman 1999).

Just as this chapter was being completed, Rockström (2009) with many colleagues published a study of nine critical biophysical boundaries which if over-stepped would have disastrous consequences; three of these have already been exceeded. This is environmental science at its broadest and best, but solving how to manage our uses of these global commons remains a core challenge for Human Ecology. Martin Rees (2003) President of the Royal Society, has given civilisation a 50/50 chance of survival beyond the century, not because of ecological collapse, but due to bioterrorism, human strife. The attitude of Human Ecology is vital to stimulate imaginative creativity for solutions.

The universities should be good at that, but in practice have not seemed able to carry out the task. This may be because the syntheses needed are difficult to fit into university faculty structures; also because Human Ecology is necessarily *subversive* or political. But this again is asymmetrical: the COWDUNG is not regarded as political because it is conventional, but to question it and to rethink is regarded as political (Waltz 2009). It should be the other way about: the basic attitude of science is to question and rethink; that should be the norm and now has to be applied to *How*, *Where* and in the end *Whether* humans live on the Planet.

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Chapter 2

The Challenge of Radical Human Ecology to the Academy

Alastair McIntosh

> And only he can do this who is in love and at home with his subject – truly in love and fully at home – the love in which high intuition supplements knowledge.
>
> (Patrick Geddes, *Cities in Evolution*, 1915.)[1]

In this volume I make two linked contributions. Here, in my first chapter, I will share from 20 years' experience in teaching Human Ecology at postgraduate university level as a basis from which to explore the place of Human Ecology within the mainstream "Academy." By that I mean western universities in general. I will ask why it is that our discipline often sits uncomfortably alongside both the modernity and postmodernity of the contemporary Academy. My conclusion will be that Human Ecology is, in essence, a premodern approach. As such, it poses an ancient but fundamental challenge to the very structure of knowledge. It requires clarity about what our premises, or starting points in seeking knowledge are. Specifically, it presses us to address the question of whether the basis or our values are derived from a purely physical or materialistic grounding, or whether there is also an underpinning to our being human that might be called metaphysical or "spiritual."

My second chapter will be less theoretical and more applied. I will explore the implications that a psychospiritually aware "radical" Human Ecology can have for the conduct of advanced teaching in our field. Here I will explore some issues that arise with contemporary students as they seek to learn and carry out research that both recognises a metaphysical backdrop to physical reality, and yet, for the good of their own careers and effectiveness in today's largely secular world, can nevertheless stand its own as peer-reviewed published scholarship.

Epistemological Priorities: Terrestrial or Extra-terrestrial?

My demands on my reader in this chapter will be considerable. As befits off-road travel through an emergent field, I shall be shifting, not always smoothly, between personal experience and impersonal theory. To permit those who might not want to take this journey to dismount forthwith, here is a preview of the destination. My conclusion is that when Human Ecology becomes radical it invites us elementally to integrate our perception of Earth, as the *physical exteriority of reality*, with Spirit, as its *metaphysical interiority*. As such, our Human Ecology must be very grounded in the scientific physical basis of reality, but equally grounded in the metaphysics – the "behind," "beyond" or "transformed-from-within" physics of our deep humanity.

I use the word radical here in its etymological sense of *getting to the roots*. To become rooted, or grounded, means that we must consider the epistemology of Human Ecology. Epistemology is the study of what counts and does not count as authentic knowledge and also how that knowledge

1 Geddes 1915: 397.

is structured and represented. For my purposes I am going to look on epistemology as falling under three alternative worldviews or sets of experience and assumptions about reality. These are *the premodern*, which is predicated on the idea that "soul," "Spirit" or some construct of the "divine" is at the root of reality; *the modern*, which is predicated on logic or reason usually applied in ways that reduces the basis of reality down to materialistic formulations; and *the postmodern*, which is predicated on the idea that everything is relative (or relational) in a world where there are no ultimate predicates.

Richard Roberts summarises as follows in describing "the present confrontation" of "problematic interactions" between these three in the Academy (Roberts 2002: 222):

- *modernity* – "the dialectic of Enlightenment, communism, instrumental reason and European integration";
- *postmodernity* – "inaugurated by the progressive triumph of the market, fluidity of identities, the collapse of communism and the 'End of History'";
- and *premodernity* – "Christendom, tradition and the *ancien regime*,"

…to which, I would wish also to add, the spiritually-based worldviews of the ancients (Plato, Lao Tzu, the Hindu Vedas, the Hebrew prophets, and so on) and the majority of today's surviving indigenous peoples. As will become clear later, I also consider that the premodern gave rise to and is capable of containing what is useful within modern and postmodern thinking.

In today's dominant Anglo-American worldview modernity is the main paradigm that shapes intellectual culture and provides the academic backdrop against which Human Ecology must stake its claims. It is not my aim to try to demolish modernity. Nobody can deny the material gains that it has brought. But whether in all its breadth of knowledge it also has the necessary depth to nourish the human condition through the challenges we face is questionable. Modernity's own agenda shapes and arguably distorts the very scope of knowledge that it would purport to represent. Let me demonstrate by offering an example of how one leading international institution structures modern knowledge.

The home page of the website of the British Library proclaims itself to be the place to "Explore the world's knowledge." In universities in the United Kingdom it is standard practice for a thesis for the award of PhD – the highest university degree – to be submitted for public record to this library. That process requires a form to be completed (British Library 2010), the final page of which is a single A4 sheet headed "Subject Categories" by which the thesis is to be catalogued and given a code according to its field of knowledge. The sheet comprises four columns of small print. These list the main groupings of what the Library recognises as human knowledge in some 200 categories which are gathered under 20 major headings. For example, there are major headings for "Biological and medical sciences," for "Chemistry" and for "Physics." That seems fair enough, but there are also major headings (out of the mere 20 available) allocated respectively to "Aeronautics," "Military sciences," "Missile technology," "Navigation, communications, detection and countermeasures," "Ordnance," "Propulsion and fuels" and "Space technology." In other words, more than one third of the headings of what appears to count as significant knowledge relates to aero-space-military matters. In contrast, just one major heading covers the whole of "Humanities, psychology and social sciences," and within this, just one category, code numbered 05H, is afforded to the entire corpus of knowledge that gets lumped together as, "Philosophy; theology; religion."

At least there is humour in the listing. Because the headings are in alphabetical order "Space technology" comes last. Here there are seven categories, at the bottom of which, in the far right

hand corner of the A4 sheet, is code 22F for "Extraterrestrial Exploration." Let us be clear of the impression that this gives. The British Library appears to afford the same weight to "Philosophy; theology; religion" as it does to extraterrestrial affairs! Attention to technological detail has subsumed the space that might have been afforded to human depth. From a radical Human Ecological perspective one can only look at such a sheet and despair as to where our discipline might sit. How about 08D for geography? Or 05R for sociology? Or 06F for ecology? Or given the planetary predicament, the category that immediately follows ecology – 06G for "Escape, rescue, survival." But most of these would leave the radical Human Ecologist languishing in such long-thrashed and outworn debates as to whether Human Ecology is a subset of biology, sociology, or geography (for example, Quinn 1940). Entirely lacking from the British Library's current representation of knowledge is any sense of over-arching metadisciplinary knowledge or, indeed, of metaphysics – a word that does not even appear on its list. The closest fit for such realms might be 05H – "Philosophy; theology; religion" which, as a category, is grossly over-burdened. Into it must be compressed the entire corpus both premodern and postmodern philosophical thought, yet it lacks even the status of having a major heading under which such categories could be spread out. Meanwhile, "Ordnance," for example, gets a heading all to itself complete with nine categories including "Bombs" (19B), "Guns" (19F), "Rockets" (19G) and "Underwater ordnance" (19H).

This is just one example of how the modern utilitarian worldview crushes alternative representations of reality. At least in so doing it helps to focus our task. It suggests that radical Human Ecology has a key philosophical role to play in bringing the condition of the world to bear on the structure of knowledge. Our calling is to face up to the physical problems of the world – to climate change, war, resource depletion, and so on – but to re-ground them in metaphysics, including the values that lie behind technology, economics and politics. This is our task because we claim to practice *Human* Ecology. If mainstream epistemological structures are not user-friendly towards it, then we must think of our mission as being, in part, an epistemological project.

In what follows I do not want to devalue modernity with its emphasis on rationality and evidence-based knowledge. Neither do I wish to devalue the postmodern where its methodologies are used to challenge injustice, especially where it deconstructs oppressive constructions of race, gender and social class. But I do wish to challenge their respective hegemonies, and specifically their oft-shared presumption that they have somehow bettered the soulfulness of those ancient and indigenous worldviews to which I refer under the catch-all "premodern." Neither do I consider the call to soul-full-ness in scholarship to be special pleading. The premodern worldview would treat category 05H, "philosophy, theology and religion," as being the very root from which all other knowledge proceeds. Here we might recall that the highest degree that the Academy offers is the PhD – a "doctor" (from the Latin meaning teacher) in "philosophy" (from the Greek, *philo-Sophia*, a lover of the Goddess of Wisdom). It is those who have pulled the PhD away from such principles who have succeeded in special pleading. And what are we left with, not just in the British Library but across much of academia? We are left with the mechanisms of war privileged over the arts of life.

Human Ecology as an Indigenous Worldview

Before proceeding further I would like to invite consideration that what I am attempting to offer in this chapter comes from somewhere bigger than me as an individual. It is coming from a web of culture – out of a "we" more than an "I" – and later I will quote the Apache philosopher, Viola Cordova, in unpacking the epistemological significance of this "we." The ideas that I will put

forward are consistent with what I think of as "the Scottish School of Human Ecology." This I see as part of an implicit worldwide Indigenous School – one that takes its bearings from the perennial ensoulment of people and place. Some examples of that loosely constellated School are contributed elsewhere in this volume.

The principles of Human Ecology that follow have built up in my mind not just systematically, but just as importantly, impressionistically, poetically. They arise from a grounding that is cultural in the lives of the people in my land who have either been born with, or have come through adoption to acquire, footholds in its bioregionally bounded communities of place. Some of these people are figures of international repute; others are little known firth of their native soil.[2] What melds them into the semi-homogenous compost of a worldview that I would see as Human Ecology of the Scottish School is the essential relationship between people and their place, their ecology: the experience of being and/or becoming what the Isle of Lewis poet Iain Crichton Smith described as "real people in a real place" (Smith 1986).

Here we stand significantly, though not uniquely on a world stage, in the proverbial "metaphysical Scotland" (Davie 1986: i). We stand with a culture that is still capable of handling metaphysics in popular discourse. In the words of Professor J.F. Ferrier, the author of *Institutes of Metaphysic: the Theory of Knowing and Being* who, around 1854, introduced the word "epistemology" into the English language: "My philosophy is Scottish to the very core … a natural growth of old Scotland's soil" (Ferrier 1856: 12–13).

I can feel the wariness of some of my readers. The tack to which I am sailing sounds dangerously like "blood and soil." Actually, it is "soil and soul," which is very different, because soul is inclusive whereas blood is determinative and thereby lays the ground for xenophobia. My sail, however, is undeniably set to the *parochial*. My defence to that is, "Guilty as charged." This is about Human *Ecology*, and ecology must start with the ground on which we stand. The parochial is that which relates to the *parish*, from the Greek, *para-oikos*, "beside the household." *Ecology* shares the same root in *oikos*. As ecologists, we must dig from where we stand, but that does not mean we should remain stuck in a hole. Ultimately, our parish is the cosmos and so, as the pioneering Scottish Human Ecologist Patrick Geddes who greatly influenced Mumford is credited with saying, our place is to "Act local; think global." In a seminal work on town planning Geddes stated:

> "Local character" is thus no mere accidental old-world quaintness, as its mimics think and say. It is attained only in course of adequate grasp and treatment of the whole environment, and in active

2 Prejudiced by my own influences, I have in mind such figures as Calgacus (Pictish king recorded by Tacitus), Robert Burns (national bard and ploughman), Mrs Anne Grant of Laggan (collector of legends), John Stuart Blackie (classicist and land rights campaigner), Alexander Carmichael (collector of the *Carmina Gadelica*), Patrick Geddes (biologist and town planner), John Duncan (artist), Margaret MacDonald Mackintosh (artist), F. Marian McNeill (folklorist), Naomi Mitchison (historical novelist), Nan Shepherd (mountaineer and novelist), Lord Macleod of Fuinary (clergyman), Hugh MacDiarmid (bard and essayist), Frank Fraser Darling (ecologist), Hamish Henderson (songwriter and collector), Iain Crichton Smith (tradition bearer and essayist), Angus 'Ease' Macleod (crofter/farmer), Colin Macleod of the GalGael (urban community organiser) … and pushing through as grass into the era of the living … Masie Steven (political nutritionist), John MacInnes (tradition bearer and scholar), Bashir Maan (Muslim community leader), Donald Macleod (Free Church College principal), Ronald Black (ethnographer), Kenneth White (geopoetician), James Hunter (historian), Michael Northcott (theologian), Camille Dressler (activist/historian) and Margaret Bennett (tradition bearer and singer). These are only a tiny sampling, but to varying degrees embody the Human Ecological triune of soil, soul and society.

> sympathy with the essential and characteristic life of the place concerned. Each place has a true personality. (Geddes 1915: 397)

We can therefore, without contradiction, be very Scottish (or wherever else we might feel connection to) and very international,[3] because the capacity to be indigenous to a place is universal: it is founded on ecological principles. As such, the indigenous person, and also the deracinated person seeking re-indigenisation, can tread each step with respect and never be a stranger in the world. What doesn't work in either human or ecological terms is to treat the world as a globalised homogeneous market surface. That sees commodities but misses the cosmology. It is incapable of comprehending soul and where this spirit dominates within academia, it is doomed to self-deconstruction up the ivory tower. Radical Human Ecology therefore queries much of contemporary academia. With one eye fixed on the specifics of local people and places and the other, on the wide global context, it challenges the hubris of domineering mores and worldviews. The following case study illustrates.

Case Study: Scotland's Centre for Human Ecology

The history of Human Ecology within academe has mostly been one of small but inspirational centres run by individuals or tiny groups of people, often transiently so. Here is one such account told from a personally embodied perspective.

By 1990 I had reached my mid-thirties and was wondering how best to use the second half of life. I had worked in teaching, NGO management and appropriate technology both in Scotland and, for four years, in Papua New Guinea (PNG). Driving my work was a passion around poverty and human development. I remember asking a friend, "Why does poverty matter?" and being hit by the simplicity of her response: "Because it hurts."[4]

Having been raised in a relatively intact ecosystem on the Isle of Lewis in Scotland's Outer Hebrides I had not previously registered "the environment" as an especially pressing issue. But while working with organisations like the South Pacific Appropriate Technology Foundation and the Solomon Islands Development Trust I had come to see at first hand how the loggers, miners and industrial fishing companies can drive ecocide as they colonise indigenous peoples' territory.

I wanted better to understand these dynamics. I wanted to be able to analyse the global problematique more adequately, but also, to see more clearly where hope might lie for the human condition and our planetary future. Somebody told me about the Centre for Human Ecology (CHE) under the direction of a semi-retired molecular biologist, Dr Ulrich Loening. One afternoon in the summer of 1990 I speculatively walked through its door at 15 Buccleuch Place in Edinburgh University. Two hours later I came back out with a job. There was only a few weeks' part-time pay on the table, but with it came the opportunity to work with Ulrich and his circle in developing the first British MSc degree in Human Ecology.

The CHE had been founded in 1972, initially as The School of the Man-Made Future. It was set up by futures thinkers led by C.H. Waddington, an eminent English geneticist from a Quaker family background who was a founding member of the Club of Rome. Alexander King, the club's co-founder which, in 1972, received the hugely influential *Limits to Growth* report that it had

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3 The exemplar of this is Hamish Henderson's Scots internationalist anthem, *The Freedom Come a' Ye* – http://www.dickgaughan.co.uk/songs/texts/freecaye.html (accessed 29 Apr 2010).

4 Pers. com. Kate O'Brien, Edinburgh, 1980s.

commissioned, also had links to the CHE.[5] Just after I had started working there he advised me: "Human Ecology is like a tangled ball of sting. You pull on one loop, and find it connected to all the rest." His response when I asked what advice he'd give to a fledgling Human Ecologist was: "Always keep a space on your desk clear, ready for whatever's coming up next."

Later I discovered that 15 Buccleuch Place was an auspicious address for heretical thinking. One hundred and twenty years previously a young English suffragist and medical student, Sophia Jex-Blake, had set up home there. She and six others were the first women to gain admittance to Edinburgh University's medical school. However, they were refused access to its "male" teaching facilities. Jex-Blake responded by converting part of 15 Buccleuch Place into a women's study centre and laboratory. After surpassing most of the men in examination grades they fully expected to graduate, but the university's patriarchy closed ranks and barred their progress. A cause celebre developed around the *septem contra Edinam* as they became known – the "seven against Edinburgh." Letters appeared in the *Times* and reports in *The British Medical Journal*. The university's Principal with his cabal of all-male professors stood firm, justifying their misogyny as being for "the maintenance of academical good order" (*BMJ* 1873).[6]

The women lost their case in the courts. Those who could went and graduated from more liberal Irish or continental universities. This allowed Jex-Blake, in 1874, to return to Britain and set up the London School of Medicine for Women. Later, after returning to Edinburgh and consistent with her concern for the poor, she opened a dispensary for women and children. The Bruntsfield Hospital as it was to become remained open until 1989, its fame augmented by the work of another pioneering physician of women's health, the much-loved Elsie Inglis.

Not until 1892 did women become legally empowered to graduate from Scottish universities. My own paternal grandmother, a classicist and historian, was one of the first to pass out of Edinburgh. Both her sons qualified from its medical school. It thrilled me to discover in Jex-Blake's biography that, "The house at 15 Buccleuch Place was a comfortable and cheerful meeting place for the women students" (Roberts 1993: 83). To the premodern mind to which I shall shortly turn, lineage and association somehow transmits blessing and legitimation. That "somehow" is in my view more poetic than genetic. It is an important qualification because it opens the way for connection through the heart and not just bloodline. As I read about Jex-Blake and her dogged determination, to borrow a line from Alice Walker, "to gather blossom under fire," I came to see her as a pioneering Human Ecologist – one of the mothers of our discipline. She lived by that gritty academic maxim, *illegitimi non carborundum*.[7] It was a quality that we too would need to inherit at 15 Buccleuch Place.

5 King was a guest lecturer at the CHE and his daughter, Jane King and her partner, Professor Malcolm Slesser, were both Honorary Fellows teaching and working in the CHE on a UNESCO-linked project that modelled energy and econometric aspects of ecological carrying capacity.

6 I was first alerted to the Jex-Blake connection by one of our students, the late Dr Bernard Kanis. Not all the professors were so boorish. Eliza Blackie, wife of J.S. Blackie, the Professor of Greek and champion of all matters Celtic, wrote to Jex-Blake after a protest dubbed the 'Surgeon's Hall riot' in November 1871, saying of her husband, 'I never saw him so hurt before … He sat at tea-time shading his eyes, and saying quietly from time to time, "I am ashamed of my sex"' (Wallace 2006: 233).

7 'Don't let the bastards grind you down.'

Human Ecology's Challenge to the System

What is Human Ecology? If wildflower ecology is the study of communities of wildflowers in relation to their environment, and mouse ecology studies mice, it follows that Human Ecology is the study of our own communities in relation to their environment. We have seen that that word, ecology, like economics, is rooted in the Greek *oikos* meaning household. Human Ecology in its widest sense therefore looks at the cosmologically sustained planet as the "household" in which we live.

During academic term at the CHE we'd hold weekly guest lectures open to the city. These were followed by a shared meal round a library table that our MSc students and staff had lovingly crafted helped by the artisan skills of Tom Forsyth, a pioneer in rural community regeneration. The pulling power of Ulrich and his wife, Francesca, drew distinguished speakers. These included Edward Goldsmith (whose seminal book, *The Way*, was presaged in his CHE lecture), Norman Meyers, Wes Jackson, Vladimir Kolontai, Nicholas Polunin, Nicholas Guppy, James Lovelock and, before my time, Arne Naess, Hazel Henderson, Lord Carver, Lord Ritchie-Calder, George McRobie and Parkinson (of Parkinson's Law fame). Mischievously if a little clumsily I dubbed many of these the GNOMEs – the GraNd Old Men of human Ecology. But the madness had method. Theirs was generally a "man and the biosphere" narrative. It viewed Human Ecology in terms of *PRED* – a term associated with the United Nations documents for the interactions between *Population, Resources, Environment* and *Development*. It was an approach that was able to sit half-comfortably within the Faculty of Science and Engineering in which we were held by the university.

But more challenging perspectives were also emerging during the early 1990s – those I call radical Human Ecology in contrast to the safer confines of PRED. Other guest lecturers that Ulrich drew in included the "economic iconoclast" Hazel Henderson, Helena Norberg-Hodge with her Buddhist insights from Ladakh, Manfred Max-Neef with his pioneering work on fundamental human needs, Jacqueline Roddick on the human rights implications of environmental geopolitics, Jonathan Porritt as director of Friends of the Earth, and Darrell Posey with his advocacy of the cultural and spiritual values of indigenous peoples. These shifted our emphasis beyond the "hard" edges of PRED and towards "soft" insights from education, ecofeminism, post-colonial studies, ecopsychology, ecotheology and spirituality. Our aim was to offer students a course that integrated the 3-H's as advocated by Patrick Geddes – "head," "heart" and "hand" (Bordman 1978: 224 – and see my Figure 2.1).[8] But it was not to last.

I have elsewhere given my account of the events leading up to our closure (McIntosh 2001: 248–253). Suffice here to say that we lost powerful patronage when a supportive Principal retired and his equally supportive deputy suddenly passed away. The idea of "sustainable development" had been laid firmly on the international table by the Brundtland Commission in 1987. The 1992 Rio summit of the UN consolidated its recognition. Academic research councils then bolted it on to their funding criteria and I have often wondered if part of what happened is that, overnight, sustainability suddenly became too big a fish to leave in the artisan hands of the CHE. Add this to the controversial growing public profile of my own work on land reform, on taking on corporate power and on criticising in the press the UK government's 1993 white paper that mandated science to be more driven by market and military imperatives, and in 1996 we were closed down.

8 Here Geddes echoes the thought of the Swiss educationalist, Johann Pestalozzi (1746–1827). It might also be worth observing that Geddes undertook some of his most distinguished work in India where yoga – the path towards union with the Ultimate – has three principle strands: Jnana (the way of the mind – which we might see as "head"), Bhakti (the way of devotion – "heart") and Karma (the way of work – "hand").

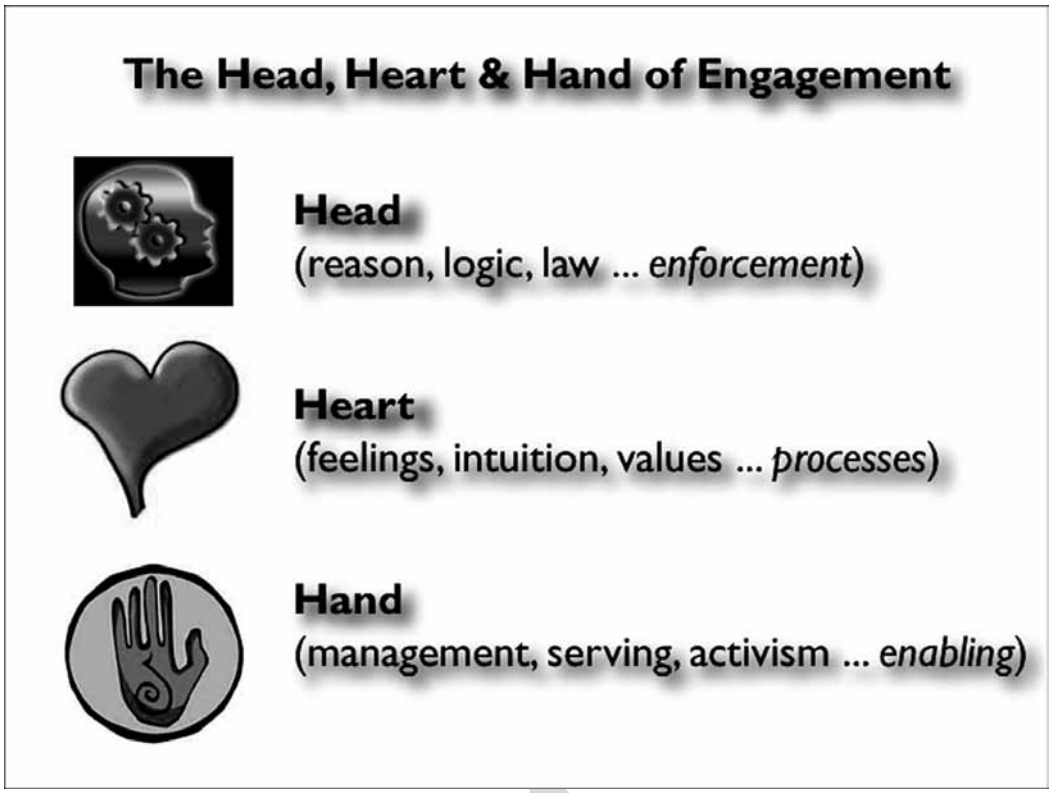

Figure 2.1 The 3 Hs of Patrick Geddes

As this happened an international academic campaign rallied to our defence. A *New Scientist* leader of 4 May 1996 castigated the University as "a narrow kirk" and praised the CHE as standing for "a tradition of fearless inquiry." An entry in the *Encyclopedia of Religion and Nature* by a leading sociologist of religion concluded "the role of the CHE as a pioneering organisation is indisputable; many of its original analytical insights and practices have become part of the widely distributed armoury of the informed environmental movement" (Roberts 2005). But what the university had attempted to kill off was a department of activists. Refusing execution, the former students and staff jumped over the wall and re-established the CHE as an independent academic organisation with its own legal status as a charitable company. The MSc degree was reopened in 2000, initially accredited by the Open University and in 2005 we moved into a five-year partnership with the Department of Geography and Sociology at the University of Strathclyde in Glasgow.

At each transition the course was redesigned. In Edinburgh our rationale had been to offer the analytical framework of Human Ecology to people who had already established existing areas of professional expertise. This was relatively conventional teaching. At the Open University, carried by the momentum that had saved the organisation, we focused more on activist training and deepening a psychospiritual analysis of the state of the world and how concerned individuals might best respond. New courses were introduced such as Nonviolence, Ecopsychology and Spiritual Activism. At Strathclyde this shift was further strengthened with a move towards autonomous models of learning and participative enquiry. There was marked emphasis, led by Vérène Nicolas

and Nick Wilding, on the understanding and practice of what it could mean to be a learning community.

This era saw a rapid rise in concern about climate change during the build-up to the Copenhagen 2009 dénouement. A number of our students in their private capacities lead risqué high profile climate change consciousness raising actions – scaling public buildings to drape banners, sit-ins, blocking airport runways, and in the case of Dan Glass, sticking himself to Prime Minister Gordon Brown's jacket when receiving a national environmental award, with the words, "I have superglued myself to your arm because you can run away from my arm but you can't run from climate change" (BBC 2008). It made for an edgy time with staff usually supportive but not always comfortable.

At the time of writing in late 2011 Strathclyde University has undergone major reorganisation. A number of departments including Geography and Sociology have been dissolved into larger administrative units to cut costs. To have renewed the CHE partnership under a different contract was possible but would have meant paying 70 percent of our students' fees in university overheads. This would have left insufficient to cover our costs and so the CHE has had to lay down the MSc programme and again move out on a limb. A new future is being explored by our former students now serving on the Board. They are asking, "given where it's all at, what next?" Has our institutional engine, forever running on empty over tricky terrain, finally bogged down? Or is it that the blossoms must once again be sought not in safety, close to the trunk, but blowing in the storm out on that limb? It is too early to say. What has happened is that the Board has chosen to relocate the library and our hand-made table – the symbolic hearth and heart of the CHE – to Govan, the former shipbuilding area of Glasgow and one of the most socially deprived urban areas in Europe. We wait to see whether a future role can spring from the taproot in such a place and at a time of severe economic recession.

The CHE has not been alone amongst institutes for Human Ecology in its struggle to honour life. The renowned programme at the Free University of Brussels (Vrije Universiteit Brussel) was unexpectedly closed down in 2009. Its staff were unable to say why except that the university had decided to change its priorities.[9] A long-running undergraduate degree at the University of Hull also hit the dust. There are similar examples worldwide. Everybody says, "Oh, but Human Ecology, it is so relevant to our times …" But precisely because of that relevance it also stirs discomfort. My observation is that once a way of thinking and being moves beyond the relatively safe confines of PRED – population, resources, environment and development – it runs up against iceberg-like structures of money, power and epistemology which are largely invisible until struck.

Let me unpack these three – money, power and epistemology. First, on the money side, academia in Europe today values research over teaching. In the UK, student: staff ratios have roughly doubled in the past 30 years. I have colleagues who are told to subcontract their teaching work "because you're worth more to the university bringing in research grants than spending time with the students." I myself have been challenged: "Why do you give so much time to students when it's not going to help your career?" Such cynicism sits ill with Human Ecology. We tend to be more interested in people than in making a fetish – something to get over-excited about – of research. What we study is too broad to fit most research council pigeon holes. The very humanness of our ecology trips us up, especially when our construct of humanity goes beyond materialistic paradigms of "rational self-interest."

Second, on the power side, there is an unspoken compact in academia to hold social norms in place. Where these norms have become dysfunctional, and the ecological crisis is a potent indicator of such dysfunctionality, the messenger risks being shot for frightening the horses. Many climate

9 Personal communication with Luc Hens (2009): Manchester: Society for Human Ecology conference.

change scientists experienced just this around the time of the UN's failed Copenhagen summit in December 2009. For example, after publishing some 200 peer-reviewed scientific papers Michael Mann in America has had what is widely seen as a politically-motivated lawsuit taken out against him claiming that his research has been a misuse of public funds (Mann 2010).

Human Ecology is generally safe enough when it sticks to PRED and serves as little more than human geography. But when it starts questioning the structures of society and consciousness, when it unpacks the psychospirituality of domination and consumerism, then it ruffles the feathers of power. This was why Patrick Geddes was marginalised in his time and earned the accolade, "a most unsettling person" (Kitchen 1975). It was why Jex-Blake was seen off for "the maintenance of academical good order." The trouble with a diamond is that it shows up the dung heap.

The Challenge is Onto-Epistemological

Third, there is the epistemological challenge – what Human Ecology does to our framing of what constitutes knowledge. This shapes individual and social consciousness. It also has knock-on effects for ontology – for people's sense of being and what being human means. In my experience these onto-epistemological challenges are to:

- personal and social comfort zones partitioned by mostly unacknowledged privileges of social class, ethnicity and gender;
- the narrowness of disciplinary compartmentalisations of knowledge to the exclusion of generalist contextualisations;
- the fetishisation of research, and specifically, abstruse research when placed above the generosity of good teaching and a concern for useful knowledge;
- the inertia of institutional complicity in not confronting social power structures in order protect status and funding;
- underdevelopment of the "heart" (feeling/Bhakti) and the "hand" (action/Karma), where a scholar's recognition has, perhaps since his or her childhood, been achieved through the one-sided development of the "head" (thinking/Jnana), and hunkering down into the sheltered disciplinary hole of specialisation;
- unresolved personal psychodynamics which can be activated by exposure to the psychopathology of the global problematique – both within the Human Ecologist and, through transference and counter-transference with students and colleagues;
- the outward projection of unresolved "shadow" dynamics onto institutional authority structures and one another. These can find healthy working through in dynamic group interplay that aspires towards psychological honesty. They can also find unhealthy expression as organisational oedipal dynamics playing out as "parent-child" succession issues and "sibling" rivalries that can poison institutional protocols and relationships;
- the shared and balanced holding of being a scholarly community of contested discourses, when some of those discourses disproportionately shape the perception of the whole and thereby affect others in the community because they carry a high socio-political charge. An example would be how my work on land reform skewed perceptions of what CHE was about within Edinburgh University, implicating colleagues who did not share the concern to the same degree;
- and lastly, the challenge of what it means to be a human being – both in those academic contexts that privilege materialistic paradigms of meaning, and in a postmodern world that

deconstructs all meaning – both sharing in common an enmity for the soul.

Jung noted, "The upheaval of our world and the upheaval of our consciousness are one and the same" (Jung 2008: 209–210). And as Goodman recognises in her contribution to this volume, "In Human Ecology terms … there is also a growing awareness that the problems and crises are interrelated because they have the same root cause: the almost totalizing dominance of the particular assumptions, worldview and social practices of the modern paradigm." The modern mind finds meaning in reason, progress and materiality. The postmodern deconstructs (or unpicks) such meaning. We might say *that modernity still professes to believe in itself but postmodernity has lost even that faith*. What both usually have in common is their rationally predicated disregard for soul. In contrast to the post/modern as I will call both the modern and the postmodern together, premodern/indigenous worldviews see soul as central to all existence. The contrast is akin to an "unconformity" in the geological sense where young rocks have been thrust or laid down so as to rest directly on much older ones but with a massive discontinuity between the ages of the two. In our case, the lacuna in question represents a loss of connection and with it, a leakage of soul.

Why does this matter? Why is it an ecological issue? Drawing on Sanskritic scholarship the late Indian-Spanish cross-cultural scholar, Raimon Panikkar, sees it as a disarticulation from reality and therefore, a question of freedom.

> We are free when we are real, when we are in harmony with reality. The Sanskrit word for untruth or a lie implies a division or disorder: *anrta*, something that disturbs *rta*, the cosmic order … "I am" insofar as I am real, insfar as I am truthful. This reality is more than what is disclosed by my senses and my rational life, it is Being. (Panikkar 2010: 78)

A radical regrounding of humanity must therefore call back Being, the soul, if it is to find harmony with ecology in its full cosmic depth – with the *rta*. The call is to a deeper authenticity. To explore ways forward let us further unpack our three main worldviews – the premodern, the modern and the postmodern.

Premodernity – The Ancient/Indigenous Holistic Worldview

I shall take *premodernity* to be a system in which physical reality is held to be inter-penetrated, or underpinned, by spiritual reality (Wink 1992). By "spiritual" I shall mean here the inner qualities of a person or thing such as comprise its *essence* – from the Latin *esse* – meaning Being.[10] To deny essence is therefore to deny the ultimacy and mystery of Being. Essence is the connection of all things to their grounding in deep reality. That does not need to imply a static understanding of deep reality. For example, in the creation myth of Genesis (1:2), it arises not from tablets of stone but from God's *Ruach* – a feminine noun for "breath of the nostrils," usually translated as "Spirit." For Aristotle, essence could be defined as "the substantial reality" of anything. It is, he said in

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10 Spirituality can also be defined as the interconnection of all things through love made manifest. It is the reality of the divine, both as transcendent unity in eternity and as immanent multiplicity within the constraints of space and time. The spiritual is that which gives life at all levels of the meaning of "life".

These views can be derived in Hinduism from *The Upanishads* and *The Bhagavad Gita* (especially chapters 6–10), from the *Tao Te Ching*, and from parts of the Bible, such as the first chapter of John's gospel, which builds on the first chapter of Genesis.

The Metaphysics, what "cannot be reduced to another definition which is fuller in expression" (Aristotle 2001, 988a: 30–35 and 994b: 15–20).

As a spiritual essentialist worldview the premodern position is *metaphysical*. It posits the fullness of reality as extending "beyond" or "behind" the physical realm of sensory experience. To know reality, and to come into a more complete relationship with it, therefore entails a bottom line openness to discern that which gives life. This renders a statement such as "Blessed are the pure of heart, for they shall see God"[11] more than just a pious ditty. It is an epistemological proposition about how, and whether, we can glimpse deep reality, the root of essence. It is the spiritual equivalent of Heisenberg's principle: namely, the proposition that what can be observed is affected by the position of the observer.

The premodern worldview is mythopoetic. Myth gives rise to reality as poetic upwelling. The Greek *poesis* means "the making." To draw on the living metaphors of Genesis again, "God *said*: Let there be …" (1:3) – in other words, "let emergence, or *poesis*, take place." In many traditions we therefore see that poetry, in the broad sense that includes myth, story, song and music, is the language of spirituality. It is poetry's divine passion that carries Truth. This may not be apparent in ordinary states of human consciousness. It requires the cultivation of spiritual perception. The consciousness researcher, Charles Tart, accordingly calls for "state specific sciences" and forms of communication that befit differing states of consciousness (Tart 1972). Just as outer worlds have different languages, so too have the mansions of inner space. Ontology cannot therefore be explored from a fixed position in the mind. It must be free to flow. The Human Ecologist cannot afford to treat this as an abstraction. It can be paradigmatic to the interpretation of reality. Shakespeare points to a metaphorical truth when, as nature goes crazy after the murder in *Macbeth* (Act 2.4), he has an old man say: "Thou seest the heavens, as troubled with man's act."

Such posited relationship between the inner and outer life suggests that to view *community* as the subject of Human Ecology requires a much deeper understanding of "community" than simply a synonym for society. Such community, of which ecology is the study, becomes a dance of the inner and the outer, the spiritual and the material, the metaphysical and the physical. Its fullness is the "church" as the Communion of the Saints (Christianity), the Ummah (Islam), or the Noble Sangha (Buddhism) in which all are parts of the whole. We are possessed of both our individuality and the ecology of our collectivity. This takes ontology very deep. As the Trappist monk Thomas Merton described it:

> Contrary to what has been thought in recent centuries in the West, the spiritual or interior life is not an exclusively private affair. In reality, the deepest and most authentic Western traditions are at one with those of the East on this point. The spiritual life of one person is simply the life of all manifesting in him … [Thus] Gandhi's … "spiritual life" was simply his participation in the life and *dharma* of his people. (Merton 1965: 6–7, his parentheses)

It is incorrect to think of the premodern as anachronistic. Not least, it continues to be the worldview of most indigenous peoples today. As Darrell Posey put it (just before his premature passing) in his introduction to the major volume that he edited on behalf of UNEP for the Global Biodiversity Assessment:

> Although conservation and management practices are highly pragmatic, indigenous and traditional peoples generally view this knowledge as emanating from a *spiritual* base. All creation is sacred,

11 Matthew 5:8.

> and the sacred and secular are inseparable. Spirituality is the highest form of consciousness, and spiritual consciousness is the highest form of awareness. In this sense, a dimension of traditional knowledge is not *local* knowledge, but knowledge of the *universal* as expressed in the local … There is a complimentary relationship … with the spiritual being more powerful than the material. The community is of the dead as well as the living. And in nature, behind visible objects lie essences, or powers, which constitute the true nature of those objects. (Posey 1999: 4, his emphasis)

Such essentialism is anathema equally to reductionist forms of modernity and to deconstructionist postmodernity. As Richard Twine (2001) puts it in *Ecofeminism Journal*, "It is worth bearing in mind that within academic writing the charge of essentialism is used in a very adversarial way, as an allegation of the worst crime." Chaone Mallory notes, "the worries over essentialism cause more anxiety for academics living in ivory towers than for citizens living in trees!" (Mallory 2010). To some secular rationalist thinkers spiritual essentialism is the royal road to Nazism (Biehl 1991: 100–101), the logic being that because the Nazis used essentialist notions of German identity this means that all essentialism teeters on the edge of totalitarianism. Such thinking is as sloppy as it would be to blame surgeons for knife crime. The challenge that premodernism poses to post/modernity is therefore grave. It considers some of the most paradigmatic thrusts of post/modern thought – those which, in their arid materialism, deny the spiritual *esse* – to be violations of Being. That is not to suggest that they have not arrived at such positions for justifiable reasons – for example, the abuse of institutional religious power. But it is to side with MacIntyre (1997: 90) that "Religion needs not so much to be refuted as to be decoded."

Modernity – the Worldview of the Dominant Paradigm

In contrast to the foregoing, predicated on a sense of soul or animating Spirit, modernity grew out of the Renaissance and the Age of Reason. But increasingly since the medieval period the "reason" in question has not been that of the divine *Logos* of Greek or Christian scholastic philosophers. Rather, it is pedestrian human rationality, a function of the brain held in the conscious control of the ego and cognitively articulated through logic. This delivers what is seen as being "positive" knowledge because it works with statements that can be positively verified as true or false from the evidence of senses in the material world. "If you can't count it, it doesn't count."

Up to a point such empiricism is very welcome. It helps to fix our bearings in the material world and protects from the wacko ideas of cultic thinking. But militant materialists are not content with the qualification "up to a point." Their concern is to silence the spiritual bottom line of premodern discourse. As Dawkins put it in *The God Delusion*: "I am not attacking any particular version of God or gods. I am attacking God, all gods, anything and everything supernatural, wherever and whenever they have been or will be invented" (Dawkins 2007: 57). Such a statement would be considered hubristic by most ancient or indigenous peoples. They would suggest, "If you don't look, you won't see"; and they would enquire, "Have you looked? Have you *asked* to see?" To the premodern mind, the reductionist worldview is blind to alternative ways of knowing such as aesthetic sensibility, inner vision, intuition and mystical experience (which can be empirically studied). It has canonised reason alone, but a dwarfed reason that rattles around in the vacuum of its own echo chamber, imagining itself to have trumped the divine mystery.

Another example of the attempt to kill off spirituality is A.J. Ayer's seminal work, *Language, Truth and Logic*. The cover of the Pelican/Penguin edition describes this as "the original English manifesto of Logical Positivism … the classic statement of this form of empiricist philosophy."

The opening chapter is brazenly entitled, "The Elimination of Metaphysics." Ayer is perfectly happy to infer the nature of truth from such arid reductionist propositions as, "if p entails *q*, the meaning of *q* is contained in that of *p*" (Ayer 1971: 24). But as he sees it, "the utterances of the metaphysician who is attempting to expound a vision are literally senseless"- literally so, he thinks, "because they go beyond the limits of experience" (Ayer 1971: 61). Here Ayer implies that because his own experience is limited, others must argue from the same low common denominator.

In order to remain within his comfort zone Ayer has had to denigrate contesting worldviews. This is why he presses for the wholesale "elimination of metaphysics"; also why he goes as far as to advise his readers on ways "of attacking a metaphysician who claimed to have knowledge of a reality which transcended the phenomenal world." For Ayer the only valid realm of reality is "the world of science and common sense" (Ayer 1971: 45). It does not seem to occur to him that the direct experience of, say, God, could be considered to be phenomenologically valid, and that if enough people, such as the mystics, claim to have had similar experiences, they could claim consensual validation of their reality – just like early explorers who, through consensual validation, gained acceptance for the existence of strange and distant lands that most people had never imagined.

The animus expressed by men like Ayer and Dawkins might be dismissed as an intellectual sideshow were it not that positivism, in its various forms, has utterly dominated Anglo-American universities during much of the twentieth century. Economics and specifically, "positive economics" with its claim to be value free is a pressing case in point. It has little to offer indigenous peoples or hard-pressed people in cities where poverty gnaws at joy, grows discoloured, stunted "poverty teeth," prematurely greys the hair, furrows young brows, and kills – I have in mind here where I live in Glasgow. Yet the situation is not without glimmers of hope. In 2009, following the collapse the previous year of the casino economy's virtual reality, the Nobel Prize in economics was awarded to Elinor Ostrom. Her work on the management of common resources attacks what she calls "the intellectual trap in relying entirely on models to provide the foundation for policy analysis … with the false confidence of presumed omniscience" (Ostrom 1990: 215). Reason is essential in making sense of reality but we must not make of it a Procrustean iron bed.

Postmodernity – the Worldview of Nemesis

Postmodernity can be seen as a movement that developed out of the need to challenge power structures embedded in modernity. These include social constructions of progress, gender, ethnicity and social class that are held in place by little-examined presumptions that dominant groups make about their own rationality, entitlement, value neutrality and objectivity.

Postmodernity's primary tool – the "deconstruction" or unpacking of assumptions – is often attributed to Derrida, but goes back to the ancients. It includes the Socratic questioning method of Plato, and of Abraham and other prophets haggling over God's use, or abuse, of power.[12] It is

12 Genesis 18:16–13. Most translations render 18:22 as "… Abraham stood before the Lord" (KJV). But there is also an "ancient tradition," as the HarperCollins NRSV Study Bible calls it, which reads: "while the Lord remained standing before Abraham." In other words, Abraham holds ascendency in taking God to task (over the brutality of the intended destruction of Sodom and Gomorrah). In *Answer to Job* Carl Jung similarly sees Job's role as having been to call God to account. As the Lord's Prayer perhaps similarly says, "And lead us not into temptation" (Matthew 6:13). This begs consideration that humanity influences the moral evolution of the divine through relationship in time, and not just the other way around.

notable that Derrida was born into a Jewish family where such deconstruction would have been culturally normal.

Postmodernism sees dominant systems of power as constellating themselves through powerful narratives or story lines. Lyotard surmised, "I define *postmodern* as incredulity towards metanarratives" (Lyotard 1986: xxiv). But left as it stands this simply pulls the Lego to bits and leaves it scattered over the nursery floor. Like modernists, some influential postmodernists get trapped in the solipsism – the circular self-referentality – of their own rationality because they cannot accept the possibility of ways of knowing that go beyond their own ego control and require opening up to the *Mythos* within which Logos itself sits (Panikkar 2010: 368–404).

At one intriguing juncture in his writings Derrida toys with the notion that, contrary to all else that he has talked about, justice might be undeconstructible. In a single paragraph that stirs much excitement amongst some contemporary theologians (for example, Caputo 1993, 201–202 in Bruggueman 2000: 19) he speaks of "the undeconstructibility of justice." In his characteristically enigmatic manner he says: "Justice in itself, if such a thing exists, outside or beyond law, is not deconstructible. No more than deconstruction itself, if such a thing exists. Deconstruction is justice" (*La déconstruction est la justice*). But Derrida fails to develop this. He simply goes on to say, "I'm sure this isn't altogether clear; I hope, though I'm not sure of it, that it will become a little clearer in a moment" (Derrida 1989–1990: 945). It doesn't become any clearer. He just changes subject and airily breezes on. Exposed here is the flatulence of Derridean postmodernism.

Baudrillard helpfully shows how postmodern social norms are replacing honest-to-goodness reality with shifting shadow plays of simulation – what he calls "hypersimulation." Here reality is substituted for with an abstracted "hyperreality." Unlike both physical and metaphysical reality, hyperreality makes no claim to be "real." Such is the virtual reality that floods consciousness in much of the contemporary world – TV "reality" shows, computer games, fashions, twitters and tweats, and addictions that include, not least, the blandishments of insatiable consumerism. Accordingly, says Baudrillard (in Poster 1988: 166), "The territory no longer precedes the map, nor survives it. Henceforth, it is the map that precedes the territory …" It could all seem like fun until one watches video clips of American soldiers in Iraq carrying out a real-life massacre as if it were an amusement arcade shoot-up (Wikileaks 2010).

Charlene Spretnak (1993) considers that postmodern philosophy has over-reached what is useful in deconstruction. The Lego is left scattered on the floor but with no sense of "grace" with which to constellate reconstruction. In a later work, *The Resurgence of the Real*, she attempts rapprochement. She proposes the "ecological postmodern" to try and bridge what is useful in postmodernism with the need also to acknowledge the realness of reality. "Nothing short of a broad and deep engagement with the real will do" she says (1999: 72). But is this yoking of ecology to postmodernism necessary, or even helpful? I would ask: does postmodern thought contain anything fundamental that cannot already be found in premodern thinkers who knew how to ask deconstructive questions?

These questions are not new to our discipline. The late Paul Shepard was a professor of Human Ecology whose research led him to the conclusion that modernity, for all its outer gains, has actually infantilised the capacity of many of us to be fully human and that this finds attenuated expression in postmodernity. Our humanity, Shephard reminds us, was what developed during 99 percent of our evolution (Shepard 1998). Postmodernity is less than skin deep. In critiquing a 1973 essay in *Science* that asked, "What's wrong with plastic trees?" Shepard responds:

> Plastic trees? They are more than a practical simulation. They are the message that the trees which they represent are themselves but surfaces … acceptable configurations … The philosophy

> of disengagement certifies whatever meanings we attach to these treelike forms – and to trees themselves. The vacuum of essential meaning implies that there really is no meaning. A highbrow wrecking crew confirms this from their own observations of reality – that is, of conflicting texts … What, then, is the final reply to the subjective and aesthetic dandyism of our time? Given our immersion in text, who can claim to know reality?' (Shepard 1995: 18, 24–25)

As if in response to his own question he says:

> Derrida, Lyotard, and other deconstructionists have about them the smell of the coffeehouse, a world of ironic, patronising remoteness in which the search for generality and truth would be an embarrassment … The loss of contact with nature, a biophilic deprivation, must lead to pathology. But other animal species, because they have no words to confuse themselves, are not so deluded. (Shepard 1995: vii)

I share Shepard's irritation. Several times at academic conferences I have been challenged in my atavistic premodernity by scholars who have protested, to quote one, that "nature is just a social construction of people who mostly live in cities." I suggested that if she really thought so, she might perhaps demonstrate her faith by deconstructing the glass in her hand and ceasing to drink such a "social construction" as water. To this she retorted, "But it rains on cities too!" I then proposed that to up the ante she might try, there and then, holding her breath … "because I don't think oxygen is photosynthesised from concrete in cities: it comes from wild nature far out across the land and sea." I added, "The country can survive without the city, but the city cannot survive without its rural hinterland." There was no reply to that one but she did keep breathing.

Such exchanges would be comic were they not so commonplace in ivory-tower academia. In a typology of such positions Demeritt shows that most postmodernists are more nuanced than the example I have just given. For many, an expression like "the social construction of nature" is just a generalised way of saying that humans have an impact on nature. Yet, as Bron Taylor at the University of Florida has remarked, "If so," by which he means, if such extreme examples are only a fringe academic position, "then how does one explain their progeny all over academia?"[13]

How indeed? Even such a respected ecologist as William Cronin (1995: 26) has, under the postmodern onslaught, felt pushed to enquire, "Can our concern for the environment survive our realisation that its authority flows as much from human values as from anything in nature that might ground those values?" And in her book about climate change the influential feminist theologian, Sallie McFague (2008: 123), amidst repeated deference to Derrida, states: "There is no untouched nature, no wilderness – even Antarctica is 'urbanised," that is, socially and historically constructed'.

Demeritt's literature review also offers examples of scholars who argue that the rainforests of the Pacific Northwest "are discursive constructions." He observes: "one of the most remarkable and politically influential examples of social construction-as-refutation is the effort by conservative ideologues in the USA to refute scientific theories of global warming as merely social constructions." Such deconstruction and deliberate reduction of natural realities to simulacra can have serious political impact. An example is Lisa Murkowski's effort to protect the oil companies from spillage liability. Testifying at a hearing on offshore energy production just months before Deepwater Horizon oilwell disaster in the Mexican Gulf, she told her fellow senators: "I had an opportunity to see what Shell is doing with the 4-D seismic technology, and *it's better than Disneyland*, in terms

13 Pers. com. by email with Bron Taylor, 2010.

of how you can take technologies and go after a resource that is thousands of years old (*sic*), and do so in an environmentally sound way" (US Senate 2009: 50, my emphasis).

The hubris of such disconnection from reality attains its nemesis in Jean-Paul Sartre's seminal work, *Being and Nothingness*. In common with Shepard, I consider Sartre to be a postmodernist on account of his dismal deconstruction of what it means to be a human being. Sartre offers no quarter to real presence, to essence, Being, substance or soul. There exists, he says, only "the *nothingness* which is at the heart of man." We are but the ripples of "relection-reflecting." With a typical enigmatic twist that starts off appearing affirmative but turns nihilistic, he concludes: "Thus freedom is not a being; it is *the being* of man – that is, his nothingness of being" (Sartre 1969: 440–441).

From Sartre's position – at least in his seminal early writing – there can be no basis for meaningful relationship between human beings. He sees relationship, and specifically the relationship of a man with a woman, as a conceit. We enter into relationships at peril to our being. As he astonishingly puts it: "the obscenity of the feminine sex is that of everything which 'gapes open'" … because she is "in the form of a hole." We cannot fault Sartre's explicitness. "The amorous act," he states, "is the castration of the man; but this is above all because sex is a hole … It is with his flesh that the child stops up the hole and the hole … is an obscene expectation, an appeal to all flesh" (Sartre 1969: 613–614).

Neither does Sartre leave any doubt that his attack is both physical and metaphysical. The book's culmination – the final three lines in the chapter immediately preceding the Conclusion – makes plain that his argument is with the notions of both "God" and "Man." He dismisses appeals to the transcendent as "Bad faith" – *mauvaise foi* – on account of the misplaced (as he sees it) hope in the possibility of having some sort of real relationship. As he sees it, there simply *is nothing* to relate to: "Thus the passion of man is the reverse of that of Christ, for man loses himself as man in order that God may be born. But the idea of God is contradictory and we lose ourselves in vain. *Man is a useless passion*" (Sartre 1969: 615).

I stress, again, that these lines are not peripheral: they are the conclusion of his argument. The preceding argument is no clearer. The aim appears to be to knock God into the moat and leave the individual in the splendid "existential" isolation of their garret. The overwhelming impression is one of negativity – that of the "useless passion" that I have here italicised. One might imagine Sartre aficionados nodding sagely at such a dénouement. One might ponder what their nod is to.

Violence and Cauterised Post/Modernity

I want to press to the core of this detachment of post/modernity from its premodern embedded ensoulment. Let us take Sartre further. To what might we attribute such an abject conclusion as that which I have just cited which, in its misogyny at least, most of his followers (though not all his biographers) conveniently overlook? Wherever I see nihilism I sense the smothering hand of violence. The post-colonial scholar, Robert Young observes, "It is significant that Sartre, Althusser, Derrida and Lyotard, among others, were all either born in Algeria or personally involved with the events of the war" (2004: 1). In addition, this was an entire generation of thinkers whose lives had been shaped by the trauma of one or both world wars. Those of us who might have escaped, direct involvement, have no cause to be smug in the criticisms we might make, but we do need to name the issues, and seek to understand, and to mend.

Violence is the antithesis of empathy; the violation of that which is sacred. It reduces reality to the mechanistic processing of dead logic. Neither is violence neutral in its effect on the mind

or on the wider psyche of entire human eras and cultures. The root of the word, *viol* in French, means rape, and twice I have heard women who have been raped say of their assailant, "He took away my soul." As Human Ecologists we must ask whether violence, both direct and transmitted intergenerationally, has a similar effect on how our minds operate. Ginsberg using a poetic medium suggests that it does, and that it shaped the twentieth century. The opening line of his epic poem, *Howl*, reads: "I saw the best minds of my generation destroyed by madness, starving hysterical naked." He goes on to ask: "What sphinx of cement and aluminum bashed open their skulls and ate up their brains and imagination?" And he answers, invoking the Old Testament fire-filled idol, into which the children were sacrificed to seek economic prosperity: "Moloch! … Boys sobbing in armies! Old men weeping in the parks!" (Ginsberg 1956: 9, 21).

Yolanda Gampel, an Israeli psychologist working with Holocaust victims and their descendents, suggests that extreme social violence disrupts a person's capacity for "articulation between internal and external worlds." She continues, it "can cause that individual to crumble due to internal and/or external alienation or even to disappear (metaphorically or realistically)" (Gampel 2000: 48). It is precisely such *disarticulation*, often to the point of becoming inchoate, that characterises the writings of key postmodern scholars of such genre as Lyotard, Derrida and as we have been seeing, Sartre. Like farmyard geese with clipped wings they flap around in circles, able to peck, to deconstruct, but unable to welcome the grace of reconstruction. Like a disengaged gearbox their cognition turns but achieves no traction through to the wheels of reality. And so they honk, like Tonka toys, while the wild geese, the real geese, soar stratospheric overhead in an altogether other universe of discourse – in nature's real world of whispering music.

To play intellectual Sudoku as do key postmodern philosophers is all very well, but as Human Ecologists, engaged with what is biophysically and spiritually real and with very real threats to those realities: must we let ourselves be distracted? Where – we might ask of the deconstructionists – is the space for children in your world? Where, the passions of love in all its meaning? Where, the flowers, and the fishes, and the stars? And the honest-to-goodness lives of those, perhaps economically weaker than us, who labour in fields and factories to make the things we consume?

There is a video on YouTube of Derrida being asked by a woman called Amy to speak about love (Derrida 2007).

"Love or death?" he responds.

"Love, not death," Amy says. "We've heard enough about death."

"I have nothing to say about love," replies a nonplussed Derrida. "No, no, it's not possible. I have an empty head on love in general."

To indigenous peoples faced with the loss of their ecosystems, deconstruction is not an abstraction. To the Hopi, Derrida's uncentredness would be a paragon of *koyaanisquatsi* – "crazy life, life in turmoil, life out of balance, life disintegrating, a state of life that calls for another way of living."[14]

I have suggested that the roots of the modern and postmodern can be found in the immensity of the premodern. In our obsession to believe in progress we have overlooked this. I stress, it is not modern rationality or postmodern deconstruction in themselves that are the problems – they can be very great blessings. It is their deracination from the spiritual grounding, their denigration of root of essence that is the problem because it erodes the meaning of being human. I believe we can glimpse the origin of such hubris in Aristotle. Aristotle was not the mystic that Plato's

14 According to Philip Glass's film by this name. I may be a little hard in my portrayal of Derrida here. He tries to get Amy to refine her question so as not to ask about love "in general". But even when she does, he still flaps about the farmyard and says nothing to touch the heart.

Socrates was. His systems of logic and categorisation laid the tramlines for what was to become the modern, and out of it, as a reaction, the postmodern. In a revealing passage Aristotle says in the *Metaphysics*:

> When Socrates was occupying himself with the excellences of character … it was natural that [he] should be seeking the essence … "what a thing is" … for there was *as yet* none of the dialectical power which enables people *even without knowledge of the essence* to speculate about … inductive arguments and universal definition, both of which are concerned with the starting-point of science. (Aristotle 2001: 1078-b-25, my emphasis)[15]

Here Aristotle does affirm essence; indeed, an alternative translation (Tredennick) has him state that "the starting-point of all logical reasoning is the essence." But he goes on to de-sacralise it. If his words are adequately reflected in the translations he appears here to render redundant the need to have direct "knowledge of the essence." Through "dialectical power" which comprises, we might reasonably assume, his own tools of reasoning, he reduces the essence to something that even those who lack experience are now placed in a position "to speculate about."

Superficially this might seem laudably democratic. But what has happened is that the process of coming to know has just been dumbed-down. The "heart" as the organ of spiritual perception has just been displaced by the "head." No longer need it be "thy will be done … blessed are the pure of heart for they shall see God"[16] in a surrender, a lover's orgasmic yielding, to the transcendent. Instead, knowledge becomes a question of "my will be done" – the triumph of ambition (or will) over destiny (or Dharma). To the indigenous psyche this is, indeed, *koyaanisquatsi*. In "Good-bye Twilight" the twentieth century Scottish bard, Hugh MacDiarmid (1985: 1124–1126), testifies that we are witnessing …

> An obsession that does not allow of any very clear
> Spiritual vision or insight into the true inwardness of the thing
> That is the obsession … and promptly becomes
> Doped, drugged, besotted – my countrymen, even as you. …
>
> Because your sub-conscious nature, which, apparently,
> You know nothing about, is manipulating you from the start.
>
> Out of your melancholy moping, your impotence, Gaels,
> (You stir the heart, you think? … but surely
> One of the heart's main functions is to supply the brain!)

We might consider, then, that all Aristotle has achieved in the passage just quoted has been to set in train spurious legitimacy for intellectuals who don't actually get the point sufficiently to see that there is a point worth getting. Prometheus has stolen fire from the gods, which is useful, but it remains a theft of what might, had he or we waited, been given; and theft carries consequences. I think we might say that Plato had anticipated the theft as, indeed, he also anticipated Baudrillard's hypersimulation. He saw that the consequences of short-circuiting the path to knowledge is

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15 I have taken liberties with my ellipsis here in contracting a considerable portion of text, but I think what remains captures the essence of Aristotle's intent.

16 Matthew 6:10; 5:8. Of course, Aristotle preceded Christ, but the principle transcends chronology.

dilettantism. Near the end of the *Phaedrus* he warns about the downside of moving from an oral to a written culture of learning. Through Socrates he recounts the story of the divine king Thamus of Egypt to whom the idea of writing was proposed. Thamus saw that that this would shift the balance of learning from inner to outer experience. It would mean that students "will make use of various external signs, not of those forms which are within." This would equip them "not with truth, but with an appearance of wisdom." By it "they will seem to know much, but will in most respects be ignorant and unpleasant to live with … for they will have become wise in their own eyes, rather than truly so" (cited and discussed in Carey 2000: 69).

In his recent book, *The Shallows*, Nicholas Carr reviews the neruroscientific literature on Internet use. He highlights concerns that our brains are being "massively remodelled" because, "The cacophony of stimuli short-circuits both conscious and unconscious thought, preventing our minds from thinking either deeply or creatively. Our brains turn into simple signal-processing units, shepherding information into consciousness and then back out again" (Carr 2010). Plato's point is corroborated and the nemesis, or at least, the shadow side of post/modernity is laid increasingly bare. In the absence of remedial measures we become trapped in wheels of colourless cognition. These may flatter the ego but they flatten the soul, reducing it to the farmyard flap. The idolatry in question is that of sidestepping divine Logos and making human reason, in all its limitations, a god. Cubism of the mind results – the intellectual equivalent of pornography – defined as sensation without the heart's engagement. Doubtless this was not Aristotle's intention. But it is his effect, and in the wider context of his arid approach to thought it maybe helps to explain why many Platonists find him important but dull.

Devoid of anchoring in essence beyond ego we move to an era where, as Francis Bacon is credited with saying, "knowledge is [outward] power." As Lewis Carroll showed:

> "When *I* use a word," Humpty Dumpty said, in rather a scornful tone, "it means just what I choose it to mean – neither more nor less."
>
> "The question is," said Alice, "whether you can make words mean so many different things."
>
> "The question is," said Humpty Dumpty, "which is to be master – that's all." (Carroll 1871)

Tradition portrays Humpty as an egg-head – a euphemism for an obsessive intellectual. When he falls off the wall "all the king's horses and all the king's men/couldn't put Humpty together again." For to deconstruct is easy; to reconstruct is quite another matter. To kill (or to be able to speak of death) is easy; to love is quite another matter. These two modes – creating and destroying – are not symmetrical in the depth of humanity that they require, and yet the nihilistic creates its own culture, its own norms and means of propagation and so, in common with many trauma psychologists, Yolanda Gampel stresses that violence propagates not only by direct contact, but indirectly by "radioactive identification." In this:

> … external reality enters the psychic apparatus without the individual having any control over its entry, implantation or effects … These unconscious remnants are internalised so that the individual identifies with them and their dehumanizing aspects. As time goes by, such individuals act out these identifications, which are alien to them, and/or transmit them to their children, who may act them out and even transmit them to the third generation. (Gampel 2000: 59)

These clinical observations increasingly find physiological corroboration from brain scan studies. Early childhood exposure to trauma can physically alter how the brain's wiring develops. Martin Teicher, who directs the Developmental Biopsychiatry Research Program at the McLean Hospital, an affiliate of the Harvard Medical School, surmises:

> Whether it comes in the form of physical, emotional or sexual trauma or through exposure to warfare, famine or pestilence, stress can set off a ripple of hormonal changes that permanently wire a child's brain to cope with a malevolent world … We hypothesize that adequate nurturing and the absence of intense early stress permits our brains to develop in a manner that is less aggressive and more emotionally stable, social, empathic and hemispherically integrated. We believe that this process enhances the ability of social animals to build more complex interpersonal structures and enables humans to better realise their creative potential. (Teicher 2002)

My question at the end of all this is as simple as some might find it offensive. How far is the post/modern condition a stunted epistemology, the seeds of which were set with certain strands of classical thought, but which germinated in the worldwide violence of rapid colonisation and war that has characterised modernity in the West? Civilisation is recent in the history of human evolution but war has always been its shadow side. War has always been the hard undercarriage of Empire. Could there be a problem here at Mission Control in the western psyche? Could we be touching on epistemological problems with which most western thought has not come to terms, but which the ecological crisis now presses on us globally as never before?[17] I consider that radical Human Ecology is an irritation to the Academy precisely because it raises such elephant-in-the-living-room questions, and does so, unlike most academic analysis, in ways that touch the viscerals of us all.

Calling Back the Soul

To many indigenous peoples the European worldview is damaging their way of life. V.F. Cordova, who was the first Native American woman to gain a university degree in philosophy, called it the philosophy of "Euroman." Euroman's problem is placing competitive individuality over the mutuality of relatedness. She offers this example:

> A professor points out to me my use of the term "we." "What do you think … " she asks in a class on the philosophy of "time," and I reply, "We think …" I reply that same way for each question: "We … think … say … believe …" She responds, "Who is this 'we' – there is only one of you sitting in that chair!" I am startled. I am assuming that she and the rest of the class are discussing views from a particular perspective – the Western perspective on space and time. I assume that they know that I am also speaking from a perspective – one that is unlike their own but not uniquely my own … They, on the other hand, believe that they have no perspective, that their … thoughts are unique to an individual. I believe, in contrast, that there are no self-made persons. There are only those who cannot (or refuse to) acknowledge their debts. (Cordova 2007: 122)

The difficulty for the post/modern western mind is that such debts can only be acknowledged (and relationship entered into) if they are accepted as having real substance. That would require a

17 I explore the links between violence and worldview as a driver of consumerism at the cutting edge of climate change in McIntosh 2008.

confession of being in a state of *koyaanisquatsi*. It would need to try and cultivate empathy, trusting that there is, indeed, an essential basis from which such empathy can proceed. That there is meaning that gives meaning to the meaning of meaning: and meaning that waits, perhaps, to be discovered empirically precisely because it is a function of the flow of what, at the risk of much button-pushing (but we are concerned here with Truth, not pussy-footing around) has been called God. Such a journey of exploration is a truly challenging task, for as the Russian artist, Kandinsky, wrote a century ago: "The nightmare of materialism, which has turned the life of the universe into an evil, useless game, is not yet past; it holds the awakening soul still in its grip" (Kandinsky 1977: 2). To awaken from anaesthesia transiently intensifies the pain.

In redress, the challenge to modernity is to re-ground reason in humility. As John Stuart Blackie said in his inaugural lecture to the chair of Greek at Edinburgh University: "Let us love the moderns, therefore, who are our familiar companions, wisely, but not too well" (1852, 9). The challenge to postmodernity is to bring to its critique the grace of reconstruction. That challenge is a grave one. It concerns nothing less than the resurgence of life and beauty into the world. These are not comfortable constructs to nihilistic forms of postmodernity. As the critic George Steiner has observed: "All good art and literature begin in immanence. But they do not stop there … I have, therefore, cited some of those who know best: the poets, the artists. *I have found no deconstructionist among them*" (1989, 227, my emphasis).

Our illness is the loss of soul, and we must find the courage to call it back. Such radical Human Ecology is shamanic. I once heard a story about a Canadian First Nations band that had a terrible problem in their community with a young man riddled with *koyaanisquatsi*. He was causing so much harm and disruption that they'd reached their wits' end. They took him out in a boat, tied a rope round his waist, threw him overboard, and shouted: "Call back your soul … or we will let go of the rope."

If we do not call back the soul we are as good as dead. Such is the challenge of radical human ecology to the Academy today. Life and death are set before us. Evidence for the reality or otherwise of both is there for us to examine. When all is said and done one question remains. Which do we choose? That is the distinctively human part. What follows on from there is ecology.

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Chapter 7

Education for Life: Human Ecology Pedagogy as a Bridge to Indigenous Knowing

Iain MacKinnon

In this chapter I would like to compare two experiences of education. The first is my experience of a taught MSc course in Human Ecology; the second my current work on a PhD by research to which I have tried to bring Human Ecological insights.

I will begin by telling how I came to study Human Ecology through a sense of dissatisfaction with how my way of life, the culture of the Gaelic-speaking people of the north west Highlands and Islands of Scotland,[1] seemed to be present in the public mind – and in my own – as fragments, rather than as a coherent whole.

I will then describe aspects of the two learning experiences, comparing and contrasting them. In order to try to compare like with like I will focus on the induction processes of each, articulating what I felt were their respective pedagogical assumptions and implications, and how these might channel students' awareness and the creative energies integral to the research process.

Theoretically I've been helped here by what I have learned from Nick Wilding, who was one of my teachers on the MSc at the Centre for Human Ecology, and by some of the academics that he introduced me to who use autoethnographic approaches in their work, such as Art Bouchner and Carolyn Ellis (2000), Norman Denzin (2003), Claudio Moreira (2008) and, in particular, Judi Marshall (2001), professor of organisational behaviour at Bath University.

I've been helped by the challenging support of Alastair McIntosh, one of the editors of this book, and inspired by the work of other indigenous scholars such as Linda Tuhiwai Smith (1999) and Viola Cordova (2007), and by the writing of second wave feminists, such as Adrienne Rich (1994, 2009) and Susan Griffin (1978). I'll also be drawing on C.B. MacPherson's (1964, 1979) work critiquing the ideology of "possessive individualism" which has helped me come to an understanding of the constellating forces of a colonial epistemology.

Autoethnographic approaches to research seek to articulate connections between personal and cultural experience.

Personally, I see this chapter as seeking to come to an understanding of, and begin to resolve, why I have been struggling with my current scholarly work – a struggle which constellated in the process of trying to write this chapter.

Culturally, I see it as a contribution to the indigenous critique of colonial education – its purposes and practices (see, for example, Tuhiwai Smith 1999, Phillips, Whatman, Hart and Winslett 2005.) These critiques seek to unveil the limited nature of colonial epistemological and pedagogical assumptions which, in consequence, act to delimit students' senses of the real and the possible.

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1 There are two major cultural areas in the Highlands and Islands, the more Gaelic-influenced areas of the west and Western Isles, and the more Scandinavian-influenced north and Northern Isles. These are distinct, and although there are many commonalities between the two, my focus here is on my own cultural ground in the Gaelic west.

I will conclude that, in my experience of it, Human Ecology, as a mode of inquiry, is a life practice based on a different set of pedagogical and epistemological assumptions about human potential and creativity. Its struggle to find a home in contemporary, colonial, academic institutions is linked to this difference, a result of its pedagogy and intention for transformation. This makes it, in my view, congruent with, and a bridge towards, indigenous ways of knowing and of being.

My reflections on Human Ecology are of my experiences as a student rather than as an active practitioner – as such they may provide a complementary view to other contributors to this volume who are articulating their experiences as teachers.

Preparing the Ground

My experience of Human Ecology, and my practice in becoming[2] a Human Ecologist, is only a few years old. I undertook the MSc course at the Centre for Human Ecology in 2005 when it had just moved to the University of Strathclyde in Glasgow. Designed for people who are actively involved in issues of social and ecological justice, it was a powerful, transformational experience for me, opening pathways that I am still walking.

In the years since I formally finished studying Human Ecology in 2007, I have been studying for a PhD exploring further in the area of inquiry I chose for my MSc thesis: the consequences of cultural colonisation as it applies to my own context as one who is from an indigenous community on the Isle of Skye, one of the Hebridean islands off the west coast of Scotland. In the PhD I have also been trying to come to an understanding of the interconnection of indigenous ways of knowing the world and of being in it (onto-epistemology) and of how these ways might be used in actions of creative resistance.

As seems to be typical, my PhD experience has been a fairly solitary one, and I chose to uproot myself and move to Ireland – a new country, albeit one with close links, physically and culturally, to my own. The peninsula in Ireland that I been living in is very close physically to the Hebridean islands, and culturally it has felt very close to my own experiences too – for example, parts of the peninsula were Gaelic speaking until early in the twentieth century.

I have made some very dear and close friends in Ireland, but at times that very closeness made it seem so like home that it accentuated my longing to be back there, to be more active, less detached.

In terms of my research environment I've been studying outwith what for me was the pedagogical *taproot* of the Human Ecological approach to learning: a critically supportive community of co-inquirers working in a paradigm in which, to use Carol Hanisch's phrase, "the personal is political" (cited in Humm 1992: 1) with the result that we were encouraged to explore the interrelationship of the issues we worked with as activists, and our personal lives as human beings.

One of the comments made of a draft of this chapter was that what I have written might be regarded by some readers as *neurotic* or *self-indulgent*. I would respond that the writing of this chapter has not appeared out of a theoretical ether. It emerged at a particular time and in response to a particular context. The words are, in part, the product of the spirit in which they were written, and that spirit has been influenced and shaped by a broader context.

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2 "Problem posing education affirms men and women as beings in the process of becoming – as unfinished beings in and with a likewise unfinished reality … The unfinished character of human beings and the transformational character of reality necessitate that education be an ongoing activity" (Freire 1972: 65).

> I exist only in and as a context. I am what that context has created. I did not burst full bloom into the world I confront … I have been created by my experiences and I am recreated – over and over again – by each new experience. (Cordova 2007: 49)

If the institutional context in which I have found myself tends to – as the scholar Stephen Sterling (2001) has claimed in a work I refer to later in this chapter – the creation of pathologies or neuroses then it may be the case that some of the words I produce will reflect the tendencies of that context.

It is such experiential shapings and limitings (both personal and cultural) that compel me, at this time, to write in the self-reflective style I have chosen.

Personally, at the moment, and as I will explain further, I believe experiences in the PhD process have contributed to a loss of confidence in how I approach my work, and created a state of confusion in me. It feels honest for me, and congruent with the values of the Human Ecology I have learned, to try to write out my inner feelings of discomfort into something that makes sense of them. The alternative is to keep those feelings internalised and to try to write something coherent in spite of the creative blockage they have caused in me.

Culturally, I realise I am not alone in these difficulties. In addition to the critiques already mentioned, other young scholars seeking to take an emancipatory approach to their work have also spoken to me about, or written about (such as the performative autoethnographer Claudio Moreira (2008)), their struggles in the PhD process.

As well as the expression of doubts and confusion, you will also find anger expressed in this paper. It is, I think, a necessary anger.

> The native cures himself of colonial neurosis by thrusting out the settler through force of arms. When his rage boils over, he discovers his lost innocence and he comes to know himself in that he himself creates himself … You may fear or be feared; that is to say, abandon yourself to the dissociations of a sham existence or conquer your birthright of unity … The child of violence, at every moment he draws from it his humanity. (Sartre in Fanon 1961: 18–20)

Sartre is talking here about the physical violence of African wars of independence. To assert the necessity of violence in the process of decolonisation makes me feel uncomfortable, but the assertion can be contextualised non-physically. The Maori scholar Linda Tuhiwai Smith has said that a confrontational forcefulness has been, for her, a necessary part of consciousness raising on issues of cultural colonisation. "And this is 'violent' work. Not because we are taking up guns but because we have to challenge people's minds. At some point you have to make that leap" (Tuhiwai Smith 2009).

The transition from a physically rooted to a psychologically rooted confrontation can involve creative, poetic, forms of resistance. For example, Tuhiwai Smith began her presentation at the conference in Durham with a traditional song expressing Maori values.

This creative transition has also been articulated by a group of musicians called Tinariwen from the nomadic Tuareg people of North Africa. During the twentieth century their homelands have been occupied by French colonisers and then by the independent Mali state. In the face of this cultural invasion a Tuareg resistance movement was formed which engaged in armed struggle (World Music Central 2007).

Members of Tinariwen were involved in this movement and when their lyricist spoke to the Gaelic tradition bearer Mairi Anna NicUalraig on the BBC's Global Gathering music programme in 2007 he told her that although they had given up their guns, their *war* continues.

> The necessity to make war continues but in the sense not of killing people or taking up arms but to fight to feed yourself, to fight to be educated, to fight to develop your regions. All those kinds of *wars* continue and these modern struggles are more difficult than the ancient struggles because they demand a certain awareness and education. (BBC 2007)

For Tinariwen, like previous generations of Tuareg, a function of their music is to raise awareness of their people's situation and to inspire them to face up to it and to act. For Tinariwen their role has now taken on a global dimension.

> Music is like a huge stroke of luck … to be able to play music around the world [and] to communicate the message around the world. For us who have had so much ill fortune … in recent times, where we have lost so much of who we are, lost a lot of things that we had before. But we have found this thing now that allows us to go out to the world. In a way it is a kind of gift that was unexpected. (BBC 2007)

In this way the poetry of their music, as an act of cultural (re)creation, transforms the potentially destructive rage of the awareness of colonisation into a force for renewed personal and cultural experience that is beyond the colonised identity.

A Method for Integration

To tell the story I wish to relate in this chapter I will make use of a research method that Judi Marshall (2001) calls engaging with *inner and outer arcs of attention* and how their respective generative processes act on and influence one another.

For Marshall, focusing on the *inner* is a process of "seeking to notice myself perceiving, making meaning, framing issues, choosing how to speak out and so on" while paying attention to assumptions and to "repetitions, patterns, themes, dilemmas" (Marshall 2001: 335–336).

While noting its practical and psychological limitations, for Marshall, working with the inner arc of attention involves "a multidimensional frame of knowing" that seeks to go beyond the intellect and include emotional, practical, intuitive, sensory and other forms of reasoning (Marshall 2001: 336).

For me this method is a way of contextualising academically a basic human impulse toward being in community, which the feminist poet Adrienne Rich noted in societies less affected by me-first consumerism. "People used their human equipment – memory, image making, narrative, voice, hand, eye – unself-consciously to engage with other people, and not as specialists or 'artistes'" (Rich 1994: 80).

In Scottish and Irish Gaelic contexts these practices are known as *cèilidh* and in the days before television were the main source of cultural exchange among Gaelic speakers. Cèilidh was for fun, of course, but more deeply it was for the transmission of knowledge, and deeper yet, for the transmission of cultural values (Bennett 2001: 1,892).

For Judi Marshall the experiences of her inner and outer arcs of attention are interconnected, and so engaging with the *outer* happens simultaneously with the *inner*. Engaging with the *outer* might involve "actively questioning, raising issues with others or seeking ways to test out my developing ideas" (Marshall 2001: 336).

However, she adds that her research may not necessarily be consultative or to raise issues with others, but instead be to explore, without direct confirmation from others, the significance of feeling discomforted in particular situations (Marshall 2001).

She uses strands of note taking contemporaneous with, or as close to possible in time to, the experiences being *noted*, before reflecting on and journaling those experiences. In this chapter I am drawing on journal notes taken particularly during the critical first few days of both MSc and PhD courses when institutional assumptions and expectations were being laid out for students. I am doing this to explore feelings of discomfort that both processes raised in me.

In part I am using Marshall's notion of an *inner arc* because it is a research method that recognises the researcher's inner world in the work they are doing, and how that inner world is affected by and affects their work. This recognition allows me to discuss the sense of community created among the CHE co-inquirers in which the importance of recognising an interconnectivity between our inner and outer worlds of inquiry (that influences and can be transformative of them both) is raised, expressed, shared, and may even be felt in the creation of community.

In an academic context that is a strong claim, but it is based on my experiences of that community and of an enduring strength of fellowship and trust formed therein.

This is not the chapter I had agreed to write for this handbook. I had written a draft exploring an indigenous onto-epistemology in a Highlands and Islands context. Yet, on looking at the editors' responses, it seemed that they essentially read: nicely written but what is the point of this chapter? After re-reading the chapter I too was asking what its point was. I could not make out a thread of meaning. This experience crystallised for me a gradual and increasing sense of directionlessness and purposelessness in the work I have been carrying out through the PhD.

Subsequently, and after successive failures *to get to the point* revising the draft, I felt the most productive way forward for me was to explore why I have been feeling this loss of meaning in my work and whether and how the academic environments I have been working in have contributed to this loss.

That exploration, of a period of epistemological disarray, is the basis of this chapter.

Journeying into Human Ecology …

On 2 August 2005, in the week that the leaders of the G8 – the eight most powerful economies in the world – were meeting at Gleneagles in Scotland, I was walking in a large flat grassland in central Edinburgh called the Meadows, among a crowd of around another 250,000 folk on a march asking the G8 to help Make Poverty History.

As I was walking with Gordon Jeffrey, a friend from the Isle of Skye, among this gathering, I met Patrick Krause and his wife Lori. Patrick is the chief executive of the Scottish Crofting Federation, a group that looks after the interests of small-scale agriculturalists in the Highlands and Islands, important representatives of our indigenous culture and a body with which I was going to become increasingly involved in the years that followed.

For the previous year I had been working for a second time with the West Highland Free Press newspaper. I had worked for them in my early twenties before beginning an undergraduate degree in English language and linguistics at Edinburgh University. After completing the course I had returned to the paper for a year.

The "Free Press" was set up on the Isle of Skye in 1972 and in the years since has played a leading role in efforts to promote land reform, crofting, and the Gaelic culture and language of the west Highlands and Islands. The paper's slogan (borrowed from a nineteenth century crofters' land

reform campaign) declares *an tir, an canan's na daoine* which means *the land, the language and the people*.

On both my mother and my father's side, I am from families of crofters. A crofter is someone who works a croft, and a croft is a small piece of land (generally just a handful of acres) usually a field of arable ground.

The crofting system of tenure was created by the UK government in response to social unrest among Gaels in the late nineteenth century. The uprisings were a reaction to many years of the people's clearance, often forcibly, from the traditional territories lived on by their forefathers and foremothers for many generations.

This struggle took place between the most unequal of combatants: on the one hand there were well resourced landlords with the full force of law behind them; on the other the impoverished bearers of a "broken" culture and way of life that had already been, in the words of the Gaelic scholar John MacInnes, subjected to centuries of "ethnocide" (MacInnes 2006: 92, 357).

That some of these landlords were the descendants of clan chiefs, and that the people had retained older values of loyalty and of love to their leaders, only increased the sense of betrayal and confusion that they felt at being so abused (MacInnes 2006, Burt cited in Newton 2009).

The crofting legislative system respects the belief, indigenous to the Highland people, that the community's right to live on the land precedes and take precedence over the ownership rights of the landlord (Hunter 1976). Providing that they meet their responsibilities to use and occupy the land, crofting tenure gives crofters the right to use and occupy their land in perpetuity.

It also gives them the right – along with other crofters in their township – to shared use of large areas of commonly held land. This land is an invaluable physical reminder and presence of a culture in which the people belongs to the land and the land belongs to no one person. This has helped foster a communitarian ethos that grew naturally out of this ground (Carmichael in Napier Commission 1883, Calloway 2008).

My plan, at the beginning of 2005, had been to save enough money from working at the newspaper so that I could return to university and begin an MSc in cognitive linguistics. But during the year I had been working for the second time with *Am Paipear Beag* (*the wee paper* – as the Free Press is known to many of its Gaelic speaking readers on account of its unusual – for a local paper in the Highlands – tabloid format), I became involved in a story and a campaign against The Crofting Reform Bill, a piece of government legislation which crofters and their supporters feared would legitimise a free market in the supposedly protected crofting system and thus encourage and hasten its demise.

The crofters' confidence in the government wasn't helped by the fact that a former government minister was alleging that senior civil servants regarded crofting tenure as "a damned nuisance" and wanted rid of it (Wilson 2007: 2).

Instinctively I understood the campaign was important for the culture and supported it but it would have been hard for me to articulate why I thought it was important. While I had been studying *historical linguistics* and *governing clauses* at Edinburgh University, I had acquired little understanding of the history and governance of the land holding system and cultural practices that, as the son of a Gaelic-speaking crofter from the Isle of Skye, I had grown up with and on – an experience common to other colonised indigenous peoples of the world (Cordova 2007, Nabigon 2006).

So I asked one of the Free Press columnist's, Roger Hutchinson, who has himself written widely on aspects of the crofting culture of the West Highlands and Islands, for reading advice. He recommended that I begin with James Hunter's book *The Making of the Crofting Community*. When I found James Hunter's book I saw, next to it on the shelf, a volume called *Soil and Soul*.

The title intrigued me and so I picked it up. The book, by a man called Alastair McIntosh from Lewis, purported to be, in part, about the campaign for community ownership of the Isle of Eigg, which neighbours Skye. I had worked for the Free Press about eight years previously and had written about the Eigg buyout at the time but I'd never heard of this Alastair McIntosh. In equal part skeptical and intrigued, I bought both books.

Both were revelatory. James Hunter's was described by the great Gaelic poet Sorley MacLean as "magnificent, just and profound." It awakened a generation to the struggle of their crofting ancestors in the nineteenth century.

Among those awakened by Hunter's book was Alastair McIntosh. In *Soil and Soul* he explained how as an adult he had confronted one of his teachers on the Western Isles ferry with it, demanding to know why this history had never been taught in school (McIntosh 2004). At the time I read it, McIntosh's book was even more compelling than Hunter's because, while *The Making of the Crofting Community* presents a compelling but relatively detached description of the historical injustices done to the people who maintained themselves by crofting, McIntosh's activist writing suggested to me, in a way that I had not encountered before, that this history is alive and that it is possible to choose to live in such a way as to support, and perhaps even to embody, the spirit of those people who are our ancestors.

This was news! Up until now I had enthusiastically engaged in campaigning work for the Free Press. Now I began to question why.

It had felt good to be doing it and I had put a lot into it and enjoyed it, and I got a satisfaction when it achieved results but I suspect it never really got much past what I could get out of it – people would congratulate the quality of my writing and I might even win a prize but, as I remember those days now, my feeling is that (perhaps not unfitting at that time in my life) my ego was at the wheel, driving my career. I didn't really know what it was to work in service to the community.

In 2005 I was working on two campaigns for The Free Press. The first, on that controversial Crofting Reform Bill, was being led by Brian Wilson, one of the paper's proprietors and founders who had become a prominent Labour MP and government minister – it was he who had let crofters know of the government's attitude towards them. The second campaign was self-directed, looking at the takeover of the Scottish fish farming industry by Norwegian multinational companies.

As I read more widely on aspects of the food economy I began to see connections of the kind that Alastair was making between patterns of heavy consumption in the *developed* world and social and environmental injustice elsewhere. Although the Free Press editor was tolerant of the breadth with which I cast my net, it was difficult for me to make such globalised connections while writing for a local paper.

I also began to feel – although I could not have articulated it this way at the time – that there was something deeper than *the language* or *the land* or *the music and song* – something that connected them together as a unified and coherent whole.

Because the paper's tole is to support these different aspects of the culture in the political arena it naturally tends to compartmentalise them into issues in order to campaign more effectively for them.

However, for me, this compartmentalisation had come at the expense of acknowledging a deeper connecting force which carries with it the very essence of the culture. In the media, other than glimpses of it in the Free Press columns of the Gaelic poet Aonghas Pàdraig Caimbeul, the Celtic scholar Raghnall MacilleDhuibh, the ethnobotanist Mary Beith, and the presbyterian theologian Donald Macleod, this deeper force – a Gaelic way of being and knowing, perhaps – remained hidden from me, and unarticulate (sic).

This emerging awareness of connectedness, as well as a stirring seed of my own culture within me, meant that by the time I visited Edinburgh for the Make Poverty History march in August 2005, although I was in the process of applying to Edinburgh University, I was far from convinced that Cognitive Grammar was what I wanted to be focusing on.

So, shortly after leaving my friends Patrick and Lori in the Meadows on that day of the march I saw a figure that I recognised from a picture in his book. Taking a deep breath, I introduced myself to Alastair McIntosh, telling him how much I had enjoyed the book and that I had read a little about a Masters course he was involved with at the Centre for Human Ecology (CHE).

As is usual with Alastair, there was no hanging around. The MSc administrator was sitting just a few yards from him and before I left them I had arranged an interview for the following week, so that I could find out more about the course and they could find out more about me.

The next week, after spending an afternoon in the Human Ecology library just off the Meadows and chatting to staff and students I was convinced that this was a path to follow. The following month I began becoming a Human Ecologist.

Journeying in Human Ecology …

As various members of the CHE have shown in their contributions to this handbook, Human Ecology as practised there holds multiple perspectives. As their student – or "student-teacher," to adopt the term from critical pedagogy (Freire 1972: 63) – and the student-teacher of other teacher-students (some of whom were also student-teachers)[3] they have instilled in me some ingredients of their Human Ecology. Those elements of their teaching that I have absorbed are infused now with the juices of my own thinking, adding flavour and colour to them.

The multiple perspectives that I encountered at CHE, learning from natural and social sciences, indigenous and spiritual traditions, were themselves rooted in an approach to the learning committed to the creation of critical consciousness among the students. This commitment was manifest in the pedagogy through the practice of participatory forms of inquiry.

For me, the taproot of the whole course, and the source of its primary transformational power, was the formation, led by the course organiser Vérène Nicolas,[4] of a critically supportive community among the students and, to varying degrees, between students and teachers. This was done in a way that might be one answer to criticisms that many applications of critical theory tend to have disempowering rather than empowering results (see Wright and Marquez 2006 for a critique of critical approaches and another positive alternative).

From notes and journals written at the time, my impression of how this community was nurtured goes like this. There were 16 of us on the course. We spent the first days getting to know one another. At first gently, the previous year's students cooked us dinner on our arrival at the university and on the first day, after forming a circle to introduce ourselves, we carried out group activities and learning games designed to begin friendship, establish trust and emphasise collaboration. Then, as these values emerged, we opened into a more personal space, beginning to share our own words, stories, motivations, dreams.

3 I am not trying to be obscure here but to use my writing to reflect the partial, and initially unsettling, dissolving of hierarchical boundaries that occurs between the "teacher" and the "taught" in an intentional process of co-inquiry into aspects of our shared human condition. For the rest of this chapter I will largely return to the more traditional words of "student" and "teacher", but understand that underlying them are terms that are less settled.

4 Later others took important roles in the maintenance and deepening of community.

At the end of the first day I found myself going up to one of my new colleagues and apologising for a comment I had made earlier that day about the place where he worked that I feared might have offended him. It became a deeper conversation about his work, and its difficulties. And I was becoming sensitised to the intimate healing, hurting power of the word.

Because of the initial focus on forming a sense of trust and community among the students I had, in this case, been able to articulate a discomfort I had become aware of in my inner arc of attention and integrate it with the experiences of my outer arc.

In these opening days it became apparent that our teachers weren't trying to fill us with their own partial and constructed knowledge; they were trying to create and help us hold a space in which we could deepen our own senses of knowing, in ways that were congruent with, and nourishment for, our own life journeys.

This contrasts with what Freire calls the *banking* approach to learning, that requires "the submergence" of the student's consciousness so they become a receptacle for learning (Freire 1972: 62) The mechanistic assumptions of this form of education tends to produce what Michel Foucault describes as subjugated "docile bodies" that, according to indigenous critiques, then serve to perpetuate their civilisation and their own state[5] (Foucault 1977: 135–170, Barriero 1978: 68, Cordova 2007: 50).

The liberatory pedagogy could be discomforting (owning up usually is) and was incredibly hard work – for us as student-teachers, and for the teacher-students too. But, ultimately, it felt good, and it felt good primarily, I think, because we were taking responsibility for our own learning journeys as individuals, but within a supportive community of co-inquirers into life in some of its myriad forms.

This, as I said, felt like the "taproot" of it. My understanding of a taproot is that it is the primary root into deep soil, the main initial nutritious force for the new plant and the part from which other parts of the root system emerge. In the metaphorical sense, the CHE taproot becomes the place from which members of the community may reveal (or have revealed) and choose to share, test and affirm their own personal and cultural truths in a space that recognises that the two are inextricably interconnected and vital to life and living it well.

I experienced this as a series of exploratory cycles through three parts of an interconnected selfhood.

HEAD – what I know and how **it** affects that (**it** being how I feel and what I do)
HEART – how I feel about **it** (**it** being what I know and what I do)
HAND – how I apply **it** (**it** being what I know and how I feel)

My assumptions about my *truth* or *truths* were opened to being tested in critical but supportive ways which allowed me to rebalance the educationally often dominant *intellectual* metonymy of the *head* with the, at times, less considered but inextricably interconnected *emotional* and *practical* metonymies of the *heart* and *hand*.

Because of its openness to both the personal and cultural/political as areas of inquiry, I found that in this pedagogy I was note taking and journalling both on the content of the course and on the feelings that the often very challenging content raised in me. In this way I was empowered, in Marshall's terms, to attend to both inner and outer arcs, contributing to an education in which I felt able to deepen my personal and cultural understandings, and the life practices that I try to use.

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5 This critique of the institutionalised nature of much of Western life is reminiscent of Lewis Mumford's description of the "vast orchestrations of specialised human labour which accomplished the monumental feats of antiquity" which he called the "megamachine" – "an invisible structure composed of living but rigid, human parts, each assigned his special office, role and task, to make possible the immense work-output and grand designs of this great collective organization" (Mumford, cited in Carey 2000: 78(n15)).

My Journey beyond Human Ecology …

After finishing the taught element of the MSc I carried its energy into a project for the crofters' representative body, the Scottish Crofting Federation, looking at whether crofters and their way of life met the criteria for and might benefit from United Nations' legislation on indigenous peoples.[6] The work was a real pleasure, nourishing both my personal and cultural needs and interests, raising awareness of issues I feel are important in supporting the culture from which I am grown, and with the potential for a practical, useful, outcome.

At the time I felt like I was working, thinking and being in the spirit of my recent crofting ancestors, well described by an economist writing about the way of life in the Highlands and Islands in the 1940s.

> The Highlander's thought has a different orientation and content. It is meditative rather than analytic, imaginative but not inventive, concerned with the past rather than with the future, with self-cultivation rather than control over material environment and with integration rather than efficiency or acquisition. At its most characteristic, practical questions are not its exclusive or first concern. It is not a substitute for labour but a concomitant of it. Thus the Highlander finds the opportunity for the self-cultivation, the contemplation which he values so highly, not in the split work-and-leisure existence of the city worker, but in his traditional form of life, wherein work and leisure are interwoven from day to day and hour to hour. (Collier 1953: 7)

However, crofters' roots are in a way of living based on the maintenance of kinship and community rather than in the acquisition of personal wealth. The economist, who called his book *The Crofting Problem* (a form of title familiar to many indigenous communities see Tuhiwai Smith 1999: 90), added that their natural inclinations thus oriented crofters' away from the *split existence* characteristic of an industrialised, mechanised society.

Journeying out of Human Ecology …

The focus of my present work, being channelled through the contemporary PhD experience, has felt less like the *interwoven* creativity of the crofting way of life and, though I have tried to resist it, more like that of the *split existence*. Speaking *a true word* argued Paulo Freire, transforms the world. On the other hand "An unauthentic word, which is unable to transform reality, results … when a word is deprived of its dimension of action … The word is changed into 'idle chatter,' into verbalism, into an alienated and alienating 'blah' …" (Freire 1972: 68).

In trying to make this chapter, which is/was supposed to reflect an indigenous sense of belonging in the context of the Highlands and Islands, I poured out thousands of words. When I read them over I did not find a story of belonging; neither was there a story of consciousness raising; nor a story of how generations have resisted colonisation. With a crushing feeling I realised I had told the story, again, that I seem to have been telling (myself) for nearly two years: a historical narrative of the colonisation of the Gaelic world. It was from a different perspective and with different emphases; but ultimately the same story – and, I think, finally merely a verbal *blah*.

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6 The report is available online at: www.croftingfoundation.co.uk/uploads/news/crofters-indigenous-peoples.pdf/

With a feeling of despair I asked myself: *why am I stuck in telling the story of colonisation, again and again? What is it that is stifling my sense of agency in the world?*

Using the idea of a *metanarrative* as a set of internalised assumptions that order, explain and tend to channel our thoughts, experiences and actions, I began to speculate that if a metanarrative of connection was behind the senses of agency and empowerment I had felt during the Masters course, perhaps the values of a different metanarrative were at work in me in the PhD experience.

Perhaps, I thought, it will help me to understand this feeling of a loss of agency if I can relate stories from my inner and outer arcs of attention that reveal a metanarrative behind the contemporary PhD experience and suggest how the values of this metanarrative might act as forces on the student body, engendering, perhaps, a spirit of acquiescence or *docility*.

First, though, I would like to put my personal narrative into a broader context.

In his *Schumacher Briefing* book advocating an approach to education that respects the complexity inherent in all natural systems, the environmental academic Stephen Sterling argues that educational systems need to move to a mode of learning based on the imagery of life, rather than on the current imagery of the machine (Sterling 2001).

According to the philosopher Mary Midgely, the tendency of many scientists and philosophers to think of and describe society, nature and human beings in terms of machines has its roots in the renaissance and has become a persuasive dominant doctrine for many modern scientists (Midgely 2000).

Sterling argues that in its educational form the predominant mechanistic approach is based "on the older modernist scientific paradigm which espoused cause-effect determinism, predictability, control and objectivism" (Sterling 2001: 45).

Higher education in the UK is currently being cemented into this paradigm, contends Sterling (2001), and he feels there is a need to rebalance the education system so that *intrinsic* values of human development are given more consideration, at the expense of its present *instrumental* focus on the use of humans to support economic growth.

In Ireland, where I have been studying for my PhD, the thrust of Sterling's critique of the instrumental nature of higher education and its increasing commodification is now also being expressed by prominent academics.

At a symposium in 2009 on the contribution of academics to public life, Professor Tom Garvin of University College of Dublin was scathing about how the country's university system operates.

The *Irish Times* newspaper reported him as saying: "Knowledge as an end in itself was despised and the result was a loss of wisdom and the growth of silliness." There was, he said, a "commerce driven" loss of respect for blue-skies thinking in the universities (*Irish Times* 28 November 2009: 9).

Other academics from Galway and Queen's universities criticised the bias within the system towards natural science and engineering against the humanities, and the naturalisation by Irish public intellectuals of market values which led to the commodification of everything in life (*Irish Times* 28 November 2009: 9).

The Irish academics appear to be condemning the arrival of market values to a previously sacrosanct sphere of higher education. However, David Orr, professor of environmental studies and politics at Oberlin College, turns this argument back on itself, suggesting that the education system itself exists to promote those market values.

> Both sides of the debate, nonetheless, agree on the basic aims and purpose of education, which are to equip our nation with a world-class labour force, to compete more favourably in the global economy and second to provide each individual with the means for maximum upward mobility. (Orr 2004: 26)

He contends that critiques of the education system which only consider problems emerging *in* education, without addressing the fundamental problem *of* education, don't reach the heart of the matter. Orr's conclusion is that, in light of the ecological crisis presently unfolding, education for the twenty-first century must change its pedagogical basis from *education for growth* to *education for survival* (Orr 2004). "The crisis we face is first and foremost one of mind, perception and values; hence it is a challenge to those institutions presuming to shape minds, perceptions and values. It is an educational challenge" (Orr 2004: 27).

Stephen Sterling believes it is ironic that higher education is entrenching itself in an instrumental approach to learning, based on ideas from linear industrial production, at a time when industry itself is adopting operative models closer to the ecological ethos that Sterling advocates, emphasising values of cooperative relationships and community within companies (Sterling 2001).

He has noted some emergent properties of this mechanistic entrenchment for the outputs of higher education.

> … the analogy with the factory is telling; young people and qualifications are produced; there are precise goals and targets; the curriculum provides directives for each stage of production; and teachers are technicians and are therefore substitutable. (Sterling 2001: 40)

In order to perpetuate their careers, the teaching technicians must absorb their "precise goals and targets" and reflect them, more or less consciously, in their agency-in-the-world. The result is a process of educational changes towards managerialism that are "demoralising … anti-educational" and "pathological, although of course they are not intended as such" (Orr 2001).

Students in many UK universities are now expected to attend a series of research training classes throughout the PhD process. In my experience of them these recently adopted training and assessment procedures tend to engender in the student a particular understanding of society (individualised, competitive, acquisitive).

Those values were evident, formally and informally, throughout the training process.[7] However, in order to contrast the metanarrative that I found informing the pedagogy of the PhD training process with the Human Ecological metanarrative of connection, I will concentrate on the induction period of the PhD, which was part of our first research training block, and during which I took notes.

To express how this induction acted on my arcs of attention I will make use in what I write below of journal entries based on those notes. They reflect my immediate response to the classes and should be read in that light.

During the first meeting of the induction we were talked to by professors and administrators for about two and a half hours, largely on the subject of university finances and administration. While I was listening to them I did a head count of students in the room. In my reflections on the meeting I noted.

> There were 30 students in that room passionate and dedicated and crazy enough to devote three years of their lives to something that burns inside them, and three hours later I left knowing three of those people – because I had asked them their names – and knowing nothing about their work.

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7 At one moment, when the university launched a student recruitment campaign during the unfolding financial meltdown in 2008, those values became very visible and very graphic. On the streets of Northern Ireland's cities, posters appeared which sought to entice students to the university by declaring, in block capitals: LEARN MORE – EARN MORE.

> I knew how much money the University got each year – because I had been told – but I forgot that within about five minutes.

At the next meeting the university's head of public policy emphasised that we were going to have to *compete in a competitive world* and assumed that once our studies were over said we would be working *in industry, for government or for management*. I felt a grinding inside me as I listened to him, yet, sitting self-consciously in a room full of strangers at the beginning of a process, I did not feel able to tell him of a broader vision of the world.

At the beginning of the next session we were told we were to take part in an exercise which was designed to encourage us to work collaboratively. In my journal I noted:

> There followed an Action Learning session in which the facilitators split the inductees into groups and asked us to think about how we would go about winning some money from a prize fund set up to find ways of sending people to the moon. We had to construct the team of people who would get us into orbit. My head was spinning.
>
> There were some pretty convincing lunar explorers in the room who diligently drew up all the necessary plans and, as far as I could see, are heading for another planet altogether.
>
> Our group said we would hire Steven Spielberg and Elliot Gould and fake the whole thing like the Americans did with the moon landing.
>
> Then we got some puzzles designed to test our assumptions. They never tested all of them. All through the day we never got to know who among our fellow students is in the same faculty as us, or on the same campus as us, or who might have overlapping interests … Still, another box ticked.

The group that I was in, and the group of another *subversive* – who was also interested in indigenous issues – subverted the process to try to expose its meaninglessness. But it was subversion – it was done under cover in the sense that not a soul (me included) challenged the facilitators directly on why it was worth spending time pretending to work together on this otherworldly task. The values I took from it were that I was expected to: keep the head down; follow instructions from the hierarchy; don't think critically. It's through such docility that spaceships, and bombs, are built (Orr 2004).

It was a sign of a relationally dysfunctional institutional dynamic that: (1) the *bankers* (in Freire's terms) did not invite the receptacles of learning to introduce ourselves to each other; and (2) the receptacles being *filled* by the *bankers* did not think it worthwhile to introduce ourselves – although I initiated this process in my group, I was listening for but did not hear it happen in other groups.

"Hello, my name is Iain. What's your name?" What stifling of selfhood can prevent these words, or make them seem not worth the uttering in the context of a learning process that is supposed to be collaborative?

From my perspective, as one being *led in* to a process, the pedagogy practised during the PhD induction contrasted starkly with the experience at CHE. In both processes I felt discomfort, but while the community building approach of the CHE encouraged me to try to resolve uncomfortable feelings, the individualistic approach of the PhD encouraged their submergence. In the first instance it was straightforward to meet the need of my inner world to be in meaningful relationship with those around me. In the second, in order to form strong relationships I have had to work much

harder because the assumptions and practices of the research environment did not and do not facilitate meaningful community building.

In such a relationally dysfunctional environment I have been fortunate to have supervisors who have been sensitive to problematic issues I have raised and are supportive of my exploration of indigenous culture in the Highlands and Islands as a living force – even to the extent of allowing me to spend extended periods away from the institution.

This has been particularly welcome as it can be a challenge to be devoted to indigenous culture in such an environment. Viola Cordova has written of the prejudice she faced as a Native American scholar in higher education, seeking a method by which to articulate and examine her own worldview while facing the assumptions of "Euroman."

You should be prepared for comments like these:

> "You must not make the mistake of attributing sophisticated notions to primitive minds."
>
> "The notions, if they are there, are not intentional."
>
> "Native American art is not a subject for an aesthetics course; the style is, as are all primitive styles, automatic (that is, unintentional)."
>
> (Cordova 2007: 53)

Academic contextual assumptions (Orr's "minds, perceptions and values") often do not privilege diversity.

Early in the PhD process I was involved in a seminar discussion in the university during which the decline of the Gaelic language was being discussed. As I spoke I acknowledged my own lack of fluency in Gaelic.

Afterwards, I was approached by a professor of British history with a cutglass accent. "How," he asked me, apparently making small talk, "did you manage to avoid Gaelic?"

I was immediately struck (and it felt like being struck) by his use of the words *manage to avoid*.

You *manage to avoid* hitting a bicyclist with your car. You *manage to avoid* speaking to someone you don't want to speak to by leaving the room or talking to someone else.

It takes an act of will to *manage to avoid* something.

I didn't *manage to avoid* Gaelic. You don't *manage to avoid* the language that is your birthright and I told him that, but I was on fire inside as I did so. I do not speak Gaelic, I said, because my grandmother who went to school with only Gaelic was belted by her teacher until she learnt to speak English and because my grandfather told my father (both native speakers) to "forget about Gaelic, it won't get you off the island."

That is the personal, and the knowledge of it is a fire that can be both, as the proverb says *a good servant but a bad master*. The political is the fact that you will hear these kinds of stories in many communities where Gaelic is still spoken. The political is the fact that when I told this story to an Irish PhD colleague his response was to tell me of a conference in London on the cultural history of the north west of Ireland where he was compelled to speak out against another, less subtle, academic assumption of Celtic cultural inferiority.

After citing a line from Robert Burns's poem "To a Louse" "*O wad some power the giftie gie us, to see oursels as ithers see us!*" ("Oh if only some power would give us the gift, to see ourselves as others see us"), the great Scottish Gaelic scholar John MacInnes describes the human consequences of the politics of cultural inferiorisation and dismemberment:

> So far as the Gaels of Scotland are concerned, Robert Burns's prayer has in large measure now been answered. For practically two centuries most of the social institutions that normally preserve a people's sense of identity have worked together to ensure that the native Gael views himself and his world through alien eyes. The processes of ethnocide work of course at many levels and in many guises, but they are most conspicuous in the domain of formal education. (MacInnes in O'Driscoll ed. 1982: 269)

I struggle with the fire of resistance because I do not want to assume the motivations of the people who make comments like those that indigenous scholars have experienced – and I do not want to assume their motivations. I want to acknowledge my own sensitivities and ask them why they choose the words they choose to express themselves. But even if and when I find the voice to ask those questions, I face agents of a system for whom such questions pose an ontological dilemma.

Rediscovering Human Ecology …

Writing now with hindsight, I can say that before coming to study at the Centre for Human Ecology my experiences of institutional education had been that they interpose an obscuring veil between the mass of theoretical text and the lived experiences of those young people, like me, who come to read the texts – although I was not conscious of this veil at the time. The veil delimits ontological possibilities.

In my national context, at least, it would seem that this was not an isolated experience. Describing the prospect for traditional culture in Scotland, the folklorist Timothy Neat has written:

> Modern institutional education tends to divorce the "literary" transmission of culture from the living reality of that culture. Huge bureaucracies have grown up around almost self-contained educational establishments – at the expense of the lived culture, the real culture carriers and poetic forces that culture should embody. In more traditional and less institutionalised communities, the process of transmission is an integral part of the lived culture … The lifestyle is the culture, the culture is the lifestyle. (Neat 1996: 180)

As Neat notes (and as Adrienne Rich noted in the quotation earlier in this chapter), in more traditional, less institutionalised communities this veil appears thinner and so the *poetic forces* inherent in *living reality* seem to manifest more readily. Perhaps that's because, in Rich's view, poetry is itself, at root, an expression of community. "Poetic imagination is never merely unto itself, free-floating or self-enclosed. It's radical, meaning root tangled in the grit of human arrangements and relationships: *how we are with each other*" (Rich 2009: 96).

Poetry, then, is a living force within us – whether a literal *poet* or not – that mediates and generates our sense of what is real and what is possible. The word *poetry* is derived etymologically from a Greek word meaning *to make*. Poetry, or *poesis*, is an innate generative force held within us and exercised by each one of us, that helps to make and shape reality, and that includes touching the realities of other people.

In an indigenous context that reality is already fundamentally in place, shaped by the ancestors. Viola Cordova has written: "Each of us occupies a world that is made by our predecessors. We are given 'reality'; we do not *discover* it" (Cordova 2007: 49).

Erica-Irene Daes, the special rapporteur of the United Nations working group on indigenous populations, has said that "we are guided, albeit often without our conscious knowledge, by the

past – our memories, the values that we have been taught, the actions of our ancestors" (Daes 2000: 4).

For Daes, this guidance supports a *unique spirit* within each person "that strives to express itself, to be recognised, to have a name and a destiny. Each one of us is born with the innate spiritual optimism that our existence is not irrelevant but an important part of the larger pattern of life" (Daes 2000: 5).

In indigenous communities, the everyday practice of education by poesis (through *institutions* like the Gaelic "cèilidhs") has helped maintain *our memories, the values that we have been taught, the actions of our ancestors*.

For Daes, colonisation seeks to limit and pervert, for un-life giving ends, the poetic potential of this creative spiritual essence – she writes that experiences of oppression "involve the denial of the individual spirit and its quest for self-expression."

> The individual consciousness of the enslaved and the oppressed is superfluous; oppressed peoples are made to realise that they could equally well serve their purpose if they were mindless robots … The experience of oppression is spiritual death. It is about the destruction of our inborn spiritual faith in the importance of individuality and, indeed, in the value of trying to stay alive. Victims of oppression not only lose interest in self preservation, but also find it difficult to maintain their relationships as parents, friends and neighbours. If you have been made to feel irrelevant, you cannot understand why anyone could possibly love you, and you anticipate betrayal from anyone who tries. Oppression undermines love and trust among its victims. (Daes 2000: 5)

Here I believe she reaches to the psychological roots of the political ideology that C.B. MacPherson found emerging in seventeenth century European philosophies based on the right of the individual to maximise their acquisition of personal material wealth at the expense of others. The emergence and dominance of this ideology, which he called "possessive individualism," has perverted "the aim of life," which MacPherson believed was the development of the "truly human powers" or "the human essence" (MacPherson 1964: 3, Cunningham 2004).

> In a sample list of these [truly human powers] he [MacPherson] includes "the capacity for rational understanding, for moral judgement and action, for aesthetic creation or contemplation, for the emotional activities of friendship and love, and, sometimes, for religious experience." Such capacities are rewarding ends in themselves rather than means to consumer satisfaction, and their exercise need not pit people in competition against one another, but typically thrives on cooperation. (Cunningham 2004)

Under the ideology of possessive individualism, which MacPherson argues emerges in particular in the philosophy of Thomas Hobbes, the human essence becomes merely "the freedom from dependence on the will of others, and freedom is a function of possession" (MacPherson 1964: 3). In possessive individualism: "Man came to be seen essentially as a consumer and appropriator; accumulation of property – unlimited accumulation – became the most valued, the most rational form of the exercise of the human powers" (Lessnoff 1999: 102).

Hobbes's famous articulation of the *state of nature* – the "war of all against all" that led to "solitary, poor, nasty, brutish and short" lives found typically, he claimed, among "savage" peoples – was in fact, argues MacPherson, just an accurate description of the limited sense of human potential in the violence and unrest of the emerging possessive market society of seventeenth

century England. Obscured by his unrealistic metanarrative of "human nature," it was, in fact, a very personal and political fear that Hobbes was expressing[8] (MacPherson 1964: 61–62).

For MacPherson, modern Western political ideologies, including the tenets of liberal democracy, are rooted in Hobbes's ideas and in the ideology of possessive individualism and "Hobbes is generally regarded as the founder of English moral and political philosophy" (MacPherson 1979: 3, Lessnoff 1999: 101–107, Honderich (ed.) 1995: 367).

The UN rapporteur on indignenous populations, Erica-Irene Daes, who is from Greece, believes that contemporary European consciousness has been shaped by centuries of this influential but limited set of ideas about what it means to be a human being, and has become *diseased*.

She argues that although the memory, pain and ugliness of colonisation is more visible among indigenous peoples, its tragic experience is a shared experience "and the oppressors as well as the oppressed need healing if the cycles of external aggression and self destruction are to be discontinued" (Daes 2000: 6). "Europeans themselves have had the disease of oppressed consciousness for centuries, and as a result they have grown so used to this experience that they do not always appreciate the fact that they are ill" (Daes 2000: 4).

Which is to say that Europeans have come to live and embody an ideology, a set of ideas that tend to close off the creative essence that brings life. They are spiritually deadening. The obscuring veil of this ideology protects the material wealth in the outer worlds of those who choose to live by it, but alienates them from the essence of their inner world.

This spiritual alienation is recognised at the heart of *Western* existence. "In both Hegal and Marx alienation is always fundamentally self-alienation. Fundamentally, to be alienated is to be separated from one's own essence or nature … In this way the experience of alienation involves a lack of self-worth and an absence of meaning in one's life" (Honderich 1995: 22).

To reach behind the veil, to reconnect young people like me – politically aware but growing up as alienated possessive individualists – with our indigenous spiritual nature, requires, according to the feminist writer Audre Lorde, the bridging ability of a faculty that male dominated western societies are afraid of, and have misnamed, vilified and devalue (Lorde 2007).

> For the bridge which connects them is formed by the erotic – the sensual – those physical, emotional and psychic expressions of what is deepest and strongest and richest within each of us, being shared: the passions of love in its deepest meanings. (Lorde 2007: 56)

In Lorde's words, the erotic is, in meaning, close to another word that academic discourse often closes itself to, and that is the word "feeling." "… the erotic is not a question of what we do; it is a question of how acutely and fully we can feel in the doing" (Lorde 2007: 54).

But because, as Daes says, the experience of oppression undermines basic feelings of love and trust and replaces them with the individual's fear of betrayal, being in a psychologically oppressed society closes off relational potential and, instead, engenders a different set of attitudes that, through "radioactive identification" (Gampel 2000: 58), are transmitted intergenerationally and, I would argue from experience, institutionally.

By contrast, at the heart of the approach to learning I have found in Human Ecology has been an invitation to cross the bridge of eros away from the sense of being an alienated individual and towards the creation of community and the cultivation of *the truly human powers*.

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8 Hobbes himself was born prematurely, when his mother went into labour after hearing of the approach of the Spanish Armada in 1588. He is reported (in his verse autobiography) to have said of his coming into the world: "My mother gave birth to twins – myself and fear" (Peters 1967: 13).

By learning a pedagogy of connection and reconnection I have had the privilege of becoming more aware of the deep interconnecting force that unifies the apparently fragmented indigenous culture of the Gaelic world. It is a force that has been maintained, in the face of colonisation, because it is inherent and emergent in human creativity and community.

In my experience of it, by coming to embody a pedagogy that tends to these values of creativity and community, students of Human Ecology can be empowered to nourish the relational human essence, and to connect and reconnect with the life of others.

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Chapter 12

Teaching Radical Human Ecology in the Academy

Alastair McIntosh

> We demand a scholarship with a large human soul and a pregnant social significance.
>
> (J.S. Blackie, The Advancement of Learning in Scotland, 1855)[1]

In my earlier chapter in this volume I explored the challenge of radical Human Ecology to the Academy, by which I mean western universities generally. I distinguished between relatively "safe" Human Ecology as PRED – the study of the interactions between population, resources, environment and development, and "radical" Human Ecology which, in addition to taking on the imperatives of PRED, explores the *essence* of what it can mean to be fully human. This moves us beyond merely rational and materialistic analysis and into the further reaches of both the nature of reality and human nature. In this chapter I want to explore the teaching of such Human Ecology and especially the supervision of student research. The chapter will be descriptive more than theoretical, and will draw heavily from 20 years' personal experience of teaching the subject at postgraduate level in a range of academic institutions, especially as a sometime staff member, former director and a Fellow, of Scotland's small and now-independent Centre for Human Ecology (CHE).

Human Ecologists often say that unforeseen twists in their career that have brought them to the discipline. It is as if we need the unexpected to throw us out of what the consciousness research psychologist Charles Tart calls "consensus trance reality." My colleagues and I have observed that our students, likewise, have typically come to us because they are on some journey in life that has thrown them out of the ordinary ambit of their careers. This is only to be expected on a planet that is undergoing ecocide and where war and injustice are rife. Under such circumstances any human being with passion and a conscience will want to use their life not just to get by and to seek pleasure, but also to make a contribution. As an approach to this, Human Ecology in its role of studying the global problematique draws in more than its fair share of stimulating, creative and altruistic students. In the same breath, it must also be acknowledged that it can also draw in more than its fair share of the ill-at-ease, opportunistic and sometimes, downright wacky. Good selection processes are necessary to try and ensure that a prospective student will be ready for the level of what the course offers. Even then, it has been our experience that strong teaching skills are needed with such potentially explosive energies to build a class dynamic that can handle psychological depth in ways that are supportive to both staff and the student group.

While this is true of all university courses it is particularly so in Human Ecology because we hit up against worldviews, which are the very framework of people's reality structures. When working with radical Human Ecology we engage constantly at levels both epistemological and ontological as distinct from the merely factual and analytic. We may operate on the watershed between the premodern worldview and the postmodern; between a spiritually informed take on reality and a purely rational/materialistic one. If we are to define Human Ecology as the study of human *communities* in relation to their ecosystems the question of whether or not the spiritual is "for real"

1 Blackie 1855, 10.

becomes pivotal. We have to ask, what is this idea of "community"? Is it just an expression of the "selfish gene," of disguised self-interest? Or is it something that transports us beyond individuality, beyond ego, and into a transpersonal realm of the greater good, even the greater "God"?[2] If being human actually means to be spiritually interconnected with one another and, as deep ecology suggests, connected at a psychic as well as the material level with the wider natural environment too, then love and its values become more than just an optional extra. As Walt Whitman puts it in his epic poem *Leaves of Grass* (1855), love becomes "a kelson of the creation" – the kelson (or keelson) being the inner keel of a boat that holds the ribs together. From such a vantage point our learning, as my quote above from Blackie suggests, develops a thrilling new perspective. It aspires to be *of large human soul and pregnant social significance*.

Such Human Ecology becomes far removed from any scholarly supposition of value neutrality. It becomes *Human Ecology with attitude*. Human Ecology bestowed of purpose and meaning, a pilgrimage through the groves of academe that open out into the fullness of life itself. But what might this mean for the student and teacher in the Academy's classroom? In this chapter I will share a highly personal view from my own experience. Much of what I say will suffer the weakness of being based on anecdote, albeit anecdote that, in sufficient quantity, tends towards becoming data. Much has been developed with my colleagues mainly at the CHE though I must stress that we are not always in agreement, our emphases vary, and I take personal responsibility for what is shared and represented here.

The Cycle of the CHE MSc Degree

It is not just the teacher of Human Ecology who will carry an implicit and/or explicit set of values with them. Merely to mention the term "Human Ecology" is enough to open up penetrating questions of values, assumptions and identity in many an aspiring student. Why? Because it is hard to get more fundamental than that which is "human," and of "ecology," as the study of the inter-relating life-support systems that comprise our terrestrial home. As such, "Human Ecology" is highly loaded; indeed, it is a depth-charge expression. You drop it in to a situation, it takes a while to sink down, then goes off with a spout that breaks the surface of consciousness.

The vigour of this epistemological depth charge is all the greater when dropped from out of a socially stratified world stuck within its own like-minded bubbles. Some students will not previously have had meaningful contexts from which to explore the bubble of their upbringing and alternate takes on reality. In this respect the framework offered by PRED is a good starting ground, but not one adequate for ongoing discovery. Often PRED-related issues will have triggered a student's initial interest. Equally often students could never quite have envisaged what they were letting themselves in for as the interconnections between seemingly disparate issues become clear. Until a person finds the courage to plunge it is hard to see what's underwater.

In the MSc courses that we have run at the CHE the study year has followed this broad pattern:

- an introductory week, getting to know one another, learning where people are at in their lives, sharing expectations, laying down group norms in anticipation of possible storms, and scoping what will be studied;

2 The Vatican has not missed this propensity within Human Ecology. Both John Paul II and Benedict XVI have mentioned it in encyclicals, for example, *Centesimus Annus* of 1991 which calls for "an authentic Human Ecology" to address the world's environmental problems.

- two semesters of core and option workshops or modules that cover Human Ecology in ways that could broadly be described as (a) *quantitative* – the scientific, factual state of the world, (b) *qualitative* – the philosophical and psychospiritual aspects of the human condition, and (c) *process* – the group dynamics, mutual support, collaboration and methodologies;
- a "field trip" or study tour to a community of place where Human Ecology can be explored in microcosm;
- a Masters thesis on a topic of the student's choice provided that it falls within the limits of staff supervisory and assessment capacity.

I have often observed that when new students embark their energetics, both individually and collectively, follow a sine curve life-cycle. They start off, during the induction period, on a rising wave of excitement. Many say "this is the kind of course I have always looked for." In addition to teaching participative and collaborative forms of inquiry my colleagues, especially Nick Wilding (who makes a chapter contribution to this book) and Vérène Nicolas, have specialised in building up a learning community. This is designed to aid study and to encourage students to reflect, both critically and appreciatively, on their motivations, assumptions, baggage, needs and capacity for service.

Enthusiasm swells during the first few weeks while they are exposed to "state of the world issues." Throughout this time the sharing of meals and holding of parties assumes an importance that

Figure 12.1 A CHE MSc student shared meal

"Work together; eat bread together" – Winstanley

goes beyond the purely social function and becomes pivotal to creating a co-learning community. As the course develops the "task" functions of learning (see Loening's chapter) are increasingly complemented with "process" that deepens reflection, relationship and integration. Participative epistemologies are introduced and strong affective bonds form. However, as this is happening, typically about six weeks into the teaching, two confounding dynamics start to emerge. One is that the realities of assignment deadlines and assessment loom and can subtly alter student-staff conviviality. A power differential, hitherto little noticed or even downplayed, becomes evident, especially to students who might be struggling to fit their studies in to complex lives. The other is that the seriousness of the global problematique provokes deep psychodynamic process in many people.

The latter dynamics can be difficult to field within a conventional university teaching framework. The personal becomes political. It is common to see oedipal transferences onto staff. Here a teacher psychologically becomes "Mum" or "Dad." In counter-transference staff members might respond unwittingly in kind. For example, when a student reacts in a childish manner to something I have found myself making the mistake of responding in a parental mode, thereby unintentionally amplifying the problem. Other psychodynamics are the projection of individual problems – the personal shadow – onto the group and the issues it is studying. These go unnoticed in more mainstream courses where space is not given to explore them. However, in radical Human Ecology their unpacking can be an important part of the learning dynamic because it is what needs to happen for a atudent not just to learn, but to grow.

The combination of pressure from assignments and a deepening sense of being personally troubled by seeing the full depth of the state of the world generally leads to a downward inflection of the sine curve of class energy after the initial honeymoon period. Depending on the students and their mix this may remain depressed for some months. Our teaching group at the CHE has learnt that the support given to students, both when laying the foundations at the start of their course and during its process, is crucial in determining how well they manage to work the challenges through in the long run. I have noticed three trajectories. The ideal is where a student looks over the precipice, can see that "this is going to be tough, but this is also what it means to face reality," and gets down to the task of engagement with the state of the world and their personal lives in the course of their studies. Others will look over the precipice and, in an honest estimate, reckon that the course is just not right for them and self-deselect, usually within the first week. A third category, of which we have been blessed with very few, is when the student sees the challenge, cannot face it but neither chooses to seek help or to withdraw. This can work through as "saboteur" energy in the class. Here an individual consciously or more probably, unconsciously blocks group depth by creating around themselves – perhaps by sarcastic humour, perhaps by moodiness or overt non-participation – an aura that keeps things shallow. One is reminded of the Islamic *Hadith*, an oral saying, that such scholars are "like a rock which has fallen into the mouth of a river: it neither drinks the water nor allows the water to pass to the crops" (Khalidi 2001: 165).

For staff, making time to support students in wrestling with their material can be easier said than done given the conflicting pressures of academic life. They have their own activist concerns to attend to, their own wrestling with the state of the world, and their own psychospiritual angst. Professional decorum places limits on how far they can share equally with students in a learning community that is truly one of equals. At the end of the day it can happen that a staff member has to face a student in an appeals tribunal in which communications may be rendered public under freedom of information provisions. Decorum is therefore forced upon us both for better and worse. Indeed, I suspect that one of the reasons why many courses in Human Ecology in other institutions remain grounded at the PRED level is that staff either lack the depth psychological

skills to be more radical, or they have correctly appraised that it would be more burdensome than they personally could sustain, or their institutions entertain.

In the CHE we have made it clear to students that we are there to support them as deeply as we are able, but we cannot pretend to be their therapists. If issues of a disturbing therapeutic nature come up, the university's official position is that students should be referred, in the first instance, to its student counselling service. In practice everybody knows that this is often a professional fig-leaf. Student counsellors are better equipped at dealing with broken love affairs and poor grades than with grief at the state of the planet, or shock at having pulled up and examined the roots of violence. We therefore urge our students from the outset to consider putting in place external forms of professional support. This in itself is problematic. Not to suggest it would, in the light of experience, be irresponsible. But to suggest it can feel like inviting problems that might otherwise not arise.

The bottom line is that we must teach what the students have come to study – that which is relevant to the global problematique. We teach to empower and there are ample past-student testimonies to the effectiveness of this, but we can never claim it will be a comfortable journey. More and more as time has gone on we have sought students who have already done some inner work on themselves and may therefore be forearmed, though this criterion does not appear amongst official university selection criteria. Sometimes, too, we have taken on students of whom we were very unsure, and who struggled with the course, and were hard work for the staff, but who have blossomed into paragons of insight, strength and effective work for change in the world. Other times we have had to lay down boundaries saying, in effect: "I will wash your feet, but you may not wipe your feet on me." In general, our MSc course has worked resoundingly well, and if my emphasis here is on the problems it is because our consciousness of these is what helps to make the rest a success.

As our CHE student year progresses and the milestones notch up, as assignments are handed in and feedback given, so the student energy cycle usually starts to climb again. Achievement channels energy back outwards. From its nadir point weighed down by the world's woes the sine curve moves back into the positive. Sometimes a student will say, "I've got to go and fix my shit before I can fix the world," but as a staff we try to respond, "Shit happens. Yours, mine and that of the world are of one nature. Fix yourself iteratively as you engage with the world." As the old Slim Whitman hit put it, "Do what you do do well." This is the praxis of action-reflection-action. It requires a head-heart-hand balance and also a balance between being, having, doing and interacting (that is, relating) such as the Chilean thinker, Manfred Max-Neef (1992), has drawn attention to in his seminal work on fundamental human needs.

We have learned that effective communication and cohesion between staff members is imperative. That doesn't mean we have to agree with one another – we often don't – but we do have to be mindful that if we fail to work in solidarity our own psychological debris can slip between the cracks and poison the students' water. The students' imperative of inner work is more easily avoided if the staff are not adequately doing theirs. At times this has been a challenge to us in the CHE because none of us are ever fully sorted. I can think of situations where my own buttons were vulnerable to being pressed by students and colleagues, my own counter-transferences evoked and my own patience worn thin, casting compassion into question. I can but apologise to those who might have felt burnt in consequence, but shit happens; what matters is how you shovel it.[3]

3 That expression is from the late Colin Macleod of Glasgow's GalGael Trust. Hermann Hesse's short story *The Poet* is a deep reflection on intense student-teacher oedipal dynamics. Available at: www.alastairmcintosh.com/general/resources/2008-Hesse-The-Poet.pdf [accessed: 7 June 2010].

Peer-Reviewed Proof of the Pudding

The greatest turning point at which our students typically feel their studies gelling and the sine wave of enthusiasm entering full resurgence is their main "field trip," usually two-thirds of the way through the course. I have documented the process of one of these study tours elsewhere (McIntosh 1994). In recent years they have been to the Isle of Eigg where it is possible to get everywhere on foot without the intervention of vehicles. It is also the island that pioneered community land ownership through a process with which I was closely involved, bringing to the group dynamic a CHE history that is respected within the community.

On Eigg, my colleagues who specialise in participative inquiry developed an approach where students go out in pairs all over the island and volunteer for whatever might need doing with local families. Typical work has involved weeding gardens, painting sheds, shearing sheep and sitting in a kitchen all day long drinking whisky. They come back and share from one another's experiences, enabling the group to weave a collaborative picture of the island's Human Ecology. As Iain Mackinnon, a former student/teacher (who contributes a chapter to this volume) has remarked: "When they arrived, they were all talking about the landscape. When they got back from the volunteering, they were all talking about the people."

Figure 12.2 Learning from "Professor" Tom Forsyth on a CHE field trip to Eigg

For many students this marks the point at which they realise they've really learned something special about how to "read" and integrate a place and its peoples. Local issues start falling into global context and vice versa. Such competence can be tremendously empowering. It is more than

just the power of interpretation. It also carries with it the capacity to develop vision, including night vision into what are usually the unconscious psychodynamics that underlie social realities.

After the field trip comes the thesis stage, and when I supervise a student's thesis I like to see them not only follow their passion, but also to make themselves useful in ways that the wider world will value. They have received and now is the time to give. My preference is that they should not only write their thesis, but also publish their findings, usually with me as the second author, in a peer-reviewed scholarly journal. In such ways anything "alternative" about their approach proves itself by passing some sort of conventional muster. This is a good filter against wackiness and self-indulgence. It is an "objective" proof of the student's level of professional attainment that probably counts for more than any exam-board designated "distinction." It also helps me, as an academic with his own pressures to balance up, to maintain a satisfactory publications track record. Some examples of topics that have led or are leading to published output from my students include:

- a historical evaluation of the religious critique of usury;
- women, empowerment and regeneration on the Isle of Eigg;
- biodiversity management on Holy Island as a sacred natural site;
- the geopoetics and Human Ecology of the River Findhorn;
- the spirituality of urban regeneration and addiction recovery in Govan;
- the effects of boarding school on women landowners' psychology;
- the political theology of modern Scottish land reform;
- corporate social responsibility, meaning and transcendent experience;
- socioeconomic resilience on Lewis in the 1966 seamen's strike;
- intergenerational succession of indigenous "lost leaders" on Skye;
- climate change protest marches as contemporary pilgrimage.

The CHE now has some 150 past Masters level students. Their careers have followed a wide variety of paths including becoming community leaders, local authority strategists, rural developers, industry consultants, business executives, civil servants, professors, environmental lawyers, writers, professional musicians, artists, full-time parents, eco-builders, eco-centre managers, back-to-the-landers, allotment makers, a pioneer of organic fish farming and climate change activists facing jail on account of their protests. As stated in my earlier chapter, our MSc course has once again hit the institutional buffers due to a finance-driven reorganisation of the university that had been our host for the past five years.[4] The CHE, with a Board now comprised entirely of past students, has moved to one of the poorest parts of town. The title of first public event there spoke for itself: "Celebrating the spirit in post-industrial communities: An evening of stories, song and poetry exploring Govan's history and cultural legacy." It may be that the CHE will not survive, or it may be that it's time is only now emerging. Either way, by making it to 2012 we have survived for 40 years, which is more than most modern organisations that have had to run consistently on empty.

4 I wish to be clear that our relationship with Strathclyde University has been very positive. My visiting professorship in Human Ecology there has been renewed until 2013. The obstacles in our way were substantially financial against a wider background of severe cuts.

Spirituality in a Teaching Paradigm

Our CHE teaching team has comprised about a dozen people with a wide range of onto-epistemological viewpoints. Some embrace the modern secular worldview. Others have inclined towards the postmodern. My own approach, as explored in my earlier chapter, is premodern. There have been tensions at times between us in how these differences play out in organisational representation. At one painful point there was a major falling-out and split. Yet, we have mostly managed to keep the act together. We have recognised that ecology needs diversity, and it is healthy to view ourselves as what we like to call "a community of contested discourses." A comparison with my colleagues' chapters in this volume will confirm that we are close to one another but not clones.

My work has been more controversial than most because I have become increasingly explicit over the years that I consider spirituality to be central to what it means to be human. I would not be able to do my Human Ecology without honouring this and I use it in my public activism. This includes work over one and a half decades on nonviolence with military staff colleges in the UK and abroad (McIntosh 2010), on Scottish land reform (Henneman and McIntosh 2009), and most recently, on sacred natural sites with the International Union for the Conservation of Nature (forthcoming).

In order not to thrust spiritual paradigms on students for whom they may not be wanted I have elected, in recent years, to conduct my teaching as an optional module called "Spiritual Activism." Let me share what this means in Human Ecology. Serious activism for social or environmental change can be profoundly challenging to our endurance and values. We may face loss of income, denigration of status, dismissal, breaking-point burdens on intimate relationships and in some cases, imprisonment and the threat of death. In my time teaching we have had students who have faced all of these and even as I write I have been trying, unsuccessfully, to check on the well-being of one of our immensely courageous past students whose human rights activism as a journalist has affronted the generals who oppress her native land. Intense engagement can push an activist beyond normal ego boundaries. Here spiritual practice ceases to be a pastime and can become a survival necessity. Intriguingly, the military find the same, for example, General Sir Richard Dannatt who was, until 2009, head of the British Army has this to say of the spiritual imperative in battle:

> Core values establish a moral baseline, and maybe for many that's sufficient; but people have to ask themselves whether there should be a spiritual baseline as well. I think that's spiritual with a small "s" at this stage … I know when push comes to shove and the chips are down, and people are being taken to the limit, and people are being killed around them, most people are looking for something bigger than themselves. I think you need to have thought what that bigger thing is, so that when you find yourself in those sorts of circumstances, you known what you're turning to. (Handley: 2010)

For me, such experience renders it imperative that radical Human Ecology is grounded in ontology – the study of the nature of *being*. In my teaching I used a simplified model based on the work of C.G. Jung (Figure 12.1 – all figures from McIntosh 2008). It is paradigmatic to my approach to Human Ecology. In this the conscious ego rests, like a lighthouse, on the bedrock of deep Self, the soul. But between ego and Self is the psychological shadow – the repository of all that we have repressed and all that has never yet matured into conscious being. This "shadow" is where we do most of our cutting-edge work. It is the spiritual coal-face, often the place of suffering and conflict, but also the locus of self-realisation. Jungians therefore say that 90 percent of the shadow

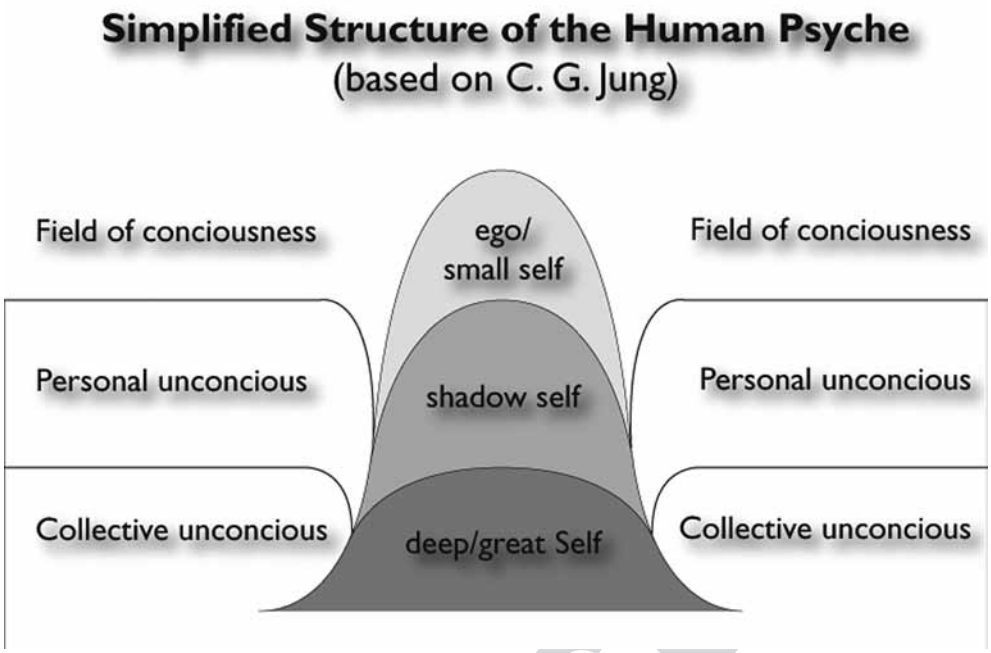

Figure 12.3 Structure of the psyche

is gold dust. Failure to ground ego dynamics in the deep Self by recognising, and working on, the shadow, is one of the main reason why right-on organisations are so often riddled with conflict. Spiritually speaking, the name of the game in life is to shift from being self-centred to becoming a more centred Self. This can make for an exciting start to the curriculum in radical Human Ecology. Shifting then from the personal to the transpersonal, the great Self can be imaged as a string of islands (Figure 12.2). Above the sea, at level of the ego or small self, we appear to one another to be separate entities. To compete with one another and even to be at war may, indeed, appear "rational" with such limited vision. But deep down we are joined through the bedrock of what it ultimately means to be community. Here, as England's metaphysical poet John Donne put it, "No man is an island, entire of itself." This is the basis of profound interconnection with one another and all things that is the spiritual basis of radical Human Ecology. It is a basis shared with deep ecology and with the mystical traditions in many of the world's great faiths. In the way that I develop the model, it is also the basis of *community* as the grounding of social and ecological activism. Implicit is the notion that community is not something that we choose to buy into, or to distance ourselves from. Community *is* the deep structure of reality. To work for, with and from the Human Ecological community is a question of alignment with reality. This can offer the activist very profound support because community, wherever it is authentic, is predicated on love.

In teaching this some students will reject my Jungian approach. They might prefer other models, such as those of Ken Wilber, or intellectual forms of Buddhism that treat the very idea of a "Self," capitalised or otherwise, as illusory. That is their prerogative, and in a liberal academic context the posing of any ontological approach is acceptable provided that it is well argued. What matters is not that students should buy into a particular worldview. What matters is that we open up language

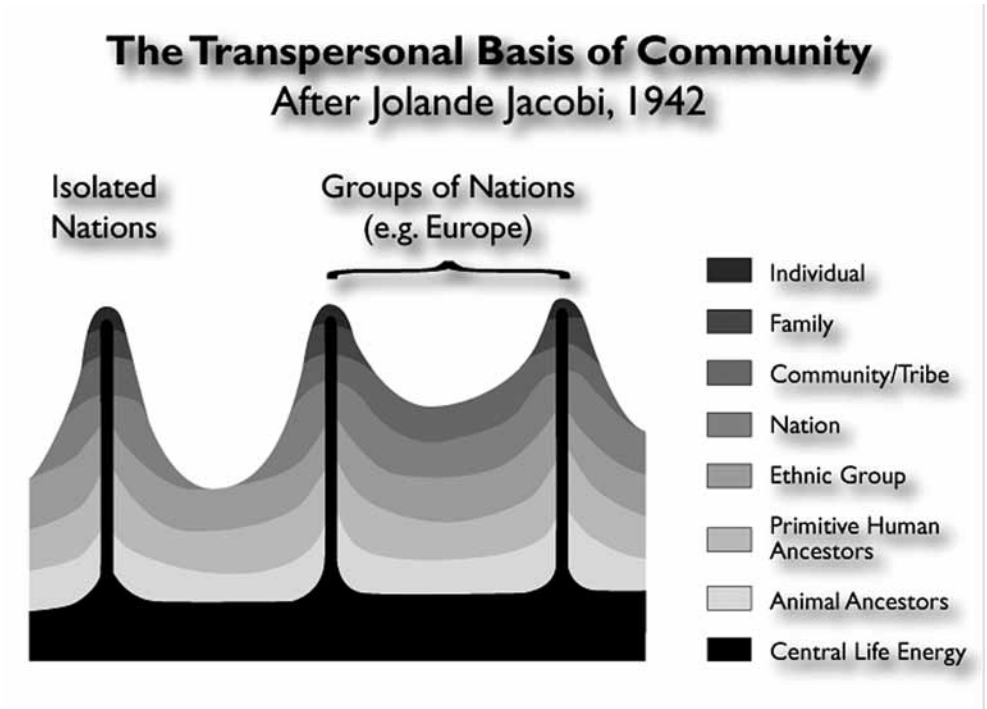

Figure 12.4 The transpersonal self

and territory in the mind by which to talk about ontology – what I call psychospiritual literacy – and in our activism, to engage, as Gandhi put it, with life as a series of "experiments with Truth."

If we are to work with spirituality as a basis for our activism, and do so in an academic context, it is imperative that the notion of spirituality is subjected to critical discernment. If it were absent we would open ourselves to cultic dynamics as the shadow side of charisma. In my teaching this means two things. It means that we explore cults and charisma asking, for example, "How would you decide whether or not this class is a cult?" It also means looking at what passes as being spiritually valid. In this we draw not just on devotional material, but also on anthropological studies of mysticism and academic parapsychology. For example, a core text is *The Varieties of Anomalous Experience* from the American Psychological Association (Cardena, Lynn and Krippner 2000).

I love to drop surprising but profound sources into my teaching. One that I draw on frequently is the twelvth-century French-based Scottish scholastic theologian, Richard of St Victor. He proposed that our *modi visionum*, or ways of seeing reality, relates to three eyes (Panikkar 2006: 12–13; Zinn 1997: 29–30). By the *Oculus Carnis* – the Eye of the Flesh – we see the physical world. By the *Oculus Rationis* – the Eye of Reason – we see the mental world, and therefore, quite literally "see" (or are blind to) reason. And by the *Oculus Fidei* – the Eye of Faith or of the heart, the soul – we see spiritually. For Richard there was no contradiction between seeing reason and seeing spirituality. On the contrary, reason is a stepping stone to "faith" as the inner, metaphysical life. To me, the power of such material is that it invites consideration that just as a student learns to use reason in a university, so that can lead on to deeper ways of seeing, and this may nourish and help to sustain our activism in the world. Here the tension between the premodern and the post/modern worldviews that my other chapter explores starts to dissolve. Rationality is not anathema

to a spiritual worldview. It is on a perceptual continuum with it, but *if we don't look we won't see*. The enemy of spirituality is not reason. It is materialism – the same as what is destroying the Earth – and as Gerri Smyth valiantly says in her chapter in this volume, "I will no longer give permission for the materialists to marginalise our deepest source of wisdom."

What might be the "vocation" or calling of that wisdom? My touchstone is: "does this serve the poor or the broken in nature?" As the American spiritual teacher Ram Dass (Richard Alpert) puts it, "If in doubt what to do with your life, feed the hungry." The food in question is more than bread alone because the hunger that faces the world is multifaceted. It entails a call to restore community at the levels of belonging, identity, values and motivation. From applied work I have dreived what I call the Cycle of Belonging – a virtuous cycle that connects nature (our sense of place) with our identity (sense of who we are), our inner-life grounding (sense of values) and the motive force of responsibility (what we can do – Figure 12.3). Such responsibility is not something forced on us by others. Rather, it is the "ability to respond" – to be empowered, to be actively engaged in life, to be an "activist" in the deepest meanings of that word.

We might see from this model that the spirit of community can be strengthened by stimulating action at any point in the cycle. Similarly, breaking the links destroys it. This is the kind of conceptual framework that can be drawn from applied Human Ecology and applied to public policy. It leads me to some considerations of research methodology in working with students.

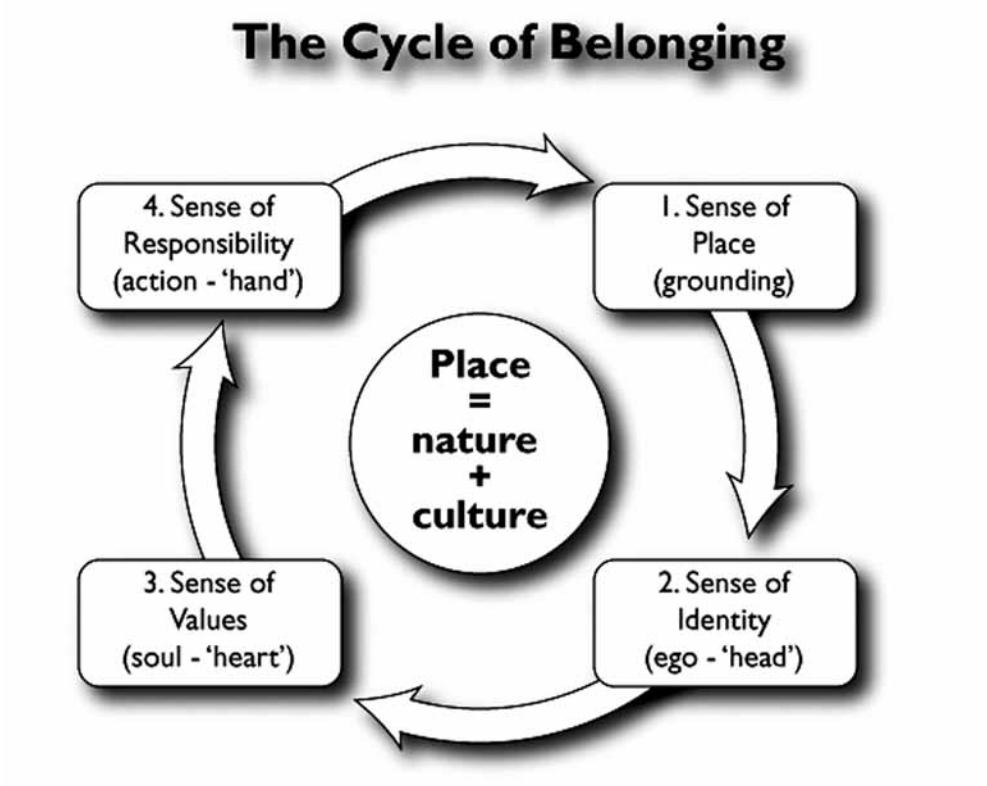

Figure 12.5 Building community responsibility

Research Methodology

As a starting point I expect my students to have a passion for what they want to do. If that enthusiasm is lacking – if they are merely time-servers seeking the kudos of a degree – then I find it hard to view them as authentic students. I expect that passion to have attitude, to be orientated in its values towards service of the poor or the broken in nature. This is not to suggest that other paradigms such as "research for research's sake" or research orientated towards the interests of the privileged is necessarily invalid. I am simply stating my values in what will motivate me to be their supervisor. Most students self-select in ways that welcome this. As an ethos it is consistent with the idea that knowledge is about more than monetary considerations. It values knowledge as something sacred. As Professor Adi Setia, a visiting Muslim scholar from Malaysia put it to me while I was writing this chapter, "To have knowledge is not enough to earn your living. To earn your living you must give service."

With my students I raise this point further by commencing the teaching of research methodology with this passage from T.S. Eliot's *Four Quartets*:

> And all shall be well
> All manner of thing shall be well
> By the purification of the motive
> In the ground of our beseeching.

Many students start off unclear about what they want to research. The purification of the motive can therefore be an immensely helpful process. What is it that they really seek in life? What is life? What do they see themselves as being about? What kindles their curiosity, and if in doubt, have they tried inwardly *asking*? Have they, to use Eliot's term, engaged in *beseechment*? It is surprising how many students get blocked with their initial choice of research topic because they took on what they thought they ought to do, and not what they really desired to do. I recall one student who set out to do a boring study of biodiversity for his thesis. He was so bored he couldn't get started on it. "What would you really desire to do if you could do anything at all?" I asked him. "Go to Africa and study the biodiversity and culture of the sacred groves," he replied. "Then how about you do that right here in Scotland with so-called faerie hills?" I suggested. His paper was published in an ecological journal and he is now a university teacher of anthropology.

A student's research may be quantitative or qualitative. Often there will be a mixture of both, but when working with human community it tends to be overwhelmingly qualitative. Here I have learned two hard lessons down the years. One concerns gathering the data, and the other, its processing.

Qualitative research usually involves students in getting out and interviewing people. Many of today's younger cohort of students lack confidence in this. They have developed their interpersonal skills in contexts that are much more socially and generationally stratified than was once upon a time the case. As such, they may be unsure how to get an interview flowing fluently and with depth. In hitting up against this problem I am not alone as a supervisor. Three years ago I was on holiday with Vérène in Co. Mayo, Ireland. We met an American academic who annually brings her students across the Atlantic. I cast a fly of a question and asked: "But what is it that they can they learn in Ireland that they wouldn't find back home in America?" She put her finger on it: "They learn how to have a conversation over the garden fence."

More than that, I have been forced to the conclusion that many urbanised modern people do not even know what "community" can really mean. I have found it necessary to teach this in order to

teach Human Ecology. Working from a Scottish perspective I make frequent use of Iain Crichton Smith's essay, *Real People in a Real Place* (Smith 1986), painful though it is in the intensity of its sense of recent loss. Also, the Orcadian writer, George Mackay Brown. For example:

> In a wholesome society the different estates are stitched together in a single garment: the warmth and comfort and well-being of the people, a symbol too of their identity and their ethos. Their language, their work, their customs, all they think and do and say, decide the style and cut of the coat. The simplest bit of social intercourse – a conversation at a cross-roads, the selling of a pig, a kiss in the darkness – puts in another stitch, does its bit in holding the tribe together and ensuring its survival. (Brown 1973:76)

We can see, then, that the depth of "presence" or "bearing" of the interviewer, their manner and even charisma, can be a huge determinant as to how an informant will respond and at what depth. Students need to understand this. Not least, it makes them more aware of where they're coming from. One person conducting an interview might think they've found the village idiot. Another will reveal a sage. The only differences are the bearing, skills and ability to see from within of the interviewer. Many years ago I took a group of students on a field trip to the Isle of Lewis where we met with Angus "Ease" Macleod, the founder of what is now the Scottish Crofting Federation serving the interests of traditional subsistence farmers. Unusually that year we had in the class some "sophisticated" city energy that enjoyed disparaging the rustic. As we sat drinking tea in Angus's home a young woman asked a deliberately silly question. He replied, "I'm sorry dear, you'll have to speak louder, I'm slightly deaf and not quite catching what you're saying."

The student repeated her question. This time the couple of her fellows who had tittered the first time sat po-faced. She was now out on a limb alone. Again Angus replied, "I'm sorry dear, *could you say it a bit louder*."

The third repeat was embarrassing. "I'm so sorry dear," he smiled pleasantly, "I'm just not catching you at all. Next question please."

Angus had heard perfectly well the first time round but refused to entertain disrespect. It was a clash of cultures. He represented age, authority, patriarchy and the rural. She was youth, fun, feminism and the city. It was a fine demonstration that enquiry is never a neutral act. Indeed, if one tries to come over "value free" with indigenous people one will usually be mistrusted. Most indigenous people expect psychological honesty even if it discloses positions at loggerheads with their own. What the modern person often doesn't realise is that grassroots people are usually more psychologically attuned than they are. I have stood with villagers on my home Isle of Lewis as a new cohort of students have stepped off the minibus, and been treated to a running commentary that psychologically caricatured each one at just a first glance with stunning perspicacity. The modern person may think that fashion, perfumes, deodorants, cosmetics and style can successfully project an image. But the indigenous is alert to the deeper signals of body language, countenance, timbre of voice, gesture and even scent – sometimes, especially, body scent! Their perceptual acuity is the psychological equivalent of X-ray vision. The lesson to the researcher is plain: "Blessed are the pure of heart for they shall collect good data."

I am well aware that my critic may charge me with idealising indigenous peoples. Of course, many indigenous societies are today broken, and many in the past were harsh. But when people relate closely to the land, water and one another for their livelihoods and their spiritual experience it brings out a capacity to be real – to be "down to earth" and a "rough diamond" that can be qualities deficient in the deracinated voyeur. As the great folklore collector and friend of marginalised

peoples, Hamish Henderson of Edinburgh University once said: "The non-genuine person cannot believe that the genuine exists" (Neat 2009, 372).

In research there is no substitute for the purification of the motive of one's beseeching. This is why, if we are to be good researchers in Human Ecology, we might view our research as a spiritual path (Heron 1998). Refining motive, sense of service and authenticity as self-authorship is all. With it barriers of social class, race, gender and all their awkwardness fall away. Without it there is little hope and no point.

If data gathering is one big issue that I have picked up on in my teaching, the other is how students undertake their data processing.[5] Here, at the stage of organising and writing up what has been found, it is important not to let the methodological freedom that Human Ecology can grant trip students up. Slack rope is a danger on deck. Many times I have seen students fail to apply discipline to organising their data and get lost in a largely-autobiographical stream of consciousness passed off as "first person" or "auto-ethnographic" inquiry. This might be good therapy, indeed, it can be good initial learning, but it can be of questionable academic merit unless skilfully executed. Sometimes the acid test boils down to whether or not a piece of student work can pass muster with hard-bitten external examiners.

My own way of tackling what I would see as deficits in being organised is to recommend the methodology of grounded theory. I suggest to students that they briefly dip into Glasser and Strauss (1967) as the original methodological treatise in this field, but not to get stuck for very long there. The masters are of little help with the practicalities! Instead, I suggest that they use Bryman (2001) for a wide framing and a hands-on text such as Charmaz (2006) for the nuts-and-bolts specifics.

Grounded theory is an approach to data collection, organisation and analysis that builds a picture from the "ground" up. Typically, the researcher seeks out key informants, perhaps using initial contacts to "snowball" leads to further ones. Gradually, and mindful that "all is data" and therefore it's about more than just interviewing, a jigsaw-like picture emerges of what is being studied. The researcher seeks out patterns of meaning. Continued interviewing as the sample size widens gives an indication of validity and weighting to different themes. Usually the aim is not to study a statistically valid sample as this would usually require being too large for qualitative research. Instead, the researcher aims to achieve "data saturation." Here the addition of further interviewees yields sharply diminishing returns of new information. At such a juncture the researcher can feel justified in starting to draw tentative conclusions.

Ethnographic software packages can be used for analysis, but at MSc level I encourage a special package known as KISS. KISS can have various meanings but a nice way of putting it is, "Keep It Sweet and Simple." I recommend that they organise their material simply as a coded and sortable table in Word or Excel. This is the laptop equivalent of cutting up field notes and sorting them in piles on the bedsit floor. From here patterns of meaning and relationships between those patterns can be discerned. But there's the rub. How does one decide what counts as meaningful?

5 I am aware that some researchers reject the term "data" as implying a positivistic paradigm. In 2009 I asked Peter Reason about his strong views on this and what he would suggest instead. He suggested using the word "evidence". To me the difference is semantic and what matters most is what we serve in conducting research.

Discernment Methodology

The social science textbooks are singularly unhelpful on this question. For example, what I'm writing at this moment could be coded "research methodology" and sub-coded "data handling." But if we are to claim objectivity, what is to say that one type of utterance, or the utterance of one particular informant, merits more consideration than another? The textbook failure to answer such a question can leave the student thinking they should write up and code absolutely everything, sometimes to the point of micro-coding that can reduce analysis to a word-by-word level. But even at that degree of breaking things down, how is the student supposed to decide significance?

This question intrigues me at more than just the practical level. It raises the theoretical question that underlies all qualitative research. If the academic climate in which we move is "modern," dare anyone posit something that is not empirically quantified in a statistically valid manner such as might satisfy the positivists? And where the academic climate claims to be postmodern, especially in its deconstructive sense, dare anyone posit such an essentialist-predicated construct as *meaning*?

One might wonder whether anything concrete can be said about anything because, under postmodern theory as per Derrida, Lyotard, et al., it is hard to see how it can be. This is why the literary critic George Steiner gives his influential study of the postmodern condition, *Real Presences,* the subtitle, "Is there anything in what we say?" Steiner's answer is that his question forces us to a theological reference point. He says:

> Even within a domestic, secular genre, which is that of the modern novel, the great exemplars continue to ask, aloud or beneath their breath (as in Proust), the one question ineradicable in man: Is there or is there not God? Is there or is there not meaning to being?

To Steiner, the absence of any intimation or felt presence and language of the spiritual implies that "certain dimensions of thought and creativity are no longer attainable" (Steiner 1989, 220, 229). Under such conditions, art dies and nihilism wins. The soul – the very organ of attunement to beauty – withers in the abject (if contradictory) realisation of its own non-existence. As explored in my previous chapter, Sartre (1969, 615) therefore may or may not be right that "Man," like God, "is a useless passion." But if he is right, his own existentialism is equally a contradiction because nothing matters anyway.

Such considerations constantly call the radical Human Ecologist back to the central reference point of the essential; to the spiritual; to Steiner's question: "Is there or is there not…?" It forces us to ask where we stand if we are to seek meaning in what we research. It presses us to ask the backgrounding question, "What is the meaning that gives meaning to meaning?" To ask, too, whether we actually believe, like Sartre seemed to do, that reality is ultimately devoid of meaning? And if Sartre has become too passé, a more contemporary example might Lady Gaga with such statements as: "It's not that I've been dishonest, it's just that I loathe reality..." (Rainbird, 2011). Is such the sorry nihilism at which we have arrived? Or is there, instead, a quality about knowledge, about the insistence on Truth with a capital T – its coherence, its tender faithfulness to the essence – that runs like fire from the sacred? For if we take the nihilistic view then nothing matters. All is loathsome. But if we can find the humble courage to reach towards the divine, simply to ask of life, then the world, and with it, our lives, become potentially transfigured.

My own prejudice or, as I should prefer to see it, experience, is a bias towards the sacred. As such, spiritual practice offers practical tools with which to draw out meaning. Earlier, in our discussion of what to research, we discussed the purification of the motive in the ground of beseeching. Now

let us explore what we do with the product of research – our data and do so through the paradigm that I propose for seeking meaning: namely, *discernment.*

The word "discern" originates from the Old French *discerner* which is rooted in the Latin, *discernere,* from *dis*- "off, away" and *cernere* "distinguish, separate, sift." To discern in the spiritual sense is therefore to refine or sift, as if seeking gold from gravel. I recommend to students that they start with their raw data – their interview tapes, diaries, observations, references, press clippings, or whatever – not by coding or even writing it all up, but by seeking out and writing up only what I call "indicative statements." These are chunks of material that actually or potentially convey *meaning*. Such a selective approach avoids having to type up whole interviews which can be mostly dross. Usually it is only necessary to write out the interesting components, the juicy bits, (though tapes and field notes should be kept for any subsequent use or verification). Once written out indicative statements can be coded according to what is found in them through discernment of its patterns. From these filaments a narrative can be woven and thus, the thesis comes into being as stories emerge and are told.

I see this process as being essentially poetic. It requires the mingling of fact with the researcher's imagination to arrange the components into a narratorial flow. Great natural scientists work with their imaginations. Why should more social scientists not comfortably acknowledge that they do likewise? Let me uncomfortably press the point. In George Bernard Shaw's play, *Saint Joan*, Joan of Arc is asked whether the instructions she hears from God are not just her imagination. She takes the bull by the horns and tells her interrogator, "Of course. That is how the messages of God come to us" (Shaw 1946: 81). Similarly, Richard of St Victor with his eyes of the flesh, reason and faith (or heart/soul) said: "Reason would never rise to the knowledge of invisible [that is, spiritual] things, unless her handmaid the imagination, were to represent to her the form of visible things … For the outer sense alone perceives visible things and the eye of the heart alone, sees the invisible. The fleshy sense is wholly outward, the heart's sight is all inward" (in Kirchberger 1957: 83).

I am suggesting that the reason why social research scientists find it difficult to talk about meaning is that they are reluctant to acknowledge this go-between role of imagination. Imagination is not to be confused with the imaginary or delusion. This is not about make-believe or "anything goes." Rather, we are talking about the ability to perceive the *meta* that lies behind the physics. To gather data is a function of the first eye – that of the flesh in its various metaphorical forms. To sort it quantitatively and cognitively is a function of the second eye, of reason. But to select, organise and represent it according to what comes through as *meaning* requires a higher epistemology – the heart's eye – reason raised to spiritual realm of Logos. In its capacity to discern higher pattern this function is essentially poetic. It refutes Aristotle, as discussed in my previous chapter, and sides with Socrates and King Thamus's insistence on knowledge "of those forms which are within." It requires knowledge of the essence and this is what renders knowledge "sacred."

The Real University, the Free University

Here prose has nearly exhausted me as surely as it has, no doubt, my patient reader. Thank you for staying with me in this sharing. I have found it surprisingly difficult in these two chapters in this volume to articulate adequately my take on Human Ecology; indeed, on philosophy in general, which is the wider intellectual backdrop to the discussion. In attempting to hold up a mirror to my own understanding I have become only too aware of the shortcomings in intelligence, practice and grasp on my subject. My reader will discern these with their criticism, and if they are sympathetic, infill with their imagination.

In acknowledging these failings I think of the Epilogue with which the great Hindu-Christian scholar, Raimon Panikkar, concludes *The Rhythm of Being: The Gifford Lectures*, published just before his passing in 2010. Back in 1990 when I was just beginning my involvement with the CHE, I helped along with Scottish churches and development agencies to organise a conference here in Govan in Glasgow called "No Life Without Roots." Panikkarji was a keynote speaker. He had recently delivered the Gifford Lectures in natural theology at Edinburgh University. What he said that day in Govan's Pearce Institute (to which the CHE has recently moved its base) had a formative influence on my subsequent Human Ecology.

Panikkar's *Epilogue* to his valedictory tome explains why it took him so long to get round to publishing. He confesses, "Led by the enthusiasm aroused by the Gifford Lectures in 1989, I imagined I could tackle a subject that proved to transcend the powers of my intellect" (Panikkar 2010: 405). He describes how he had found himself consistently defeated in his attempts to write what was intended to have been the book's final chapter. Its working title was "The Survival of Being." Eventually, to get the book out, he was forced to omit it. His explanation witnesses to the stature of the man:

> The Tree of Knowledge again and again tempts one at the cost of neglecting the more important tree, the Tree of Life. How can human thinking grasp the destiny of life itself, when we are not its owners? This is my humble conclusion to much presumptuous research. It has taken me 20 years to admit this, and I apologize.

I have felt a similar inadequacy with my contributions in this volume. In this I am not alone amongst either my fellow editors or those who have painstakingly contributed. It is a shortfall that raises the question of the Human Ecologist's relationship to depth of learning through time. Some of our discussions within the CHE over the years have led us to note the short temporal wavelength of most modern learning. For example, degree courses that last a few years at most, and are more and more concerned with tick-the-box training than with stimulating education, especially self-directed education. Against such utilitarian superficiality we might contrast the long temporal wavelength of indigenous ways of learning. Often the mellow pace of this entails what Ivan Illich has called "vernacular" learning because most of it happens in the natural course of real-life contexts, like learning one's vernacular tongue without having to be "schooled" (Illich 1981).

In *The Conquest of Gaul* Julius Caesar (2003: 140–143) says that although the Druids were literate, they refused to write down their lore – an interesting point, not just for its parallels with King Thamus of Egypt, but also, because keeping things oral kept them in the community, thereby militating against holding secrets that could be locked away on paper in a lawyer's safe for elite access only. Caesar also informs us that such a Druidic education required up to 20 years. Similarly, within the Scottish bardic tradition it is said that a piper is seven years in the learning, seven years in the practising, seven years playing … "and then there is the poetry." In both instances we see the notion that real education takes the best part of a generation – about a third of a lifetime. Given the depth of what our world and the human condition faces, could there be a lesson for us here? Should we be directing our efforts not just towards short wave education, but simultaneously – for both are necessary – on the deep learning trajectory of the long wave? Panikkar's close-to-deathbed realisation was that his "curriculum" was too big to fit a lifetime. Aquinas similarly said on the morning of his passing in 1274, "I can do no more. Such secrets have been revealed to me that all I have written now appears of little value." These are great realisations. They set an agenda that is for more than just "lifelong learning." It is also learning for life and with it the need for the "university" to be where courses are offered in living.

Within circles such as the CHE and the GalGael Trust in Govan,[6] similar reflection is deepening our sense of seeking to be "communities of practice" that can cultivate such long wave skills as eldership and mentoring. These look like being more and more necessary if we are to hold fast to working for a transformed world and yet neither sell out nor burn out in the face of multiple discouragements.

In this some of us are drawn to a sense of being implicitly part of the perennial "Free University," the university without walls; indeed, back to the very "idea of a university" (to borrow Newman's phrase). In these turbulent times we find strange company. Just a year ago I was exhilarated when Professor Geoffrey Boulton, vice principal of Edinburgh University (which once evicted the CHE for being too troublesome) sent me a warm personal note with a copy of a paper he had co-authored with the former Vice Chancellor of Oxford University, published by the League of European Research Universities. Entitled "What are universities for?" it opens with a quote from Cardinal Newman about the need to consult the "living voice" in creating a "pure and clear atmosphere of thought" so that "the student also breathes."

The authors condemn the hegemony of market-driven managerialism that is "squeezing out diversity of function and undermining teaching and learning." They endorse the study of "what it means to be human: the stories, the ideas, the words that help us to make sense of our lives and the world we live in." And radically, they advocate "political boldness … the freedom to enquire, to debate, to criticise and to speak truth to power" because "An easily governed university is no university at all" (Boulton and Lucas: 2008).

Through his Platonic character Phaedrus in *Zen and the Art of Motorcycle Maintenance* Robert Pirsig expresses what a university is and is not, as follows (Pirsig 1976: 142–144). Here he writes of "reason" not in its narrow sense, but in a manner more akin to the transcendent qualities of Logos, or Dharma – the unfolding through time of the cosmic patetrning of reality.

> The real University, he [Phaedrus] said, has no specific location. It owns no property, pays no salaries and receives no material dues. The real University is a state of mind … nothing less than the continuing body of reason itself …
>
> In addition … there's a legal entity which is unfortunately called by the same name but which is quite another thing. This is the nonprofit corporation, a branch of the state with a specific address. It owns property, is capable of paying salaries, of receiving money and of responding to legislative pressures in the process. But this second university, the legal corporation, cannot teach, does not generate new knowledge or evaluate ideas. It is not the real University at all. It is just a church building, the setting, the location at which conditions have been made favourable for the real church to exist.
>
> Confusion continually occurs in people who fail to see the difference, he said, and think that control of the church buildings implies control of the church. They see professors as employees of the second university who should abandon reason when told to and take orders with no backtalk, the same way employees do in other corporations. They see the second university, but fail to see the first …

6 www.che.ac.uk and www.galgael.org/ and www.GovanFolkUniversity.org

> A true minister, in such situations, must act as though he'd never heard the threats. His primary goal isn't to serve the members of the community, but always God. The primary goal of the Church of Reason, Phaedrus said, is always Socrates' old goal of truth, in its ever changing forms …

We stand here on the boundary of reason and its deeper context. That context is, as Panikkar repeatedly shows, and Pirsig's books also explore, the Mythos – the imaginal realm of mythopoesis; the upwelling of deep story as reality made manifest. It is the place of the singing into being of the world that is the realm of the bard or shaman, fulfilling the "essential role in the defence of the psychic integrity of the community (Eliade 1989: 509). 'Here," says Eliot in *Four Quartets* (1959: 51, 55), is the "intersection of the timeless moment/ Is England and nowhere. Never and always/ … that refining fire/ Where you must move in measure, like a dancer."

My appeal in these two papers (and with my fellow editors, in the Afterword to this volume) is simple. It is not to marginalise reason and its gifts of science; neither to denigrate what is useful in deconstruction. It is simply to ground these approaches in the dance, the essence, the reality which has always been there and comprises, therefore, the premodern bedrock known alike to the ancients and to many present-day indigenous peoples. I believe this to be the imperative of our times and the importance of Human Ecology.

I end with a passage that demonstrates the discernment of pattern and thus, meaning. It is by the contemporary Scottish poet, Kenneth White, founder of the International Institute of Geopoetics who presents his idea of geopoetics as opening new culture-space at the meeting point of poetry and geography (White 2004). These lines are the final section of the long poem "Walking the Coast" in his collection *Open World* (2003: 127). I use them when teaching research and specifically, the basis of discernment methodology. I also use them when hinting at a larger sense of life.

for the question is always
how
out of all the chances and changes
to select
the features of real significance
so as to make
of the welter
a world that will last
and how to order
the signs and symbols
so they will continue
to form new patterns
developing into
new harmonic wholes
so to keep life alive
in complexity
and complicity
with all of being -
there is only poetry

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Chapter 19

Experiments in Action Research and Human Ecology: Developing a Community of Practice for Rural Resilience Pioneers

Nick Wilding

Introduction

In his address to the Bioneers conference of April 2007, Paul Hawkin held a rapt audience as a list of tens of thousands of organizations scrolled up at speed on the screen behind him, until they seemed to fuse into one stream of bright, white light:

> It is my belief that we are part of a movement that is greater and deeper and broader than we ourselves know, or can know. It flies under the radar of the media, by and large. It is non violent, it is grassroots; it has no cluster bombs, no armies and no helicopters. It has no central ideology. A male vertebra is not in charge. This unnamed movement is the most diverse movement the world has ever seen. The very word movement, I think, is too small to describe it. No one started this worldview, no one is in charge of it, there is no orthodoxy … It is global, classless, unquenchable and tireless. The shared understanding is arising spontaneously from different economic sectors, cultures, regions and cohorts; it is growing and spreading worldwide with no exception. It has many roots, but primarily the origins are indigenous culture, the environment and social justice movements. Those three sectors and their sub sectors are intertwining, morphing, enlarging … it is marked by kinship and community and symbiosis … it's the earth talking back, waking up … (Paul Hawkin, April 2007)[1]

Months later, on a cold February day in Fife, Scotland, I sat riveted to the YouTube clip. It's become one that I have shared many times since to suggest some of the values and inspiration that I hope to make a small contribution toward in work and life.

This chapter aims to show some of the ways that action research approaches are helping me to bring Human Ecology into the world. It begins with an exploration of the field of action research drawing from material I developed for an action research option as part of a MSc Human Ecology offered by the Centre for Human Ecology in Scotland.

I then review more recent work, putting some of this theory into action in developing a Community of Practice (CoP) for Carnegie UK Trust. This story shows something of ways in which we (as Trust staff with partner organizations) are inquiring into how to be good *hosts* of the CoP, towards supporting the emergence of a vibrant community of practice (and system of influence) comprising activists, professionals, and policy makers who are building community resilience across the UK and Ireland.

1 See www.youtube.com/watch?v=N1fiubmOqH4.

Encountering Action Research through Human Ecology (and vice versa)

> [I]t's not so much a matter of knowing what external power imposes itself on science, as of what effects of power circulate among scientific statements, what constitutes, as it were, their internal regime of power, and how and why at certain moments that regime undergoes a global modification. (Foucault 1980: 112)

Human Ecology, as I encountered it at Edinburgh Centre for Human Ecology's Masters degree in 1994, seemed to me to be a field in transition. Companion chapters by Ulrich Loening and Alastair McIntosh in this volume give a good flavour of the content offered in a programme designed to reveal and explore spaces between discipines and across epistemologies of *head, hand, and heart*. As part of the course, we were able to attend a *Participatory Rapid Appraisal* (PRA) workshop run by colleagues at Edinburgh University's school of Forestry—a five-day practical training in how to "research *with* people, not *on* them." Course pre-reading included a booklet by Robert Chambers called *Challenging the Professions* (1993), which gave an overview of PRA methodology and called for *experts* to critically revue their role in development; heretofore, a new set of skills informed by a participatory values base should ensure local people's expert knowledge was put before the needs of professional and organizational egos of *helping* agencies. Henceforth, experts would be *on tap, not on top*.[2]

The course pressed home this point through experiential exercises that made transparent our unconscious habits of body posture, voice tone, language and pace which, if left unchallenged, would likely subvert our efforts as largely white, middle-class Masters students to embody this *new professionalism*. I loved the course and learned much from it. Most of all, I loved the way we had learned together—something deep inside clicked as I realized how much more powerful experiential learning was than the conventional *chalk and talk*. I decided that I, too, wanted to be a PRA trainer. I didn't know about Foucault or *regimes of truth* back then, but the MSc and this workshop helped me to begin to *get it*.

Over the course of the next year, the Centre for Human Ecology was threatened with closure, and students and staff worked together to first wage a campaign against closure, and then to find a new future for the organization outwith Edinburgh University. I became coordinator of the *new* CHE and experimented with participatory research tools as the CHE was re-established as a social enterprise the following year. More workshops helped me to see that the field of action research extended far beyond participatory appraisal, including large group visioning processes like Future Search (Weisbord and Janoff 1995), professional peer learning processes such as *story dialogue*,[3] and leadership development coaching. Over this period, I was also continuing to explore meditation practice, following teachings in the Soto Zen tradition that I had learned during retreats in Japan. Through these experiences, and reading into the field of action research, I gradually became aware that it is not so much a methodology as an umbrella term describing a multitude of approaches to inquiring from a *post-positivist* stance. In the next section, I offer a perspective on some of the territory of action research, highlighting some of the practitioners who have moulded my appreciation of this fast growing field with diverse roots.

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2 For an excellent overview of approaches to transforming power relationships developed by participatory researchers, including Chambers, over several decades, see Gaventa and Cornwall's article "Power and Knowledge," in Reason and Bradbury (2008).

3 See: www.evaluationtrust.org/tools/story.

Action Research pioneers—Toward a Participatory Paradigm

> Action research is a family of practices of living inquiry that aims, in a great variety of ways, to link practice and ideas in the service of human flourishing. It is not so much a *metholodogy* as an *orientation to inquiry* that seeks to create participative communities of inquiry in which qualities of engagement, curiousity, and question posing are brought to bear on significant practical issues (Reason and Bradbury 2008).

Action researchers work toward participatory, democratic forms of research on the assumption that peoples' participation in designing and researching their own questions represents a progressive way to democratise decision-making and policy development. In a nutshell, action research is research *with* people, not *on* them: it is more about facilitating communities of learning, and less about individual researchers gathering *data* from research *subjects*. Central to action research is extending the forms of knowledge that are acceptable as evidence, beyond *propositional* knowledge (that is, abstract theorizing which is so dominant in the worlds of policy-makers and academics leading lives that are disengaged from social action):

> [A]ction research explicitly seeks to disrupt existing power relations for the purpose of democratising society … [it] is a social process in which professional knowledge, local knowledge, process skills, and democratic values are the basis for co-created knowledge and social change. (Greenwood and Levin 1998: 93)

For action researchers, evidence is grounded in experiences of action in real places. This experience often surfaces in creative forms (stories, videos, drama pieces, and so on), which are recognized as valid ways of making sense of experience (or *ways of knowing*). Innovative theory and policy proposals can then emerge from this *presentational* data, which become more and more robust as different sites of experience corroborate and resonate with each other. The relationship between practice and theory is thus tight, developing through many iterative cycles. The main purpose of action research is not, however, theory and policy development as with more traditional approaches to social research. Instead, the aim is to generate better (collaborative) practice (that is, competencies, skills, *knacks* towards becoming a master craftsperson) that improves the well-being of people and places. Facilitating purposeful learning-amidst-action is, therefore, a significant role for an action researcher. Philosopher Richard Rorty has put such a perspective succinctly in his proposals for *social hope*:

> We cannot regard truth as a goal of inquiry. The purpose of inquiry is to achieve agreement among human beings about what to do, to bring consensus on the end to be achieved and the means to be used to achieve those ends. Inquiry that does not achieve coordination of behaviour is not inquiry but simply wordplay. (Rorty 1999, cited in Reason 2006: 190)

Sometimes, inquiries can be painful as they test *truth*, shining a light into often entrenched and unconscious patterns of thought and behaviour. The point is not to diminish an inquirer through such a process, but to sensitively build our core confidence such that we learn how to take seriously our own, and others' experience. From such groundings, we can learn also how to unlock our creativity in making sense of and communicating our narratives. Later, as resonances form between and across accounts, it becomes possible to develop more abstract frameworks and languages with which to influence and inspire the development of public policy. Through such a process, we learn

to feel more in control of our lives, more loving of (and loved by) special places and friendships in our lives, and more skilful in running and winning resources for our organizations. This, in turn, may lead to a collective strengthening of democratic institutions at every scale.

Action research approaches and tools have been developed over many decades, through many different social action traditions as well as diverse disciplinary roots within academia. Contemporary action researchers may trace inspiration from Gandhi's nonviolent philosophy and practice of *satyagraha*,[4] the civil rights movement in the USA, and the popular education movement begun by Paulo Freire and colleagues in the 1970s in Latin America. In his article on "Participatory (Action) Research in Social Theory: Origins and Challenges" (2001), Orlando Fals Borda gives his account of the emergence of participatory (action) research in the late 1960s:

> We just could not be blind or silent when we were witnessing—and suffering—the collapse of positive values and attitudes towards humankind and nature … This seemed to require a radical critique and reorientation of social theory and practice … Head and heart would have to work together. These challenges could not be resolved except with a personal ethical stand, with a balanced handling of the ideal and the possible, and with a holistic epistemology [to construct a] practical and morally satisfying paradigm for the social sciences to make them more congruent with the ideal of service. (Fals Borda in Reason and Bradbury (2001): 29)

Alternatively, we might trace the roots of action research to the work of Kurt Lewin and colleagues at the Tavistock Institute in London, Massachusetts Institute of Technology (MIT) and other sites of innovation where the new fields of social psychology, organizational change, and group relations emerged during the 1940s and 1950s. Lewin had coined the term *action research* in a 1946 paper which defined action research as "a comparative research on the conditions and effects of various forms of social action and research leading to social action" that uses "a spiral of steps, each of which is composed of a circle of planning, action and fact-finding about the result of the action" (Lewin 1946: 38). He challenged dominant thinking in the social sciences at his time, which assumed that it was possible, and preferable, for researchers to act as passive, detached, and *objective* commentators. Instead, Lewin, and many who have since followed him, emphasized how taking action and consciously learning from it in tight circuits of reflection and action can be a more rigorously ethical approach to research and change agency within society and organizations than the conventional professional paradigm acknowledged.[5] Lewin's stance can be summarized with his epithet: "if you want to truly understand something, try to change it."

Lewin also contributed to the development of a broad field of applied systems thinking and practice, alongside contemporary Ludwig von Bertalanffy, whose paper "An Outline of General Systems Theory" (von Bertalanffy 1950) offered insights into the dynamics of open, living systems which will already be familiar to many Human Ecologists. An excitement of intellectual ferment must have existed during gatherings throughout the 1940s (the Macy Conferences) bringing together such pioneers as philosopher Gregory Bateson, who argued in *Steps to an Ecology of Mind* (1972) that mind is immanent in ecological systems, and cultural anthropologist Margaret Mead who had worked with Lewin on practical problems of rationing during the second world war (reported in Weisbord 2004: 93). These were influential, paradigm-shifting academics inventing a new science of complexity capable of showing how the natural world continually self-organizes.

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4 See http://en.wikipedia.org/wiki/Satyagraha.

5 For an up-to-date discussion on implications for a new professional paradigm, see Chambers (1993) and Gaventa and Cornwall (2008).

Today, we can find management consultants applying complexity theory through their work in organizational change. Examples include Ralph Stacey's work with colleagues at the University of Hertfordshire, UK: "When one moves away from thinking that one has to manage the whole system, one pays attention to one's own participation in one's own local situation in the living present. Perhaps this humbler kind of "management" is what the "knowledge society" requires"' (2001: 235).

Is Action Research a Good "fit" with Human Ecology?

In Stacey's work (2001), and that of other interpreters of complexity theory as it relates to human community and organizational development (see for example Jenny Onyx and Rosemary Jill Leonard 2010, and Margaret Wheatley and Deborah Frieze (2011)), the territories of Human Ecology and action research converge. Attending to personal (*first person*) practice is a central intuition and teaching of the full spectrum of pioneers in participatory consciousness, from the Buddha to Arne Naess and his advocacy for the realization of our deep nature, our *ecological self*. I first began to see these connections through participating in *deep ecology* experiential exercises invented by Joana Macy and John Seed (Seed, Macy, Flemming, and Naess 1993, Macy and Brown 1998). After meeting Macy and Seed at a gathering organized by the Institute for Deep Ecology (USA) in 1995, I realized that their *experiential deep ecology* was essentially a translation for Westerners of Buddhist psychology and practice, especially from Tibetan teaching traditions. Again, something clicked: action research (as integrating first, second, and third person inquiry practices) could become a professional identity capable of describing a wide breadth of activisms, from working within mainstream organizations towards *sustainable community development*, to working in the margins of academia running a radical Masters degree, to continuing my own explorations through the foothills of my (and our) evolving consciousness (Trungpa 1988, Wilber 1977).

Explorers of evolving consciousness—whether of the action research or Human Ecology tribe—value personal inquiry practices at psychological and spiritual depth. Such practices, both perspectives will likely agree, offer immediate benefits to participatory researchers whatever context we are working within. For example, by developing *witness consciousness* (a capacity to observe the ego-in-action-in-the-moment), the quality of facilitation—perhaps the core skill as an action researcher—can dramatically improve. This capacity can be summarized as the ability to stay present in relationship. Put another way, by inquiring into the extent to which we *walk the talk* of embodying a participatory paradigm, we are more likely to be acting with awareness and with authenticity. From this perspective, action research is not so much a methodology as an approach to living life as inquiry:[6]

> Action research must not be seen as simply another methodology in the toolkit of disinterested social science: action research is an orientation to inquiry rather than a methodology. It has different purposes, it is based in different relationships, and it has different ways of conceiving knowledge and its relation to practice. (Reason 2003: 106)

6 "Living Life as Inquiry" is Professor Judi Marshall's phrase (1999: 2): "By living life as inquiry I mean a range of beliefs, strategies and ways of behaving which encourage me to treat little as fixed, finished, clear-cut. Rather I have an image of living continually in process, adjusting, seeing what emerges, bringing things into question … It involves seeking to maintain curiosity … about what part I am playing in creating and sustaining patterns of action, interaction and non-action."

As with Human Ecology (at least, in its *head, heart and hand* Centre for Human Ecology incarnation), an extended epistemology can help us towards this experience of presence-in-action. John Heron's articulation of *four ways of knowing* is often cited by action researchers as authoritative and helpful in validating an extended epistemology in academic (and other) contexts. Heron particularly emphasizes the importance breaking free from ingrained habits of privileging propositional knowledge, by advocating for the equal importance of experiential, presentational, and practical know-how:

> *Experiential knowing* is by being present with, by direct face-to-face encounter with, person, place or thing. It is knowing through the immediacy of perceiving, through empathy and resonance. Its product is the quality of relationship in which it participates, including the quality of being of those in the relationship.
>
> *Presentational knowing* emerges from the encounters of experiential knowing, by intuiting significant form and process in that which is met. Its product reveals this significance through the expressive imagery of movement, dance, sound, music, drawing, painting, sculpture, poetry, story and drama.
>
> *Propositional knowing* "about" something is intellectual knowing of ideas and theories. Its product is the informative spoken or written statement.
>
> *Practical knowing* is knowing how to do something. Its product is a skill, knack or competence—interpersonal, manual, political, technical, transpersonal, and more—supported by a community of practice.
>
> (Heron, quoted in Heron and Reason 2008: 367; emphasis mine)

Heron's *extended epistemology* implies that we can locate knowing in more and more *moments* of life, including those spaces before language exerts its framing power on our experience of being present with each other and the more-than-human world. John Heron and Peter Reason (with another action research pioneer, Bill Torbert) contend that action research represents an *action turn* beyond the naïve realism of modernity, and the deconstructivist dead-end of extreme postmodernity (the *language turn*), which "fails to embrace the challenge, with which each of us is faced, of how to inquire in the midst of action and to how create communities of inquiry within communities of social practice" (Reason and Torbert 2001: 6).

From this stance, we can see how action research and Human Ecology find common cause in exposing the partialness of currently dominant epistemologies and orientations to research. Reason and Torbert (2001) extend their advocacy for an *action turn* beyond post-modernity, stressing the role of inquiry into our day-to-day actions:

> [T]he purpose of inquiry is … to forge a more direct link between intellectual knowledge and moment-to-moment personal and social action, so that inquiry contributes directly to the flourishing of human persons, their communities and the ecosystems of which they are part … [I]nquiry after the action turn aims at timely, voluntary, mutual, validity-testing, transformative action at all moments of living …

> "[P]ostmodern interpretivism" while making an important contribution in moving us beyond the objectivized work of positivism … owes too much to modernist, reflective science … It will require fundamental epistemological, political and spiritual transformations if we are to learn, through constructive, compassionate and validity-testing actions in real-time communities, the nature and quality of inquiring action. For we would argue that the most significant question any human being faces is how to act in daily life, whether or not the questions or the evidence is clear. (Reason and Torbert 2001: 6)

I suggest that Human Ecologists would agree with what Reason and Torbert are saying here. We can establish communities of inquiry rooted in wider communities of place and practice; together, we can learn how to learn better from our experiences.[7] This may, in turn, sensitize us to attune more fully with the evolutionary change dynamics of our lives, organizations and projects … and to nature's tendency toward self-healing.[8]

Taking an attitude of inquiry as we jump more consciously into this evolutionary flow, informed by awareness of the dynamics of complex evolving systems, promises to transform leadership practice for governance, organizations, networks, and communities. Learning how to exercise facilitative leadership to open such spaces seems to me an urgent task, and one that I sought to practice as a co-leader of a revised Masters Degree in Human Ecology with new academic partners from 2000 onwards. It is primarily by working for several years with small groups of very dedicated Human Ecology students that I have been able to draw together the material in the first part of this chapter. Those years were full of powerful learning as I worked with my colleague at CHE, Verene Nicolas, to embed experiential learning and action research into the heart of the MSc. Unfortunately, space restrictions prevent me from sharing these stories here.

Toward Fiery Spirits Community of Practice: Experiments in Action Research

> Quality in action research will rest internally on our ability to see the choices we are making and understand their consequences; and externally on whether we articulate our standpoint and the choices we have made transparently to a wider public. (Reason 2006:1 90)

We now turn to consider some ways in which colleagues and I are attempting to make *good enough* choices as we seek to integrate action research into the development of a Community of Practice hosted by Carnegie UK Trust.[9] This work involves inquiring into how the Trust itself can be a good

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7 Some of the MSc theses I have supervised illustrate this praxis well. For example, David Mowatt, a community worker and jazz musician in Bristol, wrote and directed a community play ("King Cotton") which innovated an approach to social capital development as well as catalysing a community learning process (connecting the past and future of Barton Hill); Rebecca Syrett explored experiences of uprootedness with "army wives" at a local base as part of her health promotion role with the National Health Service (Rebecca is one of several NHS employees who have come to the CHE to study action research with me).

8 CHE graduate Peter Merry has written a song that imagines that humanity has been temporarily caught up in a "sixteen thousand year eddy," out of step with the "real flow" of evolution. He has since worked to establish a Centre for Human Emergence in the Netherlands (see www.humanemergence.nl/intro/) to apply a theory of evolutionary change called Integral Spiral Dynamics, and an aligned application of Communities of Practice thinking called "meshworks" supported by Gaiasoft, available at: www.gaiasoft.com/

9 This is a personal account, which does not necessarily reflect the views of my colleagues or that of Carnegie UK Trust as a whole.

host to the CoP, as well as encouraging CoP participants to integrate action research approaches to support more learningful practice exchange. My aim in sharing this account is to help illustrate how I have sought to bring material developed in a teaching context into the *real world*. In this work, I often have cause to remember Donna Ladkin's advice in her short paper "Action Research in Practice: What the Books Don't Tell You":

> Taking authentic action itself is risky and has unpredictable consequences. Perfect "action research" cannot exist. At its root is the unpredictability and confounding nature of human beings and our systems … within this apparent paradox is a nugget at the heart of doing action research well. The success of the action researcher must in some way be measured by his or her willingness to grapple with messiness and imperfections and the impossibility of ever getting it "right" … while still holding a notion of the possibility of a research method which contributes, as Reason and Bradbury (2001) suggest, to the "flourishing of the human spirit." (2004: 547)

After some experiments integrating action research into my work with the Centre for Human Ecology, I gained confidence in responding to invitations to apply what we had been learning in other contexts—local authorities, community groups, Scotland's natural heritage agency, a UK NGO, and running an 18-month-long Rural Leadership Programme for a Centre for Stewardship based in the village where I live.[10]

Carnegie UK Trust had funded the Rural Leadership Programme, and also invited me to do some additional facilitation work connected with a large Rural Action Research Programme (RARP). This involved facilitating two conventions, and bringing together 40-plus partners to share experience and learn from one another. I then joined the Trust as a full-time employee to develop a Community of Practice (CoP) as a vehicle through which the Rural Programme would undertake its work in coming years. My brief clarified that the CoP should support *Fiery Spirits*—activists, professionals, and policy makers who are building resilient rural communities across the UK, Ireland and beyond. The Director of the Rural Programme summarized the origins of the term *Fiery Spirits* in this way:

> When Carnegie UK Trust was reviewing its rural priorities in 1999/2000, I was invited as a guest speaker to their AGM. I spoke about "fiery spirits" and the trustees were persuaded that it was a good idea to base a programme around them. So we pioneered a small grant fund that enable individual fiery spirits to live their ideas out—it was a great success and the name stuck! (Kate Braithwaite, personal communication, 2007)

The Trust had taken Kate on in 2004 to run both the RARP (supported by the UK Lottery) and a parallel *Commission of Inquiry* into the future for rural communities in the UK and Ireland. The Commission's Charter for Rural Communities (2007) showed that by taking charge of their own destiny, "fired-up" groups of local activists (*fiery spirits*) were learning how to *build on what we have* rather than focusing on the deficits in an area. Assets could be buildings, and also land; they encompass the traditional culture and distinctiveness of a place as well as the hidden talents of local people. Harnessing assets involves a move to long-term *stewardship* thinking, to appreciating local resourcefulness and learning how to build resilience. These lessons were crystallized into a

10 An evaluation of the Rural Leadership Programme is available at: http://docs.google.com/Doc?id=dhh4d3pg_11frspq5.

petal model that described 10 interconnected characteristics of the healthy rural community of the future, and 3 enabling factors that allowed this to come about.

It was proposed that the *petal model* and its developmental DNA, *asset-based* approaches, would provide the focus for the CoP. My background in participatory action research gave me a good start in understanding what this holistic, appreciative approach might involve: unlocking collective potential by focusing on releasing the skills and potential of people and places, and in so doing building confidence such that communities who were *done to* in the past can take control of their own destiny. There are strong resonances with the *appreciative inquiry* action research tradition, as well as with the positive psychology movement.

In early conversations about how the CoP would work, I said that I wanted to try to *walk the talk*—to work in ways, as the sponsoring organization and funder—that embodied this asset-based approach. This would involve creating structures of action and reflection that would enable us to work in close partnership with colleagues, so as to learn, together, how to facilitate the CoP. I proposed that a collaborative inquiry structure could be suited to this task, and went on to host this inquiry through a series of teleconferences and face-face meetings with our partners. We recognized that this collaborative working model was an innovation for the Trust, and therefore risky for its well-guarded reputation. Part of our experiment was therefore to determine what kinds of investment, at which life-stages, the Trust might need to make in order to enable the CoP to work well.

Our proposals fitted with the strategic direction of travel established by Carnegie Trustees who had decided that the Trust would transition from running grants programmes toward becoming an *operating foundation*. Increasing numbers of applicants were being turned down for lack of funds. Rather than continuing to offer small grants to patch up village halls, the reasoning went, perhaps the Rural Programme might refocus and attempt to address some of the systemic causes of rural decline?

The *Community of Practice* model Kate proposed involved making strategic investments in pioneering social entrepreneurs who were prepared to take risks. In this way, new solutions to difficult questions of rural sustainability might be tested, and successes championed to inform policy development by national governments. The CoP would help to ensure learning emerging from these investments was shared widely, in part by exercising the Trust's *convening power* to bring these stories of practical action to the attention of policy makers.

This was exciting! Ahead lay a steep learning curve for the Trust and CoP participants alike. At a personal level, the challenge would involve scaling up my previous practice, and branching out beyond my existing networks to learn about key actors and issues in sustainable rural development across the five jurisdictions of England, Wales, Scotland, Northern Ireland, and the Republic of Ireland. I took into this challenge a determination to put into practice something of what I'd been teaching at the CHE, in particular embedding first, second, and third person action research practices into the work:

From a *first person* perspective, I could inquire into the quality of my own facilitative leadership in pursuing an *asset-based* action research approach to the ongoing design and development of the CoP, as an employee of Carnegie UK Trust. This would be an exploration into my own leadership capacities and blind-spots as I attempted to be conscious of, and work toward equalizing, power relationships. This involved writing down and inquiring into the conceptual frameworks informing the design, as well as keeping a diary of *freefall* writing (a stream-of-consciousness approach to note-taking) of experiences along the way. I would also record on audio or video (with permission) conversations or workshops I facilitated, and I have also invited colleagues to offer me direct feedback about my work when appropriate;

From a *second person* perspective, I envisaged that there would be opportunities for us to support collaborative inquiries (meeting face-to-face and online) focused around key *hot topic* practice themes, as well as with colleagues who had come together to co-host the CoP itself. From my experiences participating in such inquiries, I was keen to find ways to introduce a culture of *critical friend* feedback, and participatory research tools such as participatory video, in service of these inquiries.

From a *third person* perspective, we would be experimenting with catalyzing the emergence of a wide scale learning network, supported by partner organizations (hosts), with face-to-face and online components. Our intention with this work is to *inspire* policy change, particularly by bringing grassroots experience to the attention of decision-makers. Research methods include use of world cafe and open space facilitation at large-scale events to draw a large groups' attention to cross-cutting themes and patterns (this was a techique I had already employed in two annual conventions). With the collaboration of CoP participants where possible, the Carnegie team could then develop short policy briefing booklets (in plain English and full of powerful grassroots stories).

In addition, since 2004, I had been a part-time Doctoral student at the University of Bath Centre for Action Research in Professional Practice (CARRP). As support for my continuing professional development, Carnegie UK Trust contributed to my fees, on the basis that my Ph.D. studies would benefit the quality of work I was able to deliver. The structure and support afforded by CARRP's peer learning approach to supervision has been helpful at many different levels, including informing the writing of chapter.[11]

As I write, the CoP is not yet two years old. In this time, the credit crunch has hit, with sometimes severe consequences for the partners in the work. In addition, Carnegie UK Trustees have recently begun a process of organizational restructuring, driven in part by a significant fall in income from the stocks and shares that reflect the current spending power of the endowment. The story I tell below has, as a result, an uncertain future. I trust, nevertheless, that the story may be of use in inspiring Human Ecologists to embark on similar experiments elsewhere. This seems particularly important at a time when *building community resilience* is fast moving from the margins to the mainstream of political debate in the UK as we collectively face the implications of continuing financial instability, compounded by the mounting impacts of climate change, and amplified considerably by the likely impacts of the end of cheap oil over the coming years. It seems that uncertainty, change, and an *adaptive imperative* now characterizes the everyday experience of most of us, and we need to invent strategies—including support networks such as CoPs—that may help us navigate through increasing turbulence.

I will now briefly review some of the learning from our first two years. This is arranged into three sections, which broadly reflect on and illustrate the first, second and third person inquiry approaches I have introduced above.

Inquiring into Being an Employee of Carnegie UK Trust

At the recently renovated Carnegie Birthplace Museum in Dunfermline, Andrew Carnegie's dictum that *the man who dies rich dies disgraced* is contextualized within a story of a working-class upbringing in a family active in the Chartist movement, before emigrating to the USA. In the 1870s, he founded the Carnegie Steel Company that by the 1890s was largest and most

11 In making the comment, I do not want to underplay the excellent feedback and seemlingly endless patience offered by this volume's editors in the writing process.

profitable industrial enterprise in the world. Carnegie sold it to J.P. Morgan in 1901, and then turned to disposing of his enormous wealth by establishing a global network of 23 philanthropic organizations, of which the Carnegie Corporation of New York (established 1911) is the largest.

In the UK, two trusts had already been established to serve Scottish universities and Dunfermline (established 1901 and 1903 respectively). After the Carnegie Corporation had been founded with the bulk of Carnegie's remaining fortune, the Chairman of the Dunfermline Trust, Sir John Ross, was concerned that Carnegie had overlooked the people of the UK. In February 1913, Carnegie responded to Ross by proposing to transfer 10 million dollars for the Dunfermline Trust to administer for the *welfare of the masses*.

The scale, flexibility, and breadth of potential uses to which this enormous bequest could be put was unprecedented at the time (and remains exceptional today). It fell to John Ross to propose the details of how best to carry out Carnegie's wishes. An account of the first 50 years of the Trust's work suggests that Ross was concerned by the implications of Carnegie's wish that Trustees should only be drawn from Dunfermline:

> I think you will agree that the men in charge of the fund should be men of very wide sympathies and eminent in such varied walks of life as will give them experience of what upon the whole is best for the national welfare. Moreover, they should be men of such positions in life as would secure general respect to their decisions, for unquestionably they will be subject to criticism, especially from disappointed applicants. (Robertson 1964: 19)

Eventually, Carnegie acceded that 16 trustees would be appointed, half from Dunfermline and half from further afield, who could ensure the Trust worked "for the improvement of the well-being of the masses of the people of Great Britain and Ireland," with the proviso that no activity could in any way "lend countenance to war or to warlike preparations" (Robertson 1964: 18).

In its early days, Trustees closely followed Carnegie's wishes, building libraries and providing Church organs.[12] Later, as the momentum of these priorities declined (along with the capital base of the endowment), Trustees began to be more creative. The 50-year history reflects that "great importance has always been given by the Carnegie Trustees to the Trust's part in aiding pioneering or experimental schemes" (Robertson 1964: 249). One example was the Trust's involvement in town planning after the Second World War, amidst the rapid development of new housing estates across Britain. The Trust took a gamble on backing an action research programme called the Bristol Social Project between 1953 and 1961. The purpose was to encourage "local initiative and on getting local residents in a mixture of old and new housing areas to take a greater degree of responsibility for their community life." Our history suggests that:

> Some of the Trustees were not entirely clear as to what the Bristol Project implied, an understandable reaction in view of the fact that the sponsors themselves did not seem to have a single mind about what they were aiming at … As a later Trust Annual Report commentated: "The results will be measured by various people associated with the Project according to their own expectations, for this complicated, difficult piece of action research meant different things to different people. To some it was seen as a survey on which social action could be based; to others it was to provide

12 Carnegie UK Trust is perhaps still best known for the 660 libraries it built in the UK and Ireland. According to "The Carnegie Formula," for a town to receive the building, it had to demonstrate the need for a public library, provide the building site, annually provide ten percent of the cost of the library's construction to support its operation; and provide free service to all. The first was built in Carnegie's hometown, Dunfermline, in 1883.

> social amenities that were lacking in a new housing area; and to others, again, it was an effort to provide a solution to some of the complicated problems confronting those who are responsible for directing and administering the social services of a great city." (Robertson 1964: 230)

As we can see, it has not always been straightforward for Trustees to assess the value of innovative experiments they have initiated. Broadly speaking, the Trust's history demonstrates that there is a history of risk-taking by Trustees who perhaps appreciated the important role that an endowed foundation with a broad remit can afford to take bigger risks than most other institutions. By supporting innovative practice, even though some of the experiments have failed, the Trust's history shows that it has often found itself at the forefront of social innovation in service of the well-being of people in the UK and Ireland, as its founder intended. Understanding this history has given us the confidence to embark on the *Community of Practice* experiment, and re-assures us that there it is legitimate for an endowed foundation to intervene in society in this way, providing we are able to be transparent about our motivations, intentions, and actions. Inquiring, on an ongoing basis, into the integrity, legitimacy, and value of the work is, therefore, an important task for Carnegie's governing body, the Trustees, as well as a day-to-day responsibility of staff. Part of my first person inquiry into my role as CoP facilitator has been to work towards opening opportunities for myself and others to be inquiring in this area.

> New eco-HQ is great—straight onto Pittencrief Park, children playing outside, underfloor heating from ground source heat pump. Luxury. Meeting good people too—new colleagues. Some contracts seem over-generous though—and carbon! People flying London, Edinburgh, etc. Too many meetings in soul-less rooms … need to use the new building more. [Extract from diary, April 2008.]

This passage shows the germ of a series of *action experiments* that I then tried out in the first few months, as the opportunity arose. For example, I was starting to think about our work within the Rural Programme as a prototype of *engaged* philanthropy, and started to explore this idea through conversations with colleagues, and responding to invitations to submit written memos, emails, documents and notes to inform programme development discussions with my team.

Over the coming months, I wrote several papers that attempted to make explicit some of the design decisions we were making, as well as clarifying for ourselves and others the purpose of our work together. Over many drafts (we might say it was a process of *writing as inquiry*), I refined a statement of purpose for the CoP, arriving at the following forumulation:

> Fiery Spirits Community of Practice (CoP) is an action research based programme of learning and exchange for activists, professionals, and policy makers who are building resilient rural communities. It seeks to catalyse systemic social change by creating opportunities for social innovators to connect, challenge, and learn from each other and their own practice.

As these papers developed, I began to become more curious about whether other foundations had also attempted to apply CoP approaches to their work. After a brief survey, it seemed that few had as yet experimented in the way that our team were doing, but that a large literature was blossoming regarding the role of CoPs in government; for example, a paper by William Snyder and Xavier Briggs (2003) that decribes the benefits of CoPs for governments and large businesses.[13] Drawing

13 The paper was referenced in a good introduction to CoPs, written by a friend for a South African local authority (Bojer et al. 2005).

on their writing seemed a good way to communicate our intentions with Trustees and potential collaborators. It is written in fairly clear, *business* English and supported a view that CoPs tend to progress through distinct life-stages as they develop:

> *Discovery Stage 1*: Loose network of people with similar issues and needs.
> *Coalescing Stage 2*: Members come together and launch a community.
> *Maturing Stage 3*: It forms an identity, takes charge of its practice, and grows.
> *Stewarding Stage 4*: The community is established and acts as the steward of its domain.
> *Legacy Stage 5*: The community has outlived its usefulness and people move on.

Although this *life stages* model seemed useful in helping to communicate to colleagues some of the *black box* thinking behind my work as the CoP facilitator, I felt frustrated that it didn't capture the essence of what we were trying to achieve. I recalled an early conversation with my team where we had agreed that we would attempt to build relationships with co-researchers in the CoP who saw an opportunity to help advance the bigger goal of building resilience and well-being for people (in an echo of the Hawkin quote I began this paper with). I then realized that Snyder and Briggs' dry language and focus on the value benefits that could accrue to the host organization of CoPs seemed to be too distant from the vitality we were aiming to achieve through working with a collaborative ethos.

Holding this tension in mind over the course of several days, I brought it to a conversation with my PhD supervisor, whose advice was to stop *telling* him about the work we were doing, but to put myself more up front as an action researcher, *showing* more of how I was inquiring day-to-day and moment by moment into working collaboratively, if that was my goal. I realized that I had lost the ability to stay inquiring over previous weeks and months, especially in response to an increasing workload (and the sleeplessness that came with the birth of a son). The inquiry eventually helped me to articulate for colleagues that we were attempting to design an approach where the *whole* would add up to more than the sum of its parts—to create the conditions whereby a *system of influence* might emerge capable of helping to shape policy and practice effecting the well-being of rural communities.

I read back into the CoP literature to try to glean some tips about achieving such an outcome. Jean Lave and Etienne Wenge's originally coined the term after reflecting on work with colleagues at the Institute for Research on Learning (IRL) at the Xerox Palo Alto Research Centre, an interdisciplinary research group interested in constructivist models of learning (such as we had been developing with the MSc at the Centre for Human Ecology).[14] In their early writing, Lave and Wenge had focused on advocating the legitimacy of *peripheral participation* (1991) by people who hovered on the edges of learning networks. They suggested that an appropriate way to understand *situated learning* is to understand it as an evolution of apprenticeship models, which stress learning on the job with people who have been there before. With this insight in mind, they defined a CoP as "… a set of relations among persons, activity and world, over time and in relation with other tangential and overlapping Communities of Practice" (Lave and Wenger 1991: 98).

In this early view, informal learning is the natural result of participation in a community that shares and develops common domains of know-how and practice. But as I read into more of the literature on CoPs, it became clear that the focus shifts toward learning from practical applications by (mainly) consultants to corporate clients. From this shift comes a new raft of CoP definitions,

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14 Constructivism posits that knowledge is mutually "co-constructed" (or "socially constructed"), and built on Vygotsky's (1978) thinking about how individuals learn within communities.

which resonate and speak to the emergence of a new field of *knowledge management* promoted by Business Schools through the 1990s: "Communities of Practice are groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermott and Snyder 2002: 4).

The inquiry reached an *aha* moment in March 2010 when I wrote out the following note:

Is our CoP "Wild" or "Tamed"? March 2010

I've gone back over some of those early papers on CoPs and read more recent critiques. Alongside the uptake of these ideas in the private, public, and increasingly NGO sectors, there are now some serious critiques emerging of Wenger et al.'s CoP theory. Chris Kemble (2006) suggests that as CoPs *go mainstream*, becoming integrated within managerialist ambitions that foster closer and closer ties between corporate power and governments, they have lost touch with the qualities of *wild* knowledge (tacit learning happening outwith formal institutional spaces), which characterized earlier framings of the concept:

"Communities of Practice" have undergone a transition from being a heuristic device to a theory and from a theory to an application … [there is] a dislocation between the theory developed in the early work and that which is applied later … Communities of Practice have simply become a tool that can be used to produce a particular outcome; much of the early theory concerning emergence, enactment and the ambiguous nature of the relationship between community and host organization has been lost' (Kemble 2006: 229).

Kemble draws on the paper by Snyder and Briggs (2003) that I used for the external evaluators to evidence his point. Written for the IBM Center for The Business of Government, the author's definition of a CoP is geared at encouraging government managers to recognize and adopt CoPs as a knowledge management solution that enables departments, companies, and wider society to work together:

Communities of practice steward the knowledge assets of organizations and society. They operate as *social learning systems* where practitioners connect to solve problems, share ideas, set standards, build tools, and develop relationships with peers and stakeholders. (Snyder and Briggs 2003: 7)

To put it bluntly, I now see that I had found Snyder and Brigg's paper useful because its language more closely reflects that of the policy world that the Trust aspires to influence. Here is the point at which the worlds of policy and practice jar. Does this reflect a shifting emphasis back to a more managerialist, policy stance by the Trust? And if so, where does that leave our original intentions with the CoP? Kemble's analysis, supported by Cox (2005), reinforces the need to be open, clear and explicit about the democratic and liberatory values if the Trust wants to keep qualities of the *wild* alive within the CoP—the bits that will keep it alive and zesty.

This writing helped to initiate a new cycle of inquiry focused on noticing the ways in which we choose to frame our work, and in particular whether the CoP is able to retain enough *wild* quality so as to be vivid, alive, and meaningful for people who volunteer their time and energy to come to events and engage with the Website.

In this section, we have traced a short story of the history of the Carnegie UK Trust, and some moments from an ongoing first person inquiry into the quality of my own facilitative leadership in pursuing an *asset-based* action research approach to the ongoing design and development of the CoP, as an employee of Carnegie UK Trust. This is an unfinished story, but it does begin to show how I have attemped to develop iterative processes of reflection and action focused on particular themes within this work context. I have used diary excerpts to illustrate aspects of my inquiry

approach, and in the process have offered some introduction to the purpose, design, contested and *messy* nature of the work we are undertaking as an experiment in *engaged philanthropy*.

I will now look more closely at how we have begun to facilitate second and third person inquiries within the Community of Practice itself.

Figure 19.1 Visualizing balancing Chaos and Order—picture inspired after attending an "Art of Hosting" event

Developing a Community of Practice Focused on Building Rural Resilience

In the late 1990s, keen to explore practical tools that applied insights from ecology—in particular the change dynamics of complex adaptive systems—to the context of human communities of place and interest, I connected with an international group of young facilitators called the *Pioneers of Change* who were actively exploring this question, and who were developing a facilitatation approach that was heavily informed by Margaret Wheatley (1999) and Dee Hock (1999). Over time, some core practices and insights emerged as an *Art of Hosting*[15] community of practice. My *peripheral participation* in this CoP shaped my values, perspectives, and practice more than I realized at the time.

Wheatley has proposed a "life cycle of emergence" (Wheatley and Frieze 2008) whereby social movements (or "systems of influence") emerge through complex and nonlinear interactions of interconnecting communities of practice, which themselves emerge from social networks. At first, people are attracted to join networks because they satisfy individual needs—such as for belonging, to develop work, or to make contacts. These needs will vary over time, as will different networks' effectiveness in meeting them. Network membership is therefore quite fluid. Wheatley and Frieze propose that some networks can crystallize into Communities of Practice when the time is right:

15 The "Art of Hosting" Website and course details are available at: www.artofhosting.org. Some of these colleagues have gone on to work at Reos Partners with Adam Kahane whose book *Power and Love* (2010) also explores the place of working with archetypal energies similar to those summarized by "order and chaos" (or we might say the masculine and feminine principles) in facilitating complex, messy and "stuck" systems.

> [S]maller, individuated communities can spring from a robust network. CoPs are also self-organized. People share a common work and realize there is great benefit to being in relationship. They use this community to share what they know, to support one another, and to intentionally create new knowledge for their field of practice. These CoPs differ from networks in significant ways. They are communities, which means that people make a commitment to be there for each other; they participate not only for their own needs, but to serve the needs of others. In a community of practice, the focus extends beyond the needs of the group. There is an intentional commitment to advance the field of practice, and to share those discoveries with a wider audience. They make their resources and knowledge available to anyone, especially those doing related work. (2008: 5)

Just as Snyder and Briggs propose a pattern of emerging maturity within the life of CoPs, Wheatley's framing is altogether more ambitious, suggesting how CoPs themselves might represent a part of a life stage of the emergence of a global movement capable, as Hawkin suggested in his address to the Bioneers (quoted at the top of this paper), of transforming global society towards a more sustainable path. Wheatley's work helps me to bridge a radical Human Ecology perspective with identifying the possible value of working towards establishing a healthy CoP with Carnegie UK Trust.

For Wheatley, CoPs may evolve into a system of influence, with a mature set of practices, strong relationships, and habits of mutual support, and a voice capable of winning resources and changing minds in society at large. She suggests that such a shift could happen quickly—a *tipping point* process can mean that pioneers who have been long marginalized can find themselves at the heart of policy making.

Wheatley and colleagues emphasize qualities of leadership that can help steward the emergence of such systems of influence:

> As leaders and communities of concerned people, we need to intentionally work with emergence so that our efforts will result in a truly hopeful future. We focus on discovering pioneering efforts and naming them as such. We then connect these efforts to other similar work globally. We nourish this network in many ways, but most essentially through creating opportunities for learning and sharing experiences and shifting into communities of practice. We also illuminate these pioneering efforts so that many more people will learn from them. We are attempting to work intentionally with emergence so that small, local efforts can become a global force for change. (Wheatley and Frieze 2008: 6)

This process of working *intentionally with emergence* is well illustrated in the story of the invention of VISA international as recounted by Dee Hock in his book, *Birth of the Chaordic Ag*e (1999). Hock and colleagues set out to create a new kind of global organization, capable of coordinating hundreds of partners of all sizes, across multiple currencies and jurisdictions. Hock describes a pivotal moment during a design workshop where it dawned on him that, although an organizational model capable of fulfilling the groups' ambitions hadn't yet been invented in the corporate world, nature was already well ahead of the game:

> With the dawn, half-awake and surfing the shores of consciousness, came a fascinating question. Could such an organization be patterned on biological concepts and methods? … Such an organization would have to evolve, in effect, to organize and invent itself … What if we quit arguing about the structure of a new institution and tried to think of it as having some sort of genetic code? How does genetic code in individual cells create recognizable patterns—platypus

> and people—palm tree and pine—minnow and mouse—yet never duplicate a single creature, leaf, blade of grass, or even snowflake? How does nature create infinite diversity within infinite patterns of infinite complexity? If institutions have no reality save in the mind, might their genetic code have something to do with purpose and principles? (Hock 1999: 136)

Hock went on to develop a language of *chaordic design* involving two elements that support life's self-organization: chaos (creativity) and order (structure). Too much chaos and a system degenerates, loses its way; too much order and things become over-controlled, squeezing life and innovation out of systems. *Open Space* events illustrate these principles well—they seek to provide enough structure for conference participants to take responsibility for making sure they get what they need from the event, in the same way that a trellis might give a climbing pea rungs up which it can climb, without specifying exactly which rungs it will cling on to. Of course, not all plants need trellises and open space events aren't always the appropriate solution for an event—in diverse contexts, and at different times in organizational life histories, different kinds of facilitation moves will help to restore a balance.

Beyond drawing our attention to the dynamics of *chaos* and *order*, Hock went on to propose a series of organizaitonal design steps that would echo nature's dynamic balancing act between these poles. The first step is to define a crystal clear statement of purpose for the organization (or event, or community). Once agreed, initiating stakeholders agree a set of working principles through which the purpose might be enacted. The next step is to then identify the people to invite into the organization on the basis of agreed purpose and principles. Strategies, tactics, and other elements of organizational programming can follow through cycles of action and reflection.[16]

Embedding Action Research within the CoP: Working with "Host" Partners

We broadly followed this framework in the early steps of CoP design.[17] Having established the purpose for the CoP (see above), we set about identifying *inaugural hosts* to help us. These would be organizations, most of whom we already had a good working relationship with as a Trust, who satisfied a set of criteria that included being able to demonstrate that they were already working in asset-based ways (particularly regarding *hosting* participatory events), and were ready to work collaboratively to explore how the Rural Programme could step up our impact for the benefit of grassroots people with whom our partners were actively engaged. These inaugural hosts were:

- *The Eden Project*, based near St. Austell in Cornwall. The area has suffered a major decline associated with the collapse of major industries (clay mining, fishing), and in a spectacular entrepreneurial flourish, the Eden Project converted a disused clay mine into one of the UK's most well known tourist attractions and social enterprises. Less well known is the work of Eden's outreach team, who aim to bring Eden's spirit of innovation to surrounding communities by reinventing community consultation. Instead of dry presentations and boring *stickies* exercises, the team integrate their work into local festivals, rolling out the bunting, and inventing fun exercises that help people think creatively about the future (through story-telling and the arts, for example). During 2009, the Labour government decided that an *ecotown* would be built on Eden's doorstep, and the team have now thrown

16 Hock's "Chaordic" approach is laid out at: www.chaordic.org/

17 This is based on a platform provided by ning.com, with the addition of a monthly e-newsletter which encourages all site members to click through to the Website—it features a guest editorial every month, a "video of the month," and flags up specific content likely to be of interest to the membership. By August 2010, the site had 700 members.

themselves into engaging with that process, sharing learning from their work to ensure local community voices shape the proposals with the wider Fiery Spirits network.

- *Tipperary Institute (TI)*, based in the heart of rural Ireland, a Higher Education college with an explicit remit to conduct rural development work alongside formal teaching. The TI team pioneered an approach to *integrated area planning* in County Offaly, which has successfully enabled local people, politicians, businesses and council officers to work together. With the Irish economy facing difficulties, TI was keen to share its learning about developing the integrated area planning approach so as to be able to bring a stronger focus to issues of building community resilience, especially for *traditional* rural communities.
- *Falkland Centre for Stewardship*, a charity based within a private estate in central Fife, Scotland, hosts an annual festival called the *Big Tent*, as well as working towards accelerating the localization of growing, distributing, composting, and celebrating food across Fife. This work has begun by investigating the brittleness of the existing food system in Fife, alongside a sister project called the *Fife Diet* where several hundred local families attempted to eat mostly Fife grown food for a year since 2008. The Centre for Strewardship team wanted to share their learning about working on food issues in Fife with the wider network, and were also able to offer the grounds of the estate for events.
- *The Centre for Alternative Technology*, based in mid-Wales, is a visitor attraction promoting low-carbon lifestyles, as well as doing research and outreach on sustainable technologies across the Dyfi valle. Their contribution to the CoP to date has been researching (through a series of workshops) and then publishing a report on *Zero Carbon Britain*, which has affirmed the possibility of making such a transition, given the political will (among other things) to alter land use patterns and reduce meat consumption by up to 80 per cent.

We envisaged that four *inaugural hosts* could introduce, between them, a rich mix of practical action and content; that there would be synergies on which to build; and that they would all offer great venues, full of character and opportunities for immersion in actual examples of innovative work during the CoP gatherings they host. Along the way, new *hosts* are joining the CoP, including a local authority investigating how to work with local social enterprises to *co-produce* rural services (a contested topic during an age of large public sector cuts), and a community buyout group from the Highlands of Scotland.

Through monthly teleconferences and face-to-face gatherings every six months or so, our hosts meet to show each other their approach to putting on good events, to identify opportunities for joint work, and to revisit statements of purpose and principles (the *chaordic* approach) which inform our work together.

At our third meeting together at Eden, Cornwall, in April 2009, we drew a *river of hosting* timeline—six large tables were brought together covered by flip-chart that was sticky-taped together. Twenty-five of us clustered around the tables took pens and drew the *tributaries* that were now flowing into one larger river together. The aim of the exercise was to begin to develop a common language and understanding of what we mean by *hosting*, building on the diverse experience of our different partners to date. The exercise helped make visible and affirm specific strengths different partners bring to the table. It also enabled us to hear individual voices and perspectives, rather than just one well-rehearsed narrative of an institution's history. It was a powerful experience, enabling people to voice stories that hadn't been heard before, even by long-standing colleagues from the same organization. The exercise *opened space* for reflection and in so doing helped us glimpse some of the possibilities for our work together. It also enabled us to articulate potential perils

ahead. Several of us drew rocks, rapids, and monsters that we envisioned may be waiting around the corner.

Looking to the Future: Towards a "System of Influence"?

> A participant who had never "blogged" before, with encouragement, posted up a story and video showing how the Isle of Eigg has pioneered a whole community system of renewable energy generation. Every household has a trip switch that prevents use of more than 5KwH (businesses can use 10KwH). The blog caused a ripple of interest, and several members were drawn to respond who had been inactive until that point. The author received invitations to speak at upcoming Fiery Spirits events and her provocative questions about "if we can do it, why can't the rest of the UK?" seems to have touched a collective nerve. The Eigg story is becoming a metaphor for citizen power in every sense … and when amplified by a larger story ecosystem on the theme of community ownership of energy (for example, Gigha's dancing lady community-owned wind turbines), we see a policy influencing process which has little to do with a conventional representative qualitative research study, but something that is somehow more potent for its attunement to the messy, action-filled dynamics of real life as "fiery spirits" experience it, day to day. In October 2009 Carnegie UK Trust launched a "Manifesto for Rural Communities" in central London, highlighting the Eigg film for members of parliament who are writing manifestos to underpin a forthcoming general election. In response to the presentation, several attendees joined fieryspirits.com. (Excerpt from *CoP briefing paper*, February 2009)

At the time of writing, several hundred people have joined our social networking website. Some come to prepare for, or follow up on, a particular event through a dedicated *group* within the Web structure; others join after hearing about the network from friends or finding us through a Web search.

We are in the early stages of understanding how the Web might become a more effective medium for practice exchange and learning, and have undertaken a series of experiments to this end.

Carnegie staff and hosts have created videos and audio recordings from events we have run, and are becoming more accomplished at editing these into provocative and interesting narratives with the capacity to inspire Web users (as well as to be used as resources during events). During 2010, we have experimented with developing our own approach to *digital story-telling* that borrows ideas from learning history methods, but is much simpler and quicker than established learning history processes. Dr Margaret Gearty supported this work as a Fiery Spirits *catalyst*.

I encourage users to *blog* about their news, and have begun to share an action research *parts of speech* tool from Bill Torbert's *action science* methodology to help with this. The parts of speech are *framing, advocating*, *illustrating*, and *inquiry* and the suggestion is that, by paying attention to including each element in a communicative act (such as by making a blog post), we are more likely to generate energy and interesting exchanges.

We regularly *spring clean* the site, inviting participant feedback via Surveymonkey online questionnaire. This work involves paying attention to the design of the front page (getting the right balance between demonstrating lots of useful content, and over-cluttering the screen), as well as attempting to force the Ning platform to perform functions that are beyond the usual requirements of a social network (such as hosting content libraries). It is becoming clear that we have not yet discovered an ideal online platform for our work, but that the social networking tools are

accessible enough to keep people coming back to the site, especially after a prompt from a monthly e-newsletter that is full of links to new and upcoming content.

Into our second year, it has become clear that working on *rural resilience* is a very wide remit. There are several separate *communities of practice* emerging under the Fiery Spirits umbrella, all led by people with particular skills and knowledge (most of whom are sponsored to do so by the Trust). Our hosting team at Carnegie have also become more confident in taking a leadership role: we were more cautious in the first year, seeking to ensure that the CoP wasn't misunderstood as a vehicle only for Carnegie-led agendas. For example, during 2010, the Rural team have worked with colleagues on several *policy* booklets, launched at participative workshops and then distributed widely. In addition, our host partners are increasingly being invited to national forums to contribute to policy debates in the UK as well as further afield (for example, Paul Allen from CAT recently visited the USA to share the Zero Carbon Britain work in Washington DC).

Into the future, I see a need to reflect more deeply about how to deepen the quality of third person inquiry across the Fiery Spirits system. In recent years, other action researchers have begun to explore this territory in some depth. For example, Danny Burns (2007) has sought to define a discipline of *systemic action research*:

> In large system work we are concerned to understand patterns that emerge at the level of the system and the dynamics of change that bring them about. These are often the result of unintended consequences arising from the fact that a single action can have multiple impacts on different places; that interventions often do not have a linear effect; and that cumulative impacts might produce the opposite outcome to individual impacts. (Burns 2007: 28)

Burns goes on to articulate facilitation and evaluation strategies that, at root, challenge some conventional assumptions (in the dominent reductionist paradigm) of, for example, the need for *best practice* examples that can be then *rolled out* in a mainstreaming process. Given the Carnegie trustees emphasis that our work should shape public policy, systemic action research offers a potentially nuanced and sophisticated set of inquiry approaches which suggests that:

- Effective sense making and sustainable change within complex systems will be dependent on *Improvisational change strategies*.
- *Parallel development* may be a more constructive framing for change processes than either top-down planning or consensus-based planning.
- *Resonance* may be a more useful concept than representativeness for both identifying issues of concern and possibilities for mobilization (Burns 2007: 54).

With Fiery Spirits CoP, I would suggest that we are hosting a complex and nonlinear living system of relationships, many of which will not be visible to any one perspective at any particular time. Looking to the future, we are considering how to integrate Burns's insights into our evaluation strategies. This may involve experimenting with some systematic mapping of networks within the Fiery Spirits system, towards a form of *network action research* such as Foth proposes:

> … network action research moves away from a pure homogenous model of community and acknowledges the fluid, dynamic, swarming, chaotic qualities of social networks that are present in communities. The primary objective of network action research is to map the existing (formal and informal) networks that operate within the community and initiate small participatory action research projects within each of them. The task of the action researcher is then to link and harness

> each of their sub-networks of inquiry to form a larger networked community of practice. (Foth quoted in Burns 2007: 17)

In this section, we have begun to outline ways in which third person action research might help us develop the CoP into the future. This exploration has built on similar, short discussions introducing the use of first person inquiry in developing an effective practice of facilitative leadership as an employee of the Carnegie UK Trust, and an overview of some ways in which we have designed the CoP to enable a proliferations of second person collaborative inquiries on *hot themes*.

As we now move to conclude this chapter, I advocate that the work I have described constitutes an example of applied Human Ecology, focused as it is on working from a participatory paradigm to help create the conditions for the emergence of more resilient, more sustainable communities. This is *messy* work, and there is much territory still to be explored within the institutional and personal limits that bound our work. Current questions *for us* include how to balance a *light touch* facilitation approach with an emerging dynamic of the Trust taking a stronger lead within the CoP. Another way of putting this might be *is it possible to find a balance between a "wild" and a "tamed" CoP?*

Within the detail of the facilitation tasks involved with sustaining the work, there are a myriad other inquiries to attend to, not least the complexities of designing an online environment that is sufficiently functional, attractive, and lively to engage a diverse and dispersed constituency over time. To help with this task, we are exploring facilitation models that promise to help us steward (or *host*) a complex living, self-organizing system.

We are also attempting to be mindful about the opportunities (as well as blindnesses) that Carnegie UK Trust's sponsorship of the CoP offers. In particular, we are becoming more aware of the Trust's history of experimenting with novel approaches to philanthropy, and are understanding our work as such an experiment. We state on our website that "This is pioneering work for a philanthropic trust. We are learning-by-doing, and invite collaborators to journey with us, recognizing there are many opportunities to learn from each other along the way" (Carnegie UK Trust Website, accessed: October 2009).[18]

18 As this chapter neared publication, evidence that our experiment may be working came when the CoP published a handbook called 'Exploring Community Resilience'. Within three months, it had been downloaded/viewed over 20,000 times. It is available from http://www.bit.ly/comresilience-download.

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Editors' Afterword

A Research Agenda for Human Ecology

Writing in 1934[1], H.G. Wells, one of the greatest science fiction writers and futures thinkers of the twentieth century, noted that if he 'belonged to the now rapidly vanishing class of benevolent multi-millionaires' he would create 'a number of chairs for the teaching of an old subject in a new spirit'. He confesses, 'It took me some years to grasp the magnitude of my own realization', but that, 'sooner or later Human Ecology under some name or other, will win its way to academic recognition and to its proper place in general education'.

Pressing his point as the storm clouds were moving into place for World War II, he said:

> I declare that the greatest present dangers to the human race are these governess-trained brains which apparently monopolize the Foreign Offices of the World, which cannot see human affairs in any other light than as a play between the vast childish abstractions we call nations. There are people who say the causes of war, nowadays at least, are economic. They are nothing so rational. They are hallucinatory. Men like Grey, Curzon and Tyrrell present a fine big appearance to the world, but the bare truth is that they are, by education and by force of uncritical acceptance, infantile defectives, who ought to be either referred back to a study of the elements of Human Ecology or certified and secluded as damaged minds incapable of managing public affairs.

A scan through today's leading Human Ecology journals shows that much of our discipline has yet to make that leap beyond purely rational analysis. Most of the published articles engage with human *circumstance* – with its geography, sociology, anthropology and biology – but few wrestle with the human *condition* – an endeavour that requires engagement not just with reason, but also with the heart as a way of knowing.

At first glance Wells' words may indeed seem 80 years out of date, at least to those who take their bearings from the mores of advanced modernity. But most indigenous and traditional peoples, fixed on reference points more human and ecological, would consider otherwise. The governess may have mostly had her day, but the child-rearing practices and the values embedded of the rich and powerful continue to impact life on Earth in ways consistent with 'infantile defectives' and 'damaged minds'. Today, it is less 'the vast childish abstractions we call nations' wielding power than the simulacra of corporations created to stimulate wants more than to satisfy real needs. As was seen at the UN's summit on climate change in Copenhagen in 2009, even the most powerful national leaders in the world proved powerless, or disempowered, to curb the drivers of climate change.

Infantilism of and damage to the mind is of the essence here. Corporate marketing taps into such primal drivers of behaviour as love, fear, sex, hope, anxiety, guilt, pride and insecurity. Instead of maturing in our relationship to such emotions, a culture forms of wallowing in them. The baited

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1 H.G. Wells (1934). *Experiment in Autobiography*. Online at Project Gutenberg Canada: www.gutenberg.ca/ebooks/wellshg-autobiography/wellshg-autobiography-00-h-dir/wellshg-autobiography-00-h.html accessed 5 November 2010.

corporate hook dropped into the psyche is then rewarded in a positive feedback cycle – what J.K. Galbraith more than 50 years ago in *The Affluent Society* saw as the greatest danger of our economic system and called 'the Dependence Effect'. We become a world driven by oil-fuelled consumer addiction. This in turn drives wars and the degradation of the Earth's life support system. As such, the global problematique cannot look only at human circumstances on the planet. It cannot look narrowly at the interactions between the social environment and thee natural environment. It must, as well as doing these things, look deeply. It must address the fundamental questions of what it means to be a human being, and while rational enquiry is a vital tool in such inquiry it cannot be considered adequate on its own. Such 'head' must be integrated with the 'heart' based insights of the poet, artist and spiritual voyager. It must be grounded with the 'hand' based epistemologies of the artisan, the farmer, the manager and the carer of children. We cannot stop the planet and get off. But we can start to break through Wells's 'hallucinatory' forces that have set it spinning towards nemesis: a nemesis that may still be a little way off for the rich, but is already well known to the poor, and to plant and animal species on the brink of extinction.

Here, then, is the challenge to Human Ecology of our times. As the American poet Audre Lorde puts it in her collection, *Dream of a Common Language*:

> My heart is moved by all I cannot save:
> so much has been destroyed
>
> I have to cast my lot with those
> who age after age, perversely,
>
> with no extraordinary power,
> reconstitute the world.

Our task in Human Ecology research today is to draw up an agenda that can take forward this reconstitution through the twenty-first century. Such research needs to link particular issues with the emerging big picture of what it means to be human beings living with other species. Our values need to be those not so much of globalization's homogenised market surface, but of the One World village. This is about the ongoing emergence of what it means to be the human family on Earth. It concerns how we both mitigate and adapt to environmental change.

In Paulo Freire's sense, our research must have as its objective conscientization as the raising of both consciousness and conscience in a praxis of iterative action and reflection. As such, the Human Ecologist's work is shamanic, concerned with the alchemical transformation of base states of reality into that which can call back and feed the soul.

The realm in which we move must be scientific – in both its natural and social senses – but also mythic. The story of our times is being lived through us. Are we up to the part? Can we, like Joseph Campbell suggested, move from the youthful *departure* stage of life and career where most of what we are is conditioned by our backgrounds, into *initiation* in the bruising rapids of life, and through to the *return* that brings fresh life back into the community? Indeed, is there a sense that our species itself, life on Earth itself, is passing through that initiation phase, and that it matters not whether we succeed or fail; what matters, at the mythic or spiritual level, is that we develop courage, strength of heart, the capacity to love? Of course, it is not fashionable to think of the human condition teleologically. But as another American poet, Alice Walker, reminds us:

While love is unfashionable
Let us live
Unfashionably…
Let us be intimate with
Ancestral ghosts
And music of the undead….
Let us gather blossoms
Under fire

To gather blossoms means that blossom itself must be the object of our research. It is not acceptable for Human Ecology to be an enclave for time-servers and pen-pushers. We must dare to hold out for a vision of a beautiful world. As Aldo Leopold said, beauty must be the touchstone of ecological integrity. To do that will requires standing up to those who trample the blossoms, or steal them from others. That is why we must develop the courage to operate under fire.

Such research and its application cannot be sustained alone. This means that the Human Ecology of the twenty-first century must be more than just the study of human communities. It must also be their practice, and specifically, the development of scholarship in Human Ecology as *communities of practice*; communities that kindle the resilience necessary to help reconstitute the world, come-what-may in the come-to-pass.

We must also shift the temporal horizons within which we undertake research. Funding requirements mean that so much of what currently passes as research is carried out on a very short temporal horizon. We must be part of a movement from short wave to long temporal wavelengths. What we are called to work on – to search, to re-search (to search again, more deeply) the human condition, is work that as Alice Walker's lines suggest, engages the ancestors and those yet to be. Our time spans must be multi-decadal, intergenerational, and even evolutionary in scale. This cannot be done within individualistic paradigms of research. It is only possible as part of a movement of whole peoples. This indigenous peoples understand well. No bard speaks or plays apart from the deep movement of the spirit of his or her peoples. Again, we touch on the mythic. Our tribe is the world. As the Ojibwe elder Walt Bresette once said at an academic conference on ecological resistance and spirituality at the University of Wisconsin in 1995, 'Shut the doors! The doors are closed. That is how the world is now. We are all inside now. We must all learn to be indigenous now'.

Such research can only be undertaken by scholars who have embarked upon the inner journey. We note that in most societies of the world knowledge developed as something sacred. Only in the west has it developed as something copyright, bounded by so-called intellectual property rights and the ubiquitous trademark ™ symbol that we might better interpret as 'that's mine!'

Many of the contributors to this volume sit on the margins of academia and of academic Human Ecology. As the editors, we appreciate that you, the reader, and Ashgate our publisher, have given them a hearing. We think it would be fair to say that our collective call is to call back the sanctity of knowledge. To re-embed knowledge in the fabric of this world, to heal this world, to make a life worth living. We could list potential research topics – the psychology of consumerism, eldership and mentoring, trauma and calling back the soul – but the topics would be too numerous, and too limited by our own limited perspectives. We leave it to your integration of reason with imagination. Perhaps it is us all, as H.G. Wells said, who must be 'referred back to a study of the elements of Human Ecology'.

We close by making one last point. This volume has arisen, in part, out of criticisms of mainstream Human Ecology. Drawing mainly on indigenous and traditional insights we have

argued that it is time to turn the clod; time to deepen our field to integrate detail in the study of the outer life with a renewed attention to complementary depth from within.

In making such a critique it is easy to appear ungrateful to those who have paved the path to where we now stand. To fall into that trap would violate the very ethos for which we are pressing. We all walk in the shoes of our time. And so, thank you to those who have gone before us. Thank you, also, to those who may not follow in the directions we propose but who, at least, refrain from blocking its way. We are living in a complex world with many positions along a long front. We need diversity, and we need it in Human Ecology. Let us go now. The blossoms await.

Lewis Williams
Rose Roberts
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January 2012.