

INTEGRAT.ED1**INTEGRATED1**

"You know me, Tom, I work by simple principles:
Clean SORT First, Then INTEGRATE."
--St. Albatross

In some sense man is a microcosm of the universe;
therefore what man is, is a clue to the universe.
We are enfolded in the universe.
--David Bohm

How does it happen...
that the map corresponds to the territory?
And what are the consequences...
if it doesn't?
(The question before us all.)

Later, sitting down where the river bends through the green valley, and the trees--tall, thin pines that remind me of lodge-pole pines--line the bank, Muhabitsho and I talk about beauty. Across the water, across the valley, soft green hills rise to meet the jagged line where tattered black clouds are tearing away from deep blue sky. To our right, as the river bank bends around, the graceful tree trunks, reddish in the setting sun, are reflected in a crescent of black water. Walkers dive from a wooden pier; their ripples glow on the black water with the gold of sunshine.

"Is beautiful, no?"

I nod.

"How is it possible for our maps to work? This is mystery for poets and philosophers. If I make a map of Russia, I draw on paper with ink. The paper and the ink, they are not in any way what is Russia. When I experience Russia, this too--my experience--is, as we have been saying, like a map. What happens inside here," Muhabitsho points to himself, "all this chemistry, all of whatever this is to make my experience, THIS is not the same as THAT." He points his finger in a grand sweep across the river valley. "This experience of mine is not that. And what do I miss? A dog hears sounds I cannot. A porpoise hears sonar, a bat hears like radar, the spider...its chemistry, it is different and so its map is also different. And so my experience is only one experience. How can I know the map I make...that it works?"

Right in front of us, St. Albatross pops unexpectedly out of the water. "I'm a lizard man." His tongue flicks across his lips. He scuttles ashore, pulls himself with hands splayed like lizard claws, eyelids closed half-way; then darts up to sit next to us. A cool breeze blows off the river.

"Cold?"

"Wrong map. Lizard men don't get cold. We get slow." He pauses. "What's up?"

"Well if lizards and spiders and humans experience everything differently, how does it all work? If THIS is not the same as THAT, why does knowing work at all?"

Let us begin thinking about this mystery with a clean sort first: At the level of the individual living being, the Map is not the Territory.

For one thing, there are vast deletions. An individual map does not encompass but a small fragment of the territory. I cannot hear a dog whistle, nor can I perceive the dolphin's sonar nor the bat's radar; nor do I sense the shifting rivers of chemicals along which the insects fly to find flowers.

For another thing, there many differences of kind at the level of the individual. My visual representations of the world around me is very different from my auditory representations and they both differ from my olfactory representations; and so on.

For another thing, there are vast differences in history. This manuscript is a map in English not in Spanish. My history has given me particulars on my map that differ from those of other people who speak other languages and who have other cultural perspectives.

No particular map, of whatever kind, with whatever deletions, based on whatever history represents the complete territory. Those people who believe their map IS the territory, who do not cleanly sort map from territory, are lead to inferences about the rest of us which can lead to terrible consequencesBfor both parties.

The map is not the territory.

AND...

There is another clean sort to make. This is the sort across levels: including the level of individual, the level of the species, the level of various Circle Dances such as the Bird-Moth dance (let's call these "sub-ecologies"), and the level of the whole ecology (the pattern which connects all living beings).

And this sorting of levels will lead us toward more mysterious aspects of knowing.

First, I want to develop another Circle Dance: the Horse-Turf dance. When I was a child, we owned a weed-filled, vacant lot next to our house. This lot was on rich, Illinois river-bottom. All that was necessary to create a lawn on this lot was to mow it regularly. After a year or so of mowing the lot was adorned by a beautiful Kentucky blue-grass lawn. We never seeded, nor weeded, nor watered; we simply mowed. It was the right environment for grasses of course; my California and Utah lawns never did so well even with feeding and weeding and watering.

In the right environment, grasses have a real advantage over other vegetation IF the area is mowed or in some way regularly cropped short. Taller, flowering plants, for instance, will do poorly if they are regularly cut down because they can't flower and reproduce. Grass, on the other hand,

does well when mowed.

So, quite naturally, grass, turf, prairies and the such, are given an advantage when ungulates (e.g., species such as horse and bison) with sharp hooves and teeth, mow an area by eating the vegetation. The ungulates in turn are given an advantage as prairies get larger. The larger the prairie the larger the ungulate that it can support. And the larger the ungulate (both in the size of individual and in the number of individuals) the larger the prairie created by the cropping of the ungulates.

When Europeans first explored the great plains of America, they were astounded to find that bison herds were so large that they would take three or four days to thunder past their camps. That's a lot mowing.

...the evolution of the horse from Eohippus was not a one-sided adjustment to life on grassy plains. Surely the grassy plains themselves were evolved pari passu with the evolution of the teeth and hooves of the horses and other unglulates. Turf was the evolving response of the vegetation to the evolution of the horse. It is the context that evolves.

We should not think of this process just as a set of changes in the animal's adaptation to life on the grassy plains but as a constancy in the relationship between animals and environment. It is the ecology which survives and slowly evolves. In this evolution, the relata--the animals and the grass--undergo changes which are indeed adaptive from moment to moment...

The relative constancy--the survival--of the relationship between animals and grass is maintained by changes in both relata.

--Gregory Bateson

Steps to an ecology of mind [155, 338, 339]

What we are doing here in talking about the Horse-Turf circle dance is to move up levels from the level of the evolution of an individual species--horse--to the next level up: The evolution of the relationship of horse and grass. We are sorting the level of individual from the level of the species, and the level of the species from the level of the those sub-ecologies we have called circle dances, and the level of circle dances from the level of the whole ecology of Life on Earth within which the individual lives. It is the ecology that survives and evolves. It makes no sense to speak of the evolution of an individual species except in relation to its ecology.

Now that we have a clean sort between the evolution of an individual species and the evolution of that species' relationships with other species, let us return to the nature of knowing. How is that we can know what we know? Why do our maps work at all?

Recall the bird-moth dance. As the camouflage of the moth becomes better the eyesight of the bird improves and as the eyesight of the bird improves the camouflage of the moth becomes

better.

It makes no sense to speak of the keen eyesight of the bird in isolation, without reference to the cryptic camouflage of the moth.

In some real sense, the structure of the bison (its size, its digestive system) exists only in relation to the prairie; and the structure of the prairie (the kind of plant community that it is) exists only in relation to the vast herds of bison.

In some real sense, the structure of the eye of the bird exists only relation to the structure of the moth--particularly how the color patterns of moth wings differ from that of tree bark--is coded within the structure and physiology of the bird's eye. To wit, the eye must contain receptors for color and contour and so forth that are responsive to the differences between moth and tree bark. After an immense journey across eons of evolution only those birds now survive whose eyes map this difference between moth wings and tree bark. Keeness of sight exists in relation to the evolving puzzles offered by the larger ecology. In some highly abstract, relational sense, the structure of the moth is coded in the structure of the bird's eye. And THAT is why the bird's map works.

Because it is alive, the bird's map is functional. Birds with nonfunctional maps are dead, starved out along the evolutionary journey. Because it is alive, its map works.

And because I am alive, my experience, conscious and unconscious, usefully represents the territory around me. The immense, mythical journey of Life has thrown me toward to the very cutting-edge of its exploration; it has thrown me toward into this mysterious moment: NOW: with the future all unknown and open, with an unfinished map that relates--in the profoundest sense--to the territory.

So far.

At the individual level it is important to sort cleanly by realizing that this map we are making is not the territory; AND, at a higher level, the process of building this map cannot be separated from the processes of Life. THIS experience is integrally related to all the circles and levels of the whole ecology within which experience occurs. It is ONE.

The only reason the map works at all is because it is ONE.

(It's very weird to talk about the interconnected oneness and the mystical connection of experience to this oneness by using linear-logical words such as "only," and "reason" and "because." Still you play whatever instrument you know how to play; and if it is all ONE, then each way is a Way... and there are many Pollen Paths.)

When I wanted to name the computer file for this chapter I found myself with something like INTEGRAT.ED1 to represent the underlying theme of integrated oneness of map and territory. The odd punctuation is because I could only use an eight-symbol name in the context of this computer's operating system, consequently, I ended up using the first eight letters of "integrated" yielding INTEGRAT. The operating system also allowed a three-symbol subscript after a period. So I added ".ED1" to complete the theme of integrated one. Thus, there is a punctuation (a period)

between INTEGRAT and ED1; but this punctuation exists only in relation to the operating system (sub-ecology) within which it exists. It may be useful to sort *Aself@* and *Aother,@* to draw a functional boundary (punctuation) between you and me. Even so, our experience (Integrated One) across that punctuation as we relate.

However important it may be to punctuate the circle and to sort cleanly the map from territory at the level of the individual (INTEGRATE.ED1), it is equally important to realize that at the level of ecology, at the level of the Glowing Mask of Life, it is all a single INTETRATED1.

Let's try that flow of ideas again, this time without a machine metaphor. We have sorted map from territory. We have also sorted the level of the individual from other, higher levels within the total ecology.

Clean sort first, then integration.

Imagine for a moment from a distance an essential example of what the Navajos call the Pollen path: A flying insect is meandering toward a flower; add a meadow, some trees, the sky, clouds, sun... add everything because there are terrible costs for leaving out any part of the whole ecology. From this distant perspective, watch the insect (perhaps a moth?) drift in an irregular manner through the air toward food. From this distance pretend that we can see the river of chemicals wind-blown off the flower floating in the air, and pretend we can see the insect flying up this river. And pretend we can see the little chemical receptors on the insect which detect the river of chemicals. See the chemical molecules bumping against the receptors, triggering them so that the insect senses where the river of chemicals, the Pollen Path, is.

The chemical receptors allow the insect to represent internally, to map, where the Pollen Path is and where it isn't. The "experience," whatever that may be, which the insect has when its chemical receptors fire might "mean" something in our language like "food" or "flower" or "Pollen Path" to the insect.

From this distance notice that the insect's map is but one process within Flower-Insect dance. From this distance appreciate how insects danced with flowers along the journey of Life so that the flowers grew larger and more complex as did the insects; and notice the dance allowed for the appearance of keen-sighted birds and a whole sub-ecology of mammals which in turn formed the foundation for humans. Notice that it is the ecology that survives and evolves.

And NOW from this distance as we watch the insect approach the flower we can integrate. The insect's internal map is an integral part of the the circle dance. Without the insect's map, the circular pattern of interaction between insect and flower is broken and the dance does not exist. The mapping process is made up of the same matter and energy and chemical processes as the physiology of mineral absorption in the flower or the physiology of wing movement in the moth, or of any other part of the Flower Insect dance. In this sense it is all one; the map is one part of the territory. The experience of the insect, whatever that may be, is not somehow separate from the circular process.

The insect lights upon the flower, probes its delicious center, feeds; and the flower receives a message, a deep reproductive connection, a love letter, it you will, from other flowers that the

insect has visited. And within this dance, the map, or knowledge or whatever we may want to call it, which the insect uses to find flowers is inseparable from the whole of circle dance. At this level it is nonsense to separate experience from the ecology within which the experience occurs. Were there no flowers, were there no Pollen Path, there would be no experience of them. Even if the insect's receptors existed, there would be nothing to sense; and, of course, the receptors only exist in relation to the Pollen Path.

Fortunately, the Pollen Path, the Insect-Flower dance does exist; and the rich source of insect protein has allowed the evolution of other dances. The bird sits on a tree branch looking for moths. AND it makes no sense to speak of the keen eyesight of the bird except in relation to the camouflage of the moth. The very structure of the eye exists in relation to the moth, and consequently to Moth-Flower dances and the Pollen Path. What the bird "knows" is inseparable from the whole ecology within which it knows.

At this higher, more mysterious level, our experience is an integral part of the whole unfolding bloom of creation.

Why, if evolution is an immense journey of Life ever reaching out to explore new blooms of the pattern which connects, does it make sense that Joseph Campbell discovered that the Hero's Journey is the meta-myth for discovering the mythical patterns which give our lives coherence?

The nature of the mapping process is inseparable from the nature of the ecology which it maps.

Our ability to think about this, to build maps such as the one we are building together in this thinking/writing/reading/thinking process here on this page is inseparable from the journey of Life all around us.

Something new is waiting to be born.

It is emerging.

Within us and without us.

MIND AND NATURE ARE A NECESSARY UNITY.

*At the seat of the soul is there,
where
the outer and inner worlds
meet@*

--Novalis