Gregory Bateson's Re-Visioning of Epistemology

Will Stillwell and Jere Moorman

ABSTRACT Key Words: Gregory Bateson, Noel Charlton, Michael Polanyi, systems theory, cybernetics, context, play, aesthetics, Polanyi's criticism of objectivism, double bind. The following three related contributions jointly serve to lift up elements of the thought of the anthropologist Gregory Bateson that can be fruitfully compared with elements of Michael Polanyi's thought. In a brief introduction, William Stillwell reviews Bateson's life and developing interests. Stillwell also provides, in a creative dialog form akin to Bateson's own dialogs, a short review article on Noel Charlton's Understanding Gregory Bateson: Mind, Beauty and the Sacred Earth. The third piece is Jere Moorman's short 1991 essay (now out of print) discussing Polanyi's ideas about tacit knowing and their connection with Bateson's ideas about the double bind.

[Editor's Note: For some time now, Polanyians have been linking Michael Polanyi and the anthropologist/polymath Gregory Bateson. At the 1991 Kent State conference, for example, there was a session entitled "Knowing: Polanyi and Bateson Compared" in which Jere Moorman, William H. Williams and Gregory Markowitz presented papers. Most recently, writers in the new area of "biosemiotics" (see the Gulick essay in this issue), which aims to produce a new paradigm in the life sciences, have drawn on both Bateson and Polanyi to frame their approach.

Following are three related articles that engage Bateson's thought in different ways. The first article, written by Will Stillwell of the Center for Studies of the Person, is a brief biographical introduction to Bateson which charts the genesis and development of his unique slant on knowing and living. Following this is Stillwell's review of a book on Bateson's thought by Noel Charlton. Stillwell's creative review, reminiscent of a Platonic dialogue, although atypical for *TAD*, effectively captures one aspect of the spirit of Bateson. Some of Bateson's writing (see, for example, Part I of *Steps To An Ecology of Mind*) took the form of a metalogue, a conversation (between a father and a daughter) about a problematic subject in which the structure of the conversation is itself relevant to the subject. Finally, Jere Moorman's paper on Bateson's double bind, which was published in *From Polanyi to the 21St Century: Proceedings of a Centennial Conference, Kent State University, April 11-14, 1991*, Richard Gelwick, ed. (Polanyi Society: University of New England Press, 1997), 820-822, is re-printed here in slightly modified form to be available to a larger audience. Moorman ably articulates one way to connect Bateson's ideas with Polanyi's philosophy.]

Gregory Bateson: A Brief Biography

Will Stillwell

Gregory Bateson (1904-1980) was a man of ideas. Yet I, and perhaps others, too easily float out the "ideas" we might be able to use from their context of an individual-within-his-life. When I refuse this alienation of ideas-from-authorship, I am better able to realize, respond, and even celebrate "personal" knowledge.

in 1904, he named Gregory after the Austrian monk Gregor Mendel. Mendel's experiments in breeding peas and tracing inherited characteristics had recently been re-discovered and proposed as the explanatory basis for Darwin's theory of evolution. William coined the term "genetics" and was the world's first academic professor of that subject.

The Batesons were part of England's educated elite. William had an immense influence on Gregory's life. Ambitious for his sons to be scientists, he still daily read aloud to the family from the Bible, whose thinking he greatly respected but did not believe. William's central, but unfulfilled intellectual quest, was to understand (and promote) evolution as a process through which passing material is shaped by pattern and form and symmetry. Gregory's mature work in various scientific disciplines incorporates his father's framework; his use of pattern, form, and symmetry influenced the evolution of his thought. A colleague of Gregory's in his later years characterized his mind as "feminine...he sits on an idea and develops it like a big ovum."

Bateson always thought of himself as a naturalist. From his "English botanizing childhood" through Cambridge University in Natural Sciences to his end of days, he tramped through woods and swamps turning over old logs to find beetles and slugs. But by the age of fourteen, Gregory was the only surviving son, and he intensely felt the weight of his father's ambitions focused on him. He lived in strong ambivalence, seeming to be in (sometimes playful) rebellion against his serious English childhood culture.

To escape his father's shadow, Bateson took a Master's degree in anthropology, working from the mid-twenties to mid-thirties in New Guinea and Bali. Here he met, wed and worked with his soon-to-be-more-famous wife, Margaret Mead. During World War II, he became a United States resident. With the war effort, he focused his work on national character and morale, helping the Allies understand each other across cultural differences and devising propaganda to inflict upon enemy "weaknesses."

By the end of the war, Bateson living in New York, was estranged from manipulative knowledge, estranged from Mead, and learning from daily Jungian depth analysis while engaged in developing cybernetics and information theory.

He loved to analyze the "shapes of thought." For hours, he and companions would play "20 Questions," by modified rules. Instead of "animal, vegetable, or mineral?" their initial category was always the binary discrimination—"abstract" or "concrete"? He was critical of Rene Descartes' fundamental substance dualism and (like his father) had never given up on biologist Jean-Baptiste Lamarck's early nineteenth century contention that mind and body are a unity. Although his discipline title was anthropologist, all forms of life—human, animal, and plant—were what were important to Bateson. The games and the cybernetics opened a way for him to think about the unity of language and thought and living organized patterns. Through the language of "information," he was able, first in human social life, and then in the wider biological sphere, to describe recursive causal systems as "relations between things to reflect forward upon their organization."

Through the fifties and sixties, Bateson was an independent scholar, living on foundation grants and short-term academic positions for the most part. Divorced from Mead (who through her professional social networks surreptitiously continued to find financial aid for his career), he married again, and then again. This is the period in which his relational theories came to be regarded as important for understanding psychological distress. Living in California, Bateson produced the "double bind" theory purportedly explaining the social genesis of psychosis. This theory tying diagnosis to family interaction patterns has not been supported by scientifically tested evidence. Yet derivations and similarly constructed hypotheses have become part of a great

renewal in studying psyche and society, and produced an explosion in methods for successful psychotherapy for the individual and family.

Woven with this work in psychology, he sought to understand communication patterns of various animal species including dolphins and otters. He became fascinated with "play," and lived at home along with dogs and gibbons and octopuses in tanks.

He read aloud to his children. One of his repeated favorites was Samuel Coleridge's *Rime of the Ancient Mariner*. He brought to America the watercolor his natal family had hung prominently, William Blake's *Satan Exulting Over Eve*. Bateson's "rebellious romantic" Blake was one of his favorite thinkers: "Energy is eternal delight. Energy is the only truth and is from the body." This painting featured in his dreams for years, and Bateson saw in it a nuanced depiction of natural morality and love. Bateson claimed that Blake "saw through his eyes, not with them," and "knew more about what it is to be human than any other man."

Bateson worked in and contributed to many disciplines, including psychology, anthropology, and evolutionary ecology. His publications are numerous. The problems raised within disciplines led him to successive phases of learning and insight from which he developed multiple overlapping examples and parables concerning his small set of highly abstract themes. Epistemology seems to be his central intellectual concern: he explores the place of the knower in what is known, and how we can know anything. Here is one particularly interesting, potent area where his and Polanyi's thought overlap.

Citing a William Wordsworth poem, Bateson heard the poet learning about himself as a creator while gazing at the primrose. Unity (the validity of which depends on belief) is created in human self-reflexive recognition. Gregory Bateson contributed a lifetime of disciplined thought concerning the appreciation of form and coherence. He saw truth's precise skeleton in these factors at work (and play) in the communicational regulation of the biosphere.

During the seventies, Bateson wrote books for a more general audience, and became a wise-man persona for the American counter culture. His legacy in the environmental movement remains strong, even though he himself was skeptical about his efforts doing any good at all. He died in a California Zen center in 1980.

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Charlton on Bateson: A Dialogic Response

Will Stillwell

Charlton, Noel G. *Understanding Gregory Bateson: Mind, Beauty, and the Sacred Earth.* SUNY Series in Environmental Philosophy and Ethics (Albany: SUNY Press, 2008). Pp. 292. ISBN: 978-0791474518, \$74.50 hb; ISBN: 978-0791474525, \$26.35 pb. \$16.17 Kindle.

Adult: I read this book that helped me to understand more deeply what Gregory Bateson thought, and how he thought. I have been attracted to his work since the early sixies, and some of his thinking has informed my own. His writing and teaching had what I considered a well-deserved reputation for great clarity that—just as I and others expected a climax of knowledge—suddenly dropped into difficult obscurity.

Teen: So he tricks you?

A: Well, I sure got tangled. My interest was in his portrayal of social relationships. He addressed the topic concretely, yet he always embedded his discussion in a wider context of relationships between "parts" and "whole." For example, even his explanation of how human alcoholics are trapped into their addiction by their own thinking is titled, "The Cybernetics of Self." I mean, "What?"

T: Alcoholics trick themselves?

A: Yes—and they aren't alone! Also those of us who don't have a substance to blame play similar kinds of tricks on ourselves. That, of course, messes us up, and messes with the others with whom we communicate.

T: So Bateson communicates in a tricky way about how the rest of us communicate in a tricky way, and we all get in a mess trying to understand. What's that got to do with cybernetic self?

A: Yes, our mess he called a "muddle" (he grew up as an educated Brit.). Even though early in his career he migrated to the U.S., he personally kept a kind of distance from (and was amused and sometimes horrified by) American culture, as well as Western cultures generally. His daughter described Bateson's life as "full of loose ends and unstitched edges" and he said that "ideas are the only thing that seems worth doing." He honed his ideas carefully, carefully, and as Noel Charlton traces in this book, developed their many strands over his lifetime

In the thirties, Bateson was seeking to understand the process of scientific thought through an explanatory process "within which the principles of explanation could be seen and studied." By the forties, he began contributing to cybernetics, the newly-emerging field of communication and control of information. Here, in descriptions of messages' systemic forms and patterns as they convey information, he found the exemplary explanatory process he had sought. He proposed that any living systemic "whole" functions in self-regulation and regulation of information from its constituent "parts." He suggested that living systems are best understood through concepts such as "ideas" and "messages" and "information," rather than through concepts such as "energy flow." Such systems operate through relationships of events and constraints on those events, differently than through the cause and effect models used to describe inanimate physical particle relations.

T: I guess he's into information. It's all pretty abstract. So what's the big deal for you?

A: Our addictions, and our muddles in general, have to do with our appetites for isolating the "parts," our ability to ignore the contexts in which, or in reference to which, the parts have any meaning or existence. Contexts are more abstract; they are philosophical principles, but we've kept them peripheral to our consciousness. We mis-name them "feelings." They are more archetypal; they are always on another scale than any content.

Y'see, "parts" exist because we communicate in language, we break up the whole into its communicable bits. This is what we do! We seem to have to. But each bit in itself is necessarily wrong! in its separation from its context! Language is linear and not isomorphic with the world, not up to the task of describing the world which is anything but linear.

T: I hear you're exercised about this, but we're stuck with language—it makes us human after all. Are we to go back to all those gestures (like you right now)?

A: We think between the "parts." Let's say I think I have a problem: "why can't I stop drinking before I go over the edge?" If my solution is: "I need self-mastery, a stronger will power" then I've muddled, as my solution comes from a similar level of abstraction without involving the context to the problem or the context to the solution. I set up a challenge between opponents—both located in my divided self—"I can" versus "I cannot" resist drinking. My meaning for my self comes from testing my strength. This is dysfunctional communication or thinking. And Bateson shows that we all do it all the time, as here in our practical lives and also in our philosophical lives—for example in our attempts to understand the mind/body "problem."

Trying to control any part of the cybernetic system from another part inside the system breaks the process of self-regulating circuitry that the system needs to restrain itself. The system goes into "run-away," periodic, repeated arousal and satiation that induces us to even further linearity of effort, further frequent short-cut short-circuit solutions.

T: What would be a systemic solution then?

A: Ah, a systemic response...this is where Bateson, having diagnosed the problem, often slides away from a climax. Were he to respond sincerely it might be something like, "How is a noun like a leaf?"

T: Bummer.

A: Yes, but he's keen that we not "obscure our own vast darkness"—conceal what we don't know. Charlton in his book helps readers understand what Bateson is up to with such a response, and how it really is helpful. Charlton also contributes in ways he believes pragmatically furthers Bateson's legacy of thinking into our era.

T: So, how is a noun like a leaf?

A: Bateson said that a mind is that which accomplishes learning. And learning is all about response, not stimulus. He suggests we attend to how and what the perceiver or receiver learns, not the source or presumed content of the disclosed message. Ambiguities, loose ends are necessary for reflexive thought. Differences provoke consternation and can lead to new mental pattern formation, which is learning.

T: Yes, but...

A: But you try it—How is a noun like a leaf?

T: Well...they're both things, but not in the same way; they're both nouns, actually, but that doesn't make them

the same. Both are parts of some other thing larger, the phrase or the tree, which makes those two similar too. And then there are other different parts of phrases or trees too...Both can be pointed or soft, both can wave (I guess that's because they are nouns to that verb), both can be long-winded...

A: So, what have you been learning?

T: This is a trick, all right. I don't know. Something interesting, a little trippy, but I can't say exactly, they're not the same but...

A: Mind is the incarnation of metaphors. The primal method of mind's work is comparing patterns ("leaf" and "noun") and finding them partially, and perhaps strangely, equated. You compare your response of any present seeing to what a memory of what you've seen in the past. The difference you notice is qualitative, a ratio, not the quantification such as results from our mainstream logical thinking. Difference continues to wake up the response/memory process, producing patterns, "the dance of interacting parts" that never finishes.

T: Whoa. So this is like that, but not completely. I can see...but how come "the dance" never ends?

A: How many fingers on one hand? Another Bateson question. We answer "five," or maybe "four" if we think he's tricking us with "thumb." But his answer is a trick of a whole different dimension, "four intervals between the fingers." He's focusing on how the entities complement and compete, on the relationships-between, more than on the objects or things in relationship. Making relations is the way mind works, a process as a circuit of information-transforms occurring in the relationships between things. Some parts of mind are embodiments of one kind of information, other parts "know" something else. The uneven distribution of information within the circuit keeps a potential for a mind to continue learning by comparing. But you *compare*—you don't *choose between* the leaf and the noun; they're both patterns that inform each other. Bateson thought that *the* problem of today's world was that we humans don't realize this delicate process, and by imposing our human purposes on nature and one another we do choose—let's say the noun instead of the leaf—and by so choosing break the circuits. Choices of this kind—purposeful other than considering the contexts—result in runaway escalation (this line of thought he applies to warfare, psychopathologies, and environmental destruction among others).

T: So if I get what you're saying, humans are destroying the dance in which we're dancing by choosing a tango instead of maybe, an old-time...fox trot?

A: Yes—no...more like, supposedly for our benefit, making polarities and choosing one over the other—always purposefully choosing the tango, at the expense of the similar but different fox trot.

T: *This* is destroying our minds?

A: Well, "purpose" dissects the universe. Our present-day arguments over evolution are framed in ideas of "design" or "adaptation." Both these ideas are dissections. Both cut us away from the whole; and we cut up our opponent to follow our purpose.

There's something else primal here. Most learning is covert because mind is a primary process, mostly not conscious. So, yes, continual application of conscious purpose while ignoring contexts can be a bad guy for our long term health. But beyond that, mind is a process much bigger than human mentalization, human

brains. Mind, the mental processes Bateson's been describing, is a characteristic of the ecological whole, of all living being. Bateson declares that the whole living biota functions as a mind, a mind dancing its evolution.

T: If earth's ecology and its evolution functions like an unconscious mind, as he says, then the ecology must circulate something like "ideas," must keep some "ideas" in "memory," and "learn" by comparing any new information with the old; and then changing, maybe, if the bits of information are different enough.

A: Right. An ecology consists of any element and its context-environment: like zebra plus grass (plus lion, hyena, giraffe, rain, locust etc.). That relationship of linkage between them, what he calls the "interface," is the relationship where all the comparison and modification or maintenance action occurs. Of course it gets complicated, there are many scales of process—nested levels of elements-and-context—like genetic, cellular and behavioral learning.

And the truth about this that matters, is the fragility of so-called "climax" ecologies, in which optimal numbers and varieties of living beings are in some sort of relatively steady state mutual interrelationships— serving each other and holding each other's tendency toward maximization in check.

T: O.K. I get that. I suppose that your world of human relationships can be understood with some sort of "climax ecologies" too, if "noun" is anything like "leaf."

A: And there too, Bateson sees rampant pathology. He and Charlton also, want us to re-access our systemic wisdom. "All theories of evolution are of mind and God," Bateson was heard to mutter.

T: Ahh, The Divine Solution!

A: Well, not so fast, think mind and God as patterns like leaf and noun. Take "God." Bateson was a naturalist, not a religious man, but knew a lot about religious minds. I take "God" in this context to mean in part accepting, praising, giving over one's own purposes to trust the wisdom of a greater context (mind or God) that I do not (he'll say can not) understand.

This is a beauty of Charlton's volume. He traces the career-long developmental evolution of Bateson's thoughts on aesthetics as it becomes his approach to accessing systemic wisdom. For Bateson, human bodies and their rhythms are the basis of our various aesthetic values, and a route into primary process thinking. Our engagement with beauty brings in more context to join conscious-purpose: it's the beginning of that recursive epistemology that is characteristic of mind. It's not subjective, not "entertainment;" it is a mental process similar to that carried out by genetics in the natural world. He claims we're genetically conditioned to like the patterns we find in life that form themselves the way that we do. They're convivial to our systemic survival.

T: Wow, quite a jump. I'm fascinated.

A: Some say witches are boundary-jumpers, inverters of ideals, perhaps takers-on of dark, animalistic qualities as they move between realms. Bateson quips that a witch is "creating puns on her context, changing the frame." Aesthetics is play, engagement caught by play. So is dreaming. Play allows us not to be captured by the frame of our memorized categorical boundaries, to enter primary process thinking.

T: It's kind of magical; now you see it, now it's something different, or ephemeral. I see how we could consider it a different sort of trick to our ordered thought-world: What sort of message is this? Black-humor magic?

A: Beauty's engagement of us plays with our contextual magic—our world-image—and the mundane details of real objects in relationship. The action is in the interface-relationship: at the interface of conscious and primary thinking, at the choice of neither at the expense of the other, at the integration of intuition and intellect. The beautiful is a processing ecology.

T: Art, or aesthetics, results in ugliness too, or at least refers to it.

A: I'm liking our conversation; yes, play and art throw ambiguity into the rules of communication. Relationship exploration may result. And we don't know where the exploration will lead. Gestalts created at the interfaces are economical, prone to ambivalence. Thus, many generations of people, and many more generations of earth's life treat new information with immense conservativism, keeping true to "memories" in their traditions.

T: And we hope the memories contain enough flexibility to handle any big changes...

A: ...in the information they take in from the contextual circuit they inhabit.

T: The overall picture I'm getting from what you're saying is that this untidy man, Bateson, explained or created or discovered a rather complex and elegant thought-structure that exists as, thrives in, and even itself celebrates the play of untidy nature.

I guess his "wisdom," if such it be, is the gracefulness of this single, unified world-mind. I can see why he references God in respect to this. But it seems to me that with our purposeful activities again we humans end up as the "sinners" who upset the self-corrective, self-maintaining system. Out of Eden we come.

A: Well, if the Edenic tradition of loss informed by Batson's graceful wisdom is only a conceptualization, the spirit in it may indeed already be lost.

Bateson is deeply concerned with the sacred. But divinity (mind) he experiences is not transcendent, it is immanent and built into the cybernetic circuitry of the natural living biosphere.

He understands that we, patterned like our Adam and Eve, cannot from within control the natural complex circuit of life. That's why, he realized, we have invented (or been found by) the gods. Gods are beings endowed with cybernetic circuit characteristics (grace) whose unfathomable actions function to correct our naïve and prideful, straight-line attempts to control our lives.

T: So gods are the immune system of a society, of our species.

A: In their beneficence they optimize, do not maximize. That is their cruelty. That is their perfection. And that is their mystery.

T: People tell me, I haven't lived long enough to compare, that the very concept of anything sacred is disappearing from our daily lives. We're supposed to be less interested in that kind of mystery and solution...so I

guess we're losing the immunity from ourselves that goes "there but for the grace of God." But Bateson too, seems to sort of explain-away God.

A: I'm not sure that the sacred is going to take this lying down. Y'see, Bateson contends that our systems of logic—how we think we think—generate paradoxes when we try to apply their straight-line cause and effect to the living world. Mystery inevitably erupts again and again because our languaged (including mathematical) reasoning separates parts from whole, and opposes the separate parts against each other.

But we're entranced by what we don't understand. It holds a secret, and secrets tempt our curiosity, fear, and desire to come out and play.

And some of us fall into enlightenment—we come to know the secret. But only by thinking and experiencing "beyond" (or in a way other than) the cause and effect logic most of us trust.

T: I'm ready for you to tell me the secret.

A: Ha! The secrets that are told can be expressed only again in the logics of languages, which sooner or later lead again to paradox, to mystery. But at least listen to how Bateson approaches through art, citing the poem by Coleridge, "Rime of the Ancient Mariner." Maybe you remember the plot, the old man is obsessed with telling his story to guests trying to get away to a wedding. He holds them first in his grip and his look, then his story further entrances.

On a sea voyage his ship has been cursed, his shipmates say, due to his killing a passing albatross. The sail-ship is becalmed; no rain, no water, no food. He becomes the lone survivor, he accepts his guilt. Despairing, he wears the dead bird tied around his neck. A moonlit night...he watches serpents in the sea swimming and flashing and coiling:

O happy living things! No tongue Their beauty might declare: A spring of love gushed from my heart, And I blessed them unaware: Sure my kind saint took pity on me, And I blessed them unaware

From that moment on, conditions change. The albatross falls from his neck into the sea, rains and breeze appear, the ancient seaman makes his way back home to share his story with those who can hear.

"What I am suggesting," Bateson writes, "is that the nature of matters such as prayer, religion, and the like is most evident at moments of *change*—at moments the Buddhists call Enlightenment....[W]hile Enlightenment may involve many sorts of experience...notice how often Enlightenment is a sudden realization of the biological nature of the world...a realization of *life*."³

Paradox occurs and frustrates at the interfaces when we're using our usual logics. The sacred epiphanies reveal the secret, mysteriously relating events of now (parts) in beauty and awe opening us to the endless surround (whole).

T: I'm thinking that a "sacred" event involves a "faithful" person, one who acts from her own, or our own, incapability, and trusts...the doing in the whole?

A: And I blessed them unaware

T: I think you think what's necessary is metaphoric thinking. So religion is necessary? Or art? Or being faithful? To keep some sort of immunity to the danger of our common logic?

A: What do you see as the sacred, secret zones of our culture?

T: Sex! Uh, death...uh...maybe the reasons for faith, for living...

A: Topics that adults play around with, but don't really seem to have adequate answers to tell. At least when you want to know. I like your list. Myself—as a pair to sex—I'd add love and violence in our relationships as a part of our secret treasure. Metaphor, aesthetics, and appeal to sacred matrix are trying to approach all that.

T: Uh huh. It seems almost any metaphor would do the trick.

A: "There are few things as toxic as a bad metaphor."

George Lakoff and his colleagues gathered evidence that many metaphors in English are rooted in body orientation and movement of an individual.⁴ This physical action is the basis of our cause-to-effect logic. Long before that, Elizabeth Sewell⁵ convinced me that *most* of our language has roots in metaphoric imagery; and that over time and use some metaphorical terms become reified" (that is, slip from being "X is like Z" to "X is Z").

T: Oh. As we talk, and you gesture, the "leaf" and the "noun" cease being partially similar and partially different, but are made the same in our thinking. But that takes the play out of it!

A: It helps us believe in certainties, saves us from the bother of thinking about that again, and takes us away from remembering how we're living in faith. And some of the metaphors are deadly: the metaphor of personal muscle power transformed to an objective measurable "force" for our discipline of physics; it also metamorphed into the idea that there is real force (power) that one human holds in relations to others. This "false heuristic" tempts us to straight-line solutions relying on political power.

But, to be sure, inventive humankind keeps coming up with new metaphors, new artistic expression, and new sacred forms. Bateson saw us making these metaphors into real "tautologies" across human history. All cultures do this: "trick" their people unaware into particular life ways and morals and beliefs by assuming reality is what their (metaphoric) map tells them it is.

T: We understand from the basis of these unconsciously accepted "buried" metaphors that are hard-wired as fact into our social practices. Is that it?

A: Uh huh. This is the point where Charlton's book takes off from being a study and explication of Bateson. Other people have been inspired by Bateson's ideas in fields of psychotherapy, communications, ecology and anthropology. 6 Charlton inquires how Bateson's brilliant, late-in-life insights concerning living in sacred

knowledge might help save us from our folly: the destruction of our ecosystems and ourselves, the destruction of the mind of nature.

T: More of Bateson-type trickery, I hope.

A; Well, then you'll be disappointed. Part of Bateson's legacy is that he remained to the end reluctant to reify his metaphors. He was comfortable in untidy indefiniteness, with pointing and teaching and learning and hoping some of the rest of us would get the essential—that mental phenomena are epistemological. For him every question is always enclosed in some wider *question*.

With great and genuine heart, Charlton chooses to consciously seek a goal set of ethics that would bring about a real, sustainable, self-correcting mind-circuit in which humans are participants. He leads us on an aesthetic plan.

About a quarter of his book is devoted to first, exploring other thinkers and activists whose work is partially commensurate with Bateson's thoughts, and second, building a notion of the moral and political forms that a sacred nature ethic might take. His careful manifestation of his own tacit understandings cover a wide range of possibility in venturing where Bateson himself would not tread.

T: Hmm...but another toxic metaphor?

A: Gregory Bateson believes we cannot be conscious of the nature of the sacred, or the nature of beauty which might get us there. Noel Charlton weaves Bateson's thoughts through the ideas, "feelings," and practices suggested by, among others, Lovelock and Margulis, Naess, Macy, Midgley, O'Murchu, Fox, Primavesi, Abram, and Spinoza. He suggests possibilities and continues a process through which bodies and minds relating together, can pursue our goal, a sacred commitment to earth's life. I hesitate before what seems a purposive ontology supposedly mapped on purposeless reality. I find Charlton's journey provocative, desperate, stimulating, sad and hopeful.

Endnotes

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⁴ George Lakoff, *Women, Fire and Dangerous Things* (Chicago: University of Chicago Press, 1987). George Lakoff, and Mark Johnson, *Metaphors We Live By* (Chicago: University of Chicago Press, 1980).

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Michael Polanyi's Tacit Knowing and Gregory Bateson's Double Bind

Jere Moorman

A student needed a date for the prom and sent in her requirements to a computer dating service. She wanted a date who was fun, playful, short, liked water sports and enjoyed wearing formal attire. The dating service sent her a penguin. Matters became worse when the computer dating service would not listen to the student's complaint that an understandable, but terrible mistake had been made.

I offer the joke about the penguin as an example of the double bind made famous by scientist Gregory Bateson as a possible cause of schizophrenia. I offer it also as an example of the results of strictly following the ideal of scientific detachment with its assumptions that the whole can be reduced to the parts or that the amassing of facts will impersonally lead to conclusions which are real and true.

The objectivist ideal of scientific detachment was rejected by scientist-philosopher Michael Polanyi in favor of his ideal of personal knowledge with its recognition of personal, unformalizable, unspecifiable tacit mental skills as the grounds on which all knowledge is pursued and held.

My thesis is that objectivism, the ideal of scientific detachment rejected by Polanyi, is like a double bind; and that Polanyi's conceptual reform, personal knowledge, with his recognition of tacit knowing as a fundamental fact of consciousness, offers a palliative to the distorting effects of both the double bind and the ideal of objectivism which he rejects.

Bateson's double bind is a communication, sent in the context of an important relationship, in which there is a contradiction between messages at different logical levels—and a rule in the relationship which prohibits or punishes any sort of a comment on the contradiction. An example would be a parent verbally inviting her child to give her a hug, and non-verbally sending a message of hostility. The child doesn't know which level of the message to believe. He is left to respond to an oscillating, and untenable situation.

The double bind is proposed all through the writings of Bateson as a possible determining factor of schizophrenia, the schizophrenia following repeated exposure to this contradiction between logical levels—the object level and the meta-level—which deals with what the object level is about; and the prohibition of "third level" alternatives attempting to clarify or comment about the contradiction. The double bind theory eschews the option of just leaving the field—an option not open to the dependent child or the disturbed schizophrenic. The schizophrenic, in other words, becomes unable to tell whether a message is literal or metaphorical—or just plain contradictory. He acts out a strategy, which seems bizarre to others, in his attempt to make sense of his perceived "un-decidable" situation—he attempts to find a break-through to the contradiction, which proves to be a "break-down" in terms of what is commonly considered "normal." Normal life is full of the contradictions between levels that plague the schizophrenic, but the ability to comment on the contradiction is generally available; if not, a communications breakdown is apt to occur with the concomitant, bizarre, if not schizophrenic, break-through or break-down strategies for coping with the contradiction and misunderstanding.

Bateson points out that the double bind can also lead to creative discoveries, such as the hindsight of jokes and the insight of scientific discoveries. He points out that the schizophrenic response is also a creative attempt which has either gone wrong, or which no one but the schizophrenic understands. The structures of hindsight and insight are similar; and both deal The structure of all three situations: hindsight, insight and foresight are similar; both deal with the different logical types and kinds of awareness in communication that may be resolved at the focal level of meaning: seeing the humorous, unexpected meaning of the joke and laughing, or seeing how all the evidence leads to a coherent scientific discovery.

The penguin story illustrates both the creative (breakout) and destructive (breakdown) potential of the double bind: a person hearing the story as a joke does a double take at the appearance of the penguin, and more or less "gets the point" of the joke. He has a mini-transcendent experience and a good laugh. The person actually seeking such a date for the prom at the last minute has the same double take, but perhaps is not so amused.

Consider the demand to "be spontaneous", a potential double bind in that a literal attempt to be spontaneous precludes spontaneity and evokes an oscillation—double take—similar to that which occurs in humor. The result of such a demand is a focusing too narrowly on the parts and failing to see the necessary characteristics of the whole. The command to "be spontaneous" looks like helpful advice but actually makes things worse, and may preclude finding a creative solution. The "be spontaneous" paradox is of the same structure as the "liar's paradox": an example where focal attention is directed to the subsidiary elements of an action, potentially leading to self-consciousness, contradiction and oscillation between logical levels. This oscillation may also be seen as what happens when a musician looks too closely at the subsidiary notes to a musical composition—he becomes what we might, using Poteat's phrase, call a person who is "note sensitive and melody deaf" (*Polanyian Meditations*, 202).

In the case of the penguin story, focal attention directed to the subsidiary elements of a problem leads not to an ideal date, but to a date which is literally "provable" but false. The ideal date cannot be obtained by amassing facts about the date requirements and putting focal attention on these "impersonal" clues, although the scientific ideal of a strictly detached, impersonal, fully explicit knowledge assumes that it can. In the real world of computer dating services, the third level option may be available where the dating agency would adjust their mistake or the customer may refuse the date altogether by leaving the field—an option not as available to the schizophrenic or the small child.

In the real world of the scientist, Polanyi believes that, in spite of the ideal of a detached, impersonal knowledge, the grounds on which science is pursued is actually determined at every stage by indefinable, unformalizable, unspecifiable, personal, fiduciary, tacit powers of thought. The vision, the belief in something there to be known, comes first, and there are no strict rules that can account for the way such a vision originates and there are no strict rules for the verification or the refutation of a proposed solution. In the case of the ideal date, the seeker will know it when she sees it, but her vision cannot be reduced to a bunch of facts that can be fed to a computer dating service.

Polanyi believed that the absence of strict criteria on which to base our acceptance of knowledge shows that our confidence in our knowledge is based on non-strict, informal, tacit criteria. Data require interpretation, and the seeing of pattern and relationship is not inherent in the appearance of the data itself—interpretation and appraisal require an actively knowing, real person—one who is FREE to raise objections or seek solutions to apparently incoherent data.

Polanyi wishes to substitute for the impersonal ideal of scientific detachment an alternative ideal which gives attention to the personal, fiduciary involvement of the knower in all acts of understanding. He distinguishes between the tacit and explicit dimensions of knowing, and recognizes two kinds of awareness, focal and subsidiary. Focal awareness begins with the recognition of a problem—sometimes just a bare outline of a solution, an outline which may ultimately emerge into a more complete focal awareness, into an explicit insight which can be articulated, and hopefully recognized by others. This personal dimension is neither impersonally objective nor subjective, but is a responsible act—hazardous, yet claiming universal validity.

The distinction between the tacit and explicit, the focal and subsidiary can be illustrated by considering a piano player who looks too closely at the notes of a melody and his fingers while playing music. His playing will become self-conscious and clumsy. This disintegration and clumsiness occurs when focal attention is directed at the subsidiary elements of a comprehensive act, instead of through them. Since the two kinds of awareness are mutually exclusive, the piano player is in self-contradiction when he is focusing on the notes and his fingers while he is playing; he is modeling the higher logical type of the melody or tune at the lower logical level of the notes. He has detached himself from the pattern or the tune. The tune cannot be played with flair and style and a high level of skill by impersonally playing each note precisely. The piano player must actually dis-attend from the notes, not attend to them; he must indwell the notes, making the notes function subsidiarily in the act of tacit knowing and doing. In other words, he must do something like "casting his mind forward" (*PK*, 56) towards the meaning of the individual notes, i.e., towards the melody he is seeking to play competently, towards the pattern of the music. The clumsy piano player condemns himself to such "melody deafness" by embracing the false ideal of "objectivism.

The structural contradiction of the self-conscious piano player exemplifies the pathologies of both objectivism and Bateson's double bind. Both Bateson and Polanyi assume that there are always at least two levels to knowledge, the level of the particulars and the level of the meaningful pattern or relationship. It seems to me that ideal of objectivism fails to recognize the subsidiary kind of awareness—the "from" and the "via" involved in a person's getting to human interpretation and meaning: i.e., embodied personal skills and habits, and the level of language and logic (rationality) which are needed to make sense of the embodied particulars.

But the very denial of the personal when it is said that "this knowledge is impersonal" employs language using personal, embodied skills that contradict what the statement affirms. The second part of the double bind, the inability to comment on the contradiction, is built into the ideal of objectivism because embodied skills are regarded as merely subjective and thus unreliable in comparison to logic.

Polanyi's alternative form of objectivity, personal knowledge, with its recognition of the unformalizable personal, fiduciary, tacit component in addition to the level of language and logic offers an alternative to the distorting ideal of scientific objectivism, as well as to Bateson's double bind.

Tacit knowing will not eliminate the hazards of the penguin problem, but it may offer a framework for better understanding how "penguin" sorts of misunderstanding show up in our communication, and allow for the discovery of more suitable interpretations and meanings.

Electronic Discussion List

The Polanyi Society supports an electronic discussion group that explores implications of the thought of Michael Polanyi. Anyone interested can join. To join yourself, go to the following address: http://groups.yahoo.com/group/polanyi_list/join. If you have difficulty, send an e-mail to James van Pelt (james. vanpelt@yale.edu) and someone will see that you are added to the list.

WWW Polanyi Resources

The Polanyi Society web site (<u>polanyisociety.org/or polanyisociety.com/</u>) provides information about Polanyi Society membership and meetings. The site also contains the following: (1) digital archives containing all issues of *Tradition and Discovery* and its predecessor publications of the Polanyi Society going back to 1972; (2) indices listing *Tradition and Discovery* authors, reviews and reviewers; (3) the history of Polanyi Society publications; (4) information on *Appraisal* and *Polanyiana*, two sister journals with special interest in Michael Polanyi's thought; (5) a link to the "Guide to the Papers of Michael Polanyi," which provides an orientation to archival material housed in the Special Collections Research Center of the University of Chicago Library, Chicago, IL 60637; (6) photographs of Polanyi; (7) links to a number of Polanyi essays (available on the Polanyi Society web site and other sites), Polanyi's Duke Lectures (1964), as well as audio files for Polanyi's McEnerney Lectures (1962), and Polanyi's conversation with Carl Rogers (1966).