The Ouroboros (Part 1): Towards an ontology of connectedness in ecopsychology research

Margaret Kerr & David Key

The Ouroboros has been said to have a meaning of infinity or wholeness... [it] is a dramatic symbol for the integration and assimilation of the opposite (Jung, 1955-6: 513).

Abstract

In this paper we explore a new ontological foundation for ecopsychology research. Central to ecopsychology is the idea of the ecological self – the human self as a deeply interconnected part of wider nature (Naess, 1986/1995). The positivist methods which dominate the biomedical and natural sciences have no way of studying this interconnected self. Despite this, there is a risk that fears about mainstream scientific credibility may lead ecopsychology researchers to embrace a positivist approach. In the rush to gain apparent scientific acceptance, the heart of ecopsychology could be lost. We argue here that a radically contextual ontology is needed to protect the heart of ecopsychology. From this foundation, in our second paper, "The Ouroboros (Part 2)",[1] we go on to develop an alternative – transpersonal – methodology for ecopsychology research.

Keywords: Ecopsychology, gestalt ontology, heuristic research, intersubjectivity, unconscious.

Positivism and ecopsychology

One of the stimuli for writing this two-part paper was a conversation with a medical school professor. Although the professor was personally interested in ecopsychology, he apologised that his institution would be dismissive of the subject due to its lack of an "evidence-base". He explained that research on the link

[1] See this issue, pp. 61-75

between environment and human health was already being undertaken at his school – in a laboratory designed to measure the physiological effects of factors isolated from natural environments. The factors to be tested included the sound of running water and different shades of green. It was obvious from his example that by "evidence-base", he meant a certain kind of quantitative evidence, which is familiar to biomedical scientists.

We felt worried by this clinical dissection of nature because, as ecopsychologists, we have found that working with nature as a whole system (including humans) provides a better understanding of human ecological health. Research methods that isolate one "part" and cut away its relationships with the rest of the system can be self-defeating and produce findings that are seriously restricted.

Much of the research that currently attracts funding in psychology and health is based on a paradigm like that described above; where physical phenomena are studied objectively, in isolation, in a search for causal laws and definitive truth. This paradigm is known as "positivism". It has its origins in the early 19th century and is the dominant philosophy behind mainstream scientific research today. The core tenets of positivism are shown in Appendix 1.

Unfortunately, positivism often hides the processes that separate humans from the rest of nature. In the worst case scenario, it even disconnects phenomena from their whole context and forces them to be seen as artificially separate parts, as in our example of the medical school research. In this way, positivist methodologies mirror many of the disconnecting patterns of industrial culture, which ecopsychology aims to challenge. Vital information, that could help to develop a sustainable culture based on interconnectedness, is dismissed as invalid or simply missed altogether. To do justice to the full nature of ecopsychological phenomena we need a new methodology that allows interconnections to be clearly seen.

It would be easy for ecopsychology to resign itself to the belief that positivism was the only way to gain acceptance by the mainstream academic community. However, this strategy would keep us trapped in a culture of disconnection. We need to be bold enough to break free. But as ecopsychologists we must also keep our relationships with the academic research community, as this is where our political power lies. To achieve this balance we need to enter into a dialogue where we can explain logically why positivism limits ecopsychology – and explicitly offer an alternative approach.

In this paper we explore the historical and ontological ground for a new approach to ecopsychology research. In a second paper "The Ouroboros (Part 2)", we describe our development of this as a methodology which preserves academic rigour, deepens our understanding and aids political influence.

William James and "radical empiricism"

The positivist paradigm has not always been as dominant in psychology as it is today. William James, one of the founders of psychological research, held an epistemological position of "radical empiricism", which sees all the contents of human experience as valid objects of study. This validity applies not only to 'internal' mental phenomena and "external" physical phenomena, but also to their interconnections, and the rich web of meanings woven between them:

> the relations that connect experiences must themselves be experienced relations, and any kind of relation experienced must be accounted as 'real' as anything else in the system (James, 1904: 533).

What's more, James proposed that human consciousness is an inextricable part of this web. He writes:

> there belongs to mind, from its birth upward, a spontaneity, a vote. It is in the game, not a mere looker-on; and its judgement of the should-be, its ideals cannot be peeled off from the body of the cogitandum as if they were excrescences... (James, 1878: 21).

James then, was years ahead of his time in seeing that a contextual and participatory ontology is needed to explore complex and situated psychological phenomena.

One of James's central areas of interest was parapsychology. Along with colleagues in the Society for Psychical Research, he applied radical empiricism to the investigation of paranormal phenomena. In the latter half of the nineteenth century, he generated a large body of empirical data (Blum, 2007). With the rise of psychoanalysis and behaviourism in the early twentieth century, academic interest in the paranormal became less fashionable. However, more recently parapsychology has re-emerged and has been subject to the rigorous application of positivist methods, in an attempt to reinstate it as a credible part of academic psychology. We would suggest that this recent development has inadvertently

offered evidence of what can happen when positivist methods are applied inappropriately to the human psyche. There are important lessons to be learned from this, which we can apply to ecopsychology research.

The psi paradox

Surveys have shown that paranormal experience, or "psi", is widely reported among the general population. For example, in a study in 1987, 67% of American adults reported having had psychic experiences (Radin, 1997). Despite this, such experiences are usually considered as being peripheral to the study of psychology: they are often referred to pejoratively, as "anomalous". As already described, contemporary researchers have attempted to gain mainstream credibility by using positivist methods to study psi. For example, significant research on psi has emerged from departments of engineering, where sensitive equipment has been developed to "measure" it: the focus here is on wrestling the paranormal directly into a quantitative framework.

Some psychological phenomena, for example in cognitive psychology, are relatively easy to isolate and are therefore well-suited to positivist methods. However, a closer look suggests that studying psi in isolation from the interconnections that weave it into a complex context may degrade it. For example, Dunne and Jahn (2003) present an intriguing description of how the performance of "remote viewers"[2] deteriorated as the researchers' methods became increasingly positivist – as they shifted from collecting stream of consciousness reports to binary, yes/no answers in questionnaires.

They suggest that:

> each increment of analytical refinement appears to have resulted in a systematic reduction not of the 'noise' but of the 'signal' itself. This raises the somewhat radical possibility that manifestation of the anomaly may actually *require* a certain degree of the very noise, or uncertainty, that we had invested so much effort to reduce (p. 232 – emphasis ours).

So, the methods of positivism may be dismantling their object of study. As Tolstoy (1882) writes:

[2]"Remote viewers" are people who "see" mental images of geographical areas which they are not personally familiar with. These areas are presented as "targets" by researchers. Outside the laboratory, such information is often elicited because of its strategic value, for example in police or military operations.

> If it were not so frightening it would be amusing to observe the pride and complacency with which we, like children, take apart the watch, pull out the spring and make a toy of it, and are then surprised when the watch stops working (p. 60).

Dunne and Jahn's analysis suggests that psi is deeply woven into the unconscious psyche. Other narrative reports suggest that it is also part of the intricate web of our relationships with each other. For example, published accounts of near death experiences (e.g., Cook et al., 1998), apparitions of loved ones in distress (e.g., Blum, 2007; Haraldsson, 1987), precognition between humans and animals (e.g., Sheldrake & Smart, 2000), and apparitions in the context of extreme human suffering (Haraldsson, 2009) suggest that these spontaneous manifestations of psi happen in a profoundly relational context. What deeply touches the living, the dead and the dying in these examples, may provide the necessary emotional charge for such phenomena to "break through" into the conscious world.

Positivism studies phenomena by breaking them up into parts, and sees the whole as equal to the sum of its parts; it also studies these parts in isolation from the whole. However, it would seem that a completely different ontological basis is needed for parapsychology research: one that is deeply contextual and does justice to physical and metaphysical interconnectedness. In the next section, we argue that a similar ontological basis should also inform ecopsychology research.

Radical interconnectedness and the ecological self

We suggest that the human psyche is woven into nature in the same way that psi is interwoven into a larger emotional and physical context. As the Jungian analyst and researcher, Robert Romanyshyn (2007) writes,

> At the deepest level of the unconscious, the unconscious is nature. The consequence, of course, is that as the psychologist probes deeper and deeper into the psyche, he or she descends into the soul of the world. He or she discovers that at the psychoid level of the archetypes, psyche matters as a matter of the soul of the world. He or she discovers that the unconscious is not just in us, but that we are in the unconscious of nature, and that at the deepest level of our psyches, we retain some dim remembrance of once, very long ago, having been a part of the world's dark-light (pp. 38-39).

Reflecting on the literature (for example see: Abram, 1997, 2010; Bernstein, 2005; Buzzell & Chalquist, 2010; Daniels, 2005; Jung, 1963; Plotkin, 2008; Roszak et al., 1995), our own experiences, and on those of clients and colleagues over the

years, many of the deepest and most subtle experiences of psyche and nature make more sense if a wider interconnected self – rather than the everyday skin-bound sense of "me" – is used as the datum (Kerr & Key, 2012). This has been referred to by Næss (1986) as the "ecological self": a shifting, complex self that is integrated with the rest of nature, both physically and metaphysically; both psychologically and ecologically. To study the ecological self, perhaps we need to return to James's radical empiricism and allow that physical and mental phenomena and their interconnections are worthy of research. But we would contend that we need to go further still, beyond the dualism that sees objects of study as discrete entities, and instead see ecopsychological phenomena as inseparable parts of a gestalt.

A gestalt is a structure where the whole is greater than the sum of its parts. From this, Næss (1989) developed the concept of "gestalt ontology" – where not only is the whole greater than the sum of its parts, but also each part is greater as a result of the whole. From this, we can deduce that phenomena may only become fully visible when studied as part of the gestalt to which they belong (Kerr & Key, 2012). If we study things in isolation, we will miss seeing their full nature.

To make ecopsychological phenomena fully visible, we need a new interconnected way of "seeing". A clue to this comes from taking the metaphor of seeing, at first, literally. In the mid 20th Century, following from James's radical empiricism, William Gibson developed "Ecological Psychology", which he applied particularly to visual perception. Gibson holds that perception is direct – part of an ever-changing experiential gestalt with which we are always interacting. Perception cannot be separated from meaning and possibilities for action. So, for example, in Gibson's view it is not possible to "just see" a handle – we see a "handle for turning". As human beings, our perception and our ways of being, understanding and acting in the world are inseparable (Roth, 1990). This perspective is also explored by contemporary writers for example, Abram (2010), Sewall (2000) and Capra (1997). Making the link back to the prime motive of ecopsychology, Capra even referred to the ecological crisis as "a crisis of perception", made up of diverse issues that "cannot be understood in isolation" (p. 3).

There are resonances in these contemporary perspectives with indigenous "ways of seeing", for example the Sami of northern Europe,

> possess the kind of knowledge that Western culture does not fully acknowledge as valid knowledge. A person is able to comprehend things in their totality, in a "flash." But what that

> flash is, where it comes from and what its content is, are difficult to explain succinctly on the basis of the Western system of knowledge. Sami knowledge is immediate in the sense that living as they do within the cyclical, nomadic circle of life, the Sami occasionally land in situations where they can free their thoughts and open themselves up to reality without observing it consciously. A person can become part of reality without having to construct it first. The direct knowledge gained through shamanistic methods and experiences and through a long-lasting stay in nature makes people conscious of the interrelatedness of animals, stones, and other natural objects and beings. Ecological thinking becomes an important factor in the maintenance of those mutual relationships (Kailo, 1998: 15).

Similarly, in North America,

> unity among people, nature, and spirits can be found in Navajo tradition relating to the concept of Diyin. The concept itself relates to a kind of 'sacred wholeness' that is believed to be fundamental to human life. According to Navajo professors Nancy Maryboy and David Begay (2004), Diyin is a dynamic and ongoing process encompassing all things existent in the universe through a pattern of complex interrelationships, and this process constantly changes as the living and natural elements which make it up change Diyin (Williams, 1997: 140).

It is obvious from these indigenous perspectives, and from Naess's formulations of gestalt ontology and the ecological self, that these ideas of "self" do not fit with the positivist worldview. The ecological self is interconnected – part of a constantly changing gestalt; positivist psychology assumes a discrete self, who has experiences which "happen to" him or her, or who "makes things happen". Positivism assumes a subject or object of experience, a cause and effect self. The ecological self is an acausal self.

Further, positivism assumes a self that is situated more-or-less consistently in time and space. This establishes a point of perspective from which phenomena are studied. Gestalt ontology, on the other hand, sees the self as a form emerging from a constantly changing formless whole – like a wave emerging in the rapids of a river. In the same way that the wave cannot be removed from the rapids without being changed beyond recognition – or more likely completely destroyed – the self cannot be meaningfully removed from its whole ontological gestalt.

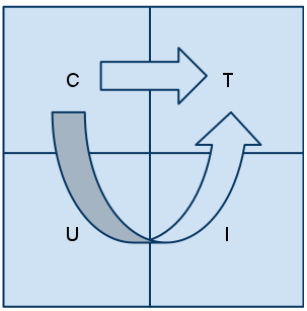
Psyche and matter

There is a deeper question here, about how we might be integrated with the rest of nature: where does psyche stop and matter start, and do they interpenetrate each other at the deepest levels? The positivist approach assumes that matter is matter

and psyche is psyche, but what if the distinction is not that clear cut? Gregory Bateson (1972) asks,

> But what about 'me'? Suppose I am a blind man, and I use a stick. I go tap, tap, tap. Where do *I* start? Is my mental system bounded at the handle of the stick? Is it bounded by my skin? Does it start halfway up the stick? Does it start at the tip of the stick? (p. 459)

Parapsychology acknowledges this self-boundary question in its subjects of study, which include "mind-matter interactions" such as poltergeist phenomena (e.g., Roll, 2003), and healing by laying-on of hands (e.g., Bengston & Krinsley, 2000). The parapsychology researcher, Jahn (2001: 451) has proposed a model of how such "mind-matter interactions" might be conceptualised. In this model, there are four quadrants:



Key:

C = **Conscious** mind.

U = **Unconscious** mind.

I = **Intangible** events or processes of the physical world.

T = **Tangible** events and processes of the physical world.

Figure 1. Jahn's model of mind-matter interactions (after Jahn, 2001)

In Jahn's model (Fig. 1), "paranormal" processes are shown by the U-shaped arrow, traversing all four quadrants. "Normal" processes are shown by the straight arrow. Positivism uses the conscious mind (C) to study what emerges into tangible form (T). In doing this it stays above the x-axis and uses quadrant C to study quadrant T exclusively. As such, it will at best give a partial account of psychological phenomena, which omits unconscious and intangible elements. At worst, by creating conditions which block events occurring below the x-axis, the positivist methodology may stem the flow of some phenomena altogether – as suggested by Dunne and Jahn (2003) in their analysis of "remote viewing" studies. Positivism studies the lines, and misses what might exist between them. It imposes

control and an illusion of completeness, at the expense of ecological validity. What is needed is a methodology that makes it possible to dive below the x-axis, and open out into the space between the lines. It is also important that, on surfacing from this territory, the insights gained can somehow be remembered well enough and translated into terms intelligible to the conscious mind (Tart, 1998). This is no easy task, and may require immediate, intersubjective, creative and non-verbal methods of expression.

Perhaps at the deepest level of exploration, the axis on Jahn's diagram between the unconscious mind and intangible processes – between psyche and nature – is erased, as Romanyshyn (2007) suggests. Certainly, there is much evidence in descriptions of mystical ways of seeing that ultimately all these axes can be erased. Such descriptions are common in all cultures, and throughout human history (for example see, Brody, 2002; Campbell, 1968; Eliade, 1964; Jung, 1963; Tacey 2009/1995). This opens the possibility of a methodology that allows the full range of phenomena to interweave in a cohesive narrative on Being.

On first appearance, it might seem that Wilber's "Integral Theory" four quadrant model provides a way for this kind of integration to take place (Wilber, 2001). However, we would suggest that Wilber's model risks falling prey to the same atomistic tendency as positivism – dividing one aspect of the universe from the other, and more specifically, dividing matter from psyche – obscuring the "dark-light" of nature. As McFarlane (2001) says, in his critique of Wilber's four quadrant model:

> Wilber himself writes, 'Although consciousness and value and meaning are intrinsic to the depth of the Kosmos, they cannot be found in the cosmos. That is, they inhere in the Left Hand dimensions of the Kosmos, not in the Right Hand surfaces' (*A Brief History of Everything*, p. 245). This assertion is based on the assumption... that the mind and soul cannot take exteriors as their objects, that exteriors can only be known through bodily sensations alone. Of course, if we artificially restrict our knowledge of being to perception alone, we will only see the perceptual surfaces of objects. We are then blind to seeing any depth in the cosmos and we reduce the meaning of *'exterior'* to the physical alone, as Wilber has done (emphasis ours).

Wilber's model is holistic, and allows for interrelationship of elements within categories, but it abstracts psyche from matter, and does not allow for the possibility of a numinous opening-out of experience as part of a gestalt. It thus denies the possibility of deeper holism and interrelatedness by assuming its

perspective is already complete.

Reports of psi phenomena seem to suggest a kind of holism where psyche is immanent in matter, a perspective reflected in parapsychologist, William Roll's (1997) invocation of the Languna Pueblo concept of the "longbody":

> What seems inanimate to the body's soul may be part of the longbody, notably the people and things within the person's circle of psychic interaction, such as family and friends, land and possessions. These are permeated with meaning and memory; they are as mental as they are material. The dualistic view is the view from the small body. Matter feels different from mind to the small body, heavy, recalcitrant, immune to command, and so we place it in another part of nature (p. 64).

In Roll's terms, and in conclusion, ecopsychology needs a research methodology that honours the "longbody", and does not objectify it, or attempt to dissect it. Transpersonal methods such as those described by Braud and Anderson (1998), Romanyshyn (2007) and Moustakas's heuristic method (1990) hold that possibility. It is to our exploration of these methods and the development of a fresh approach to ecopsychology research, that we turn in "The Ouroboros (Part 2)".[3]

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Correspondence

Margaret Kerr

Email: margaret.heatherkerr@googlemail.com

David Key

Email: dave@ecoself.net
Web: http://www.ecoself.net/

Appendix 1: The tenets of Positivism

Naturalism	The principles of the natural sciences should be used for social science.
Phenomenalism	Only observable phenomena provide valid information.
Dualism and Objectivism	Objects can be studied without influencing them.
Nominalism	Words of scientific value have fixed and single meanings. The existence of a word does not imply the existence of what it describes.
Atomism	Things can be studied by reducing them to their smallest parts (and the whole is the sum of the parts).
Scientific laws	The goal of science is to create generalised laws (which are useful for prediction).
Rejection of metaphysics	Only physical phenomena are admitted as valid data
Separation of facts and values	Values have no place in scientific research. Only facts are worthy of study.