Fielding Graduate Institute HOD Doctoral Program

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BOOK REVIEW: *Mind and Nature: A Necessary Unity* by Gregory Bateson (1979) E.P. Dutton

This is explicitly a book about epistemology: the nature and origin of knowledge. How do we know what we know? What is there to the process of knowing?

Bateson states: "It is the Platonic thesis of the book that epistemology is an indivisible, integrated meta-science whose subject matter is the world of evolution, thought, adaptation, embryology, and genetics – the science of mind in the widest sense of the word...we may say that epistemology is the bonus from combining insights from all these separate genetic sciences...But epistemology is always and inevitably *personal*" (p. 87).

This paragraph illustrates the sources of the personal epistemology of the author: he is a biologist, an ethologist, an anthropologist, a psychologist – as well as one of the originators of systems theory and cybernetics – so his life's work has been in the world of the living.

In the introduction we hear: "[T]he old-fashioned and still-established ideas about epistemology...were a reflection of an obsolete physics and contrasted in a curious way with the little we seem to know about living things" (p. 5). The premises of this obsolete way of knowing included:

- The Cartesian dualism separating "mind" and "matter"
- The strange physicalism of the metaphors which we use to describe and explain mental phenomena "power," "tension," "energy," "social forces," etc.
- Our anti-aesthetic assumption, borrowed from the emphasis which Bacon, Locke, and Newton long ago gave to the physical sciences, viz. that all phenomena (including the mental) can and shall be studied and evaluated in quantitative terms (pp. 217-18)

Bateson, then, is from that genre of scholarship that has been attempting to bridge the gap and pull us back into the world of the living, in a sense recovering from the lifeless, mechanistic Cartesian Anxiety of Technical Rationality that has led to the ruthless (though instrumental) colonization, exploitation, and depletion of living systems. We are reminded of this misdirection but that is not the purpose of the book.

Bateson masterfully weaves fifty years worth of accumulated thoughts, principles, experiences, and exemplars into a hermeneutic spiral that, as the book unfolds, draws the reader ever closer to the realization that "both genetic change and that process called *learning* (including the somatic changes induced by habitat and environment) are stochastic processes" (p. 147). In other words, creative thought and biological evolution – Mind and Nature – operate

by the same processes and principles – they are a necessary unity! 'Knowing,' then, is immanent to and a function of genetic and somatic evolution. The body of the book reveals, in a systematic way, the knowledge required to integrate this understanding.

In the last section, Bateson summarizes the six criteria of Mind:

- Made of parts which are not themselves mental. "Mind" is immanent in certain sorts of *organization* of parts
- The parts are triggered by events in time. Differences though static in the outside world can generate events if *you* move in relation to them
- Collateral energy. The stimulus (being a difference) may provide no energy but the respondent has energy, usually provided by metabolism
- Their cause and effects form into circular (or more complex) chains
- All messages are coded
- Most important, there is the fact of logical typing [See glossary; this concept is from Bertrand Russel's *Principia*]

Bateson clams that any system having these characteristics can be said to embody 'mind.' I'm wondering if these characteristics, or criteria, can be consciously designed into an "ecovillage" setting with the effect of producing a meta-mind or meta-cognition at settlement scale?

One of my favorite statements in the book is when he says: "To be unconscious of the nature of the sacred or of the nature of beauty is the folly of reductionism" (p. 214). This is obvious because both sacredness and beauty are emergent qualities of *wholeness*.

Another incisive comment comes on page 143: "Any change in our epistemology will involve shifting our whole system of abductions." Of course, a paradigm shift requires a new epistemology; so you paradigm shifters would do well to master the metaphors, parables, allegories, etc. of the emerging epistemology of life.