

## Art, Science and Ecological Consciousness: Being part of 'Transmute'

An Essay by Dr Elizabeth Baker, 2002

The concept of ecological consciousness is not easy to define, either in theory or through practice. How can we describe a 'human - self - nature' that is sustaining all of three elements? How can we bring this concept into the relationships that we use in our everyday lives?

We tend to approach these questions from the bias of our disciplinary backgrounds. Is developing ecological consciousness a matter of expression? Of understanding? Of acting on some universal truth or absence of the same? And in approaching the question in a transdisciplinary way, we struggle with differences of language, assumptions, meanings, and the historical prejudices we learn even as we learn our disciplines.

In approaching these questions in a transdisciplinary way we are confronted with these issues. Words, ideas, and symbols have to be translated. We discover that it is through building a relationship between ourselves that we get a hint of how it is possible to build relationships with other forms of being, those others-not-human. The flows of information using different media, the negotiation and translation, the feedback loops, the changes in response to all these: this is like a faint scent of what an ecological consciousness means.

Science, of itself, is not enough. Science does not and cannot have the answers simply because it cannot ask many of the relevant questions. By its own defining standards of rigour and analysis, of rationality and cause and effect, science is unable to ask certain types of questions. And understanding the interwoven systems and processes that are the viability of life on the planet - even if we did, which we do not - does not necessarily engender wisdom about our personal and collective responsibility for the integrity of these systems. Indeed, the ways in which ecology is taught and the contexts within which it is learnt do not support the development of an ecological consciousness. Nor, it could be argued, should it be so. The purpose is to train scientists. A lot depends on who we want scientists to be and what roles we expect them to play.

Scientific inquiry does have an important part to play. We do need to understand our world, but we also need to be able to communicate this understanding in meaningful ways. We need to be humble with this knowledge, however. It does not raise us above the level of the artist, the philosophy, or the person who's willing to clean your office windows. There is no room for the sorts of disciplinary arrogance that lead some - from whatever discipline - to assume that they have the answers.

This does not, however, place the onus on the other half of the traditional dichotomy, namely the so-called 'arts'. Unfortunately, the dichotomy and the teaching of the disciplines, regardless of what they are, limit our capacity to appreciate fully either the exigency or the concomitant responsibility.

For those of us grappling with the concept of ecological consciousness, communication and building relationships are crucial. We need to learn each other's languages and accept that within the other-than-human there are languages we can know only faintly, if at all. For a natural scientist, trained to find out and to know, the idea of fundamental otherness can be challenging. It can drive us deeper into the minutia of 'knowing' in a way that loses sight of the interrelationships creating the 'being'. Sustaining human-self-nature does not mean only that must understand nature, even assuming such is possible.



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We need also to talk with those souls who have managed to create an ecological consciousness. Who would such people be? Not necessarily the more obvious candidates that might come to mind, as anyone who has endured the politics of grassroots activism will attest. Nor is it about the neo-hippy who consumes 'being green' with the same appetite as they do the latest exercise fad.

If we believe, as I do, that ecological consciousness is a way of being, of expressing an integrity in the relationships that sustain us, socially as well as ecologically, then there are many ways in which this will be expressed. And different sorts of compromises will be made. So, how do we both explore the concept and create a place where others can do the same?

I was asked to be a part of the Transmute collective, working on such a project. I was asked to wear my scientist hat, to advise, and to help the team work with fundamental ecological concepts. It was a learning process for all of us. It was good to be reminded that there are people who have a sense of ecological consciousness based on relationships with place and the other-than-human that has no basis in any understanding of ecology. Developing that understanding enhanced the wonder in those relationships.

Initially we concentrated on energy flows and food systems. After several hours playing at being primary producers (those life-forms that capture the sun's energy), herbivores, and predators, we all had a better feel for the sheer amounts of energy required to stay alive, let alone find a mate and bring about another generation. It also helped us make the conceptual leap to what makes humans different. Why is it that many of living in western and/or industrialised areas now do not experience this involvement in the task of staying alive? This led to a discussion about the idea of an 'ecological footprint' and how we capture energy from other systems far removed from us in time and space.

What was interesting for me, too, was the ways in which these ideas were discussed using the language and symbols of other disciplines. As a scientist interested in sustainability I might approach the question of energy flows by looking at systems, whereas here I was asked to consider how changing energy flows might sound, or how to express through movement an awareness of energy inputs and of synergies through time and space.

What evolved subsequently through our collaborations was a different sort of ecology; a simplified system of inputs, interactions, and feedback loops using visual, aural, and kinesthetic means of communicating the idea of existing within systems of energy flows and their consequences. It provides an opportunity for a person to be within a simplified version of a complex system of which they are already a part and, perhaps, to understand something about what 'being a part of' means.

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