

Essay on what is holy Mary Gilbert, Jan 2021

"I go amazed into a maze of a design that mind can follow but not know."

Wendell Berry; A Timbered Choir

My main assertion here is that there is only one thing, and it is holy. I will look at the impact of language on how we understand reality, and at the long history of one-thing-ness, and at how I personally recognize and relate to this holiness.

WORDS - *How we talk about our ideas and experiences*

Words are not reality. Words are based on assuming that what we name are separate entities, that we can commonly see/detect/experience/explain. We need them for communication.

First, let's not forget that everything in existence is made of elements forged in stars. I no longer make an essential division between living and non-living. Consider the element oxygen. All by itself it is a gaseous atom, with certain inherent capacities for joining with other elements so as to make O₂, water, rust, etc. But what is it when in our bloodstream? Is it now alive, as part of our living body, or not? Does it make any difference which way we answer that question, as long as it functions as it does?

Consider rock. It's hard (mostly), to our touch, and we use the word to mean permanent, reliable. But it does wear down when exposed to movement of wind or water. And lichens eat rock, turning it into soil so that things can grow. Rock also comprises the continental plates, which are at the top layer of the churning crust of the earth. Some of these plates are heavier, and some are lighter. When plates meet, the heavier get subducted by the lighter, shoved under, where they turn to hotter, more flexible magma. They are not gone. The minerals will recycle; eventually they may become incorporated into plants, animals or fungi. They are still themselves, but they have now become part of other organizations of matter that we commonly call "alive."

HISTORY - *How did it happen to happen?*

Once upon a human time, if an animal lived in water, we called it a fish. We had starfish, jellyfish, shellfish. Whalefish. In fact those terms are still in use. Only within the last few years did I learn about the concept of the clade.

(From Wikipedia) A clade is a group of [organisms](#) that are [monophyletic](#)—that is, composed of a [common ancestor](#) and all its [lineal descendants](#)... The common ancestor may be an individual, a [population](#), a [species](#) ([extinct](#) or [extant](#)), and so on right up to a [kingdom](#) and further. Clades are

nested, one in another, as each branch in turn splits into smaller branches. These splits reflect [evolutionary history](#) as populations diverged and evolved independently....

The ancestors of whales and dolphins were once land mammals, and so on. Time-wise, that's the "vertical" dimension of change.

There is also a horizontal dimension to evolution. I was astounded recently to learn that the lateral transfer of genetic material is commonplace. DNA can move directly from one organism into an unrelated other. Long ago, single celled creatures commonly shifted inheritance sideways. It still happens today, for instance in our gut microbiome.

In our eagerness to understand, we commonly, and without realizing it, think of the way humans are organized as a template. We try to make sense of things in human terms. For instance, so much of what we humans are aware of as our own learning and intelligence is brain-based; we think of intelligence as seated in the brain. However the world is full of learning and decision-making that takes place in the absence of brain. Slime molds can learn to work faster through mazes to reach food. The coordination in insect communities among individuals without the physical connection of brain tissue is amazing. Termite mounds are built to adjust the internal temperature as conditions change; individual termites do the sophisticated and separate but coordinated work. There are scientifically reliable claims that our stomachs are "a second brain" that learns, manages its functions, and communicates with the brain in our head, the workings of which (the head) we can have some conscious knowledge of.

For most of my life I thought fungi were types of plant; after all, mushrooms grow from the ground. But no, some of the relationships between organisms that the molecular biology arm of cladistics has revealed are that [fungi](#) are closer relatives to animals than they are to plants. If you draw one of those branching "trees" that shows descent, at a certain point plants and the rest of life diverge. Then *later* the rest of life diverges into animal and fungal organisms.

Let's briefly consider fungi, which are another life-form that make decisions without having a brain. Lichen, formed by a joining of fungus and plant, was able to "eat" rock and turn it into soil, which enabled land life (such as ourselves, much later) to begin, and the teamwork between plant and fungus continues today *just as strongly*. Fungi have very long filament connections of one-cell thick strands of hyphae. They are too thin to see, but miles of it can exist under every footstep you take. They transport nutrients from the soil to plants. In the case of trees, they actually enter the cells of roots, to get the sugars they need to operate and grow, and give in exchange the minerals the trees depend on. They transmit chemical messages between plants. This network is often referred to as the wood-wide web. What amazes me is that the functions of fungi are responsible for our coming forth in the first place, and for our continued existence, and we have not really been aware that they are there. Many people still consider fungus an enemy of our well-being, put fungicides on their toes and into their lawns in the name of health.

People tend to talk about the functions of fungi as being cooperators, or as being selfish parasites. They would like to consider fungi either good or bad. In his book *Entangled Life*, mycologist Merlin Sheldrake writes: "*How best to think of mycorrhizal networks...Are we dealing with a superorganism? A metropolis? A living internet? Nursery schools for trees? Socialism in the soil? Deregulated markets of late capitalism, with fungi jostling on the trading floor of a forest stock exchange? Or maybe it's fungal feudalism, with mycorrhizal overlords presiding over the lives of their plant laborers for their own ultimate benefit.*" Obviously, terms of human relationships don't fit the case, but there is a reality of fungal functioning from which those funny suggestions can arise.

AWE

It's the interactive systems of the earth that inspire wonder in me. They are incredible. To say interactive systems might imply that there is/are more than one of them, but no, it's really one system, of incredible complexity, in which we participate.

I have to admit that over the last five years I've done a lot of reading. Scientists of natural processes have discovered that there is a wider audience for their writing, people like me who are educated in a general way, and are curious about how it all works. So the thinking I have done now has more information than it would have had some years ago. But it is not the gathering of information that leads me to call the Earth organism holy. It is my experience of awe.

Awe is not a cognitive process. It's an overwhelming experience that stops me in my tracks. I close my eyes and have to remember to breathe. I am filled with wonder and gratitude. I quote Wendell Berry again here:

"I go amazed into the maze of a design that mind can follow but not know.

SUMMARY:

- * There is only one thing. It is holy. Our relationship to it is that we are participants.
- * The Earth is not an assemblage, it is an organism, just as we are.
- * Over long time, as life has evolved, this organism has become more complex than we can understand. All existence is included: matter, spatial relationships, forces, all of it.
- * I recognize it by my experience of awe.