

FINDING YOUR INNER COMPASS

Sunday Sermon for October 9, 2011 at Channing Memorial Church, Newport, Rhode Island, written and read by Robert M. Thorson.

CALL TO WORSHIP

Come...let us open our hearts and minds to a higher power

- An invisible power extending far above the earth's surface ...
- An ubiquitous power present during every moment of every day...
- A guiding power that helps us find the right way...
- A protective power that shields us from harm...
- A power operating beyond the realm of common sense... almost magical.

I do not speak of God. I speak of magnetism. Natural magnetism. Electromagnetism. A force in the sky we can use when we are physically lost.

But what force is there for us to use when we are spiritually lost? What sort of inner compass can we use then?

READING

Sigurd Olson. "Northern Lights." From *The Singing Wilderness*. NY: Knopf (1956)

These are my words: The aurora borealis, also known as the northern lights, is a beautiful manifestation of the earth's magnetic field. They are sometimes visible at the latitude of Newport, especially during magnetic storms. They are common in Minnesota, where today's reading is set, and where I grew up. In Alaska, where I spent seven dark winters, the aurora colors the whole sky to such an extent that its beauty almost made up for the darkness and cold.

These are the words of Sigurd Olson: "The lights of the aurora moved and shifted over the horizon. Sometimes there were shafts of yellow tinged with green, then masses of EVANescence which moved from east to west and back again. Great *streamers* of bluish white ...zigzagged like a *tremendous trembling curtain* from one end of the sky to the other. Streaks of *yellow* and *orange* and *red* shimmered along the flowing borders. Never for a moment were they *still*... fading until they were almost completely gone, only to dance forth again in renewed splendor with infinite combinations and startling patterns of design..."

“As I lay there on the ice ... I wondered if legendry could survive scientific truth; if the dance of the protons would replace the ghost dance of the Chippewas...I wondered ...as I began to skate toward home... if *anything*—even knowing the physical truth—could ever *change the beauty* of what I had seen, the sense of unreality, Indian warriors, exploding atoms, beds of radium – what difference did it make? What counted was...[that.] ...those northern lights were part of me and I of them. “

SERMON TEXT

One hundred-and-sixty-seven years ago, a young Unitarian minister, Ralph Waldo Emerson, was having one of the most character-defining years of his life. Beset with grief over the death of his nineteen-year old wife, Ellen, and standing on the precipice of a personal spiritual crisis, he resigned his Unitarian pulpit in Boston and left for his first European tour. The highlight of that trip was visit to the Cabinet of Natural History at the *Jardin des Plantes* in Paris. After examining a room filled with mineral specimens, fossils and taxidermy, Emerson experienced a personal epiphany, writing in his journal on July 13, 1833: “I am *moved* by strange sympathies; I say continually “I *WILL* be a naturalist.”

Two years later he was an under-employed young man living with his mother and stepfather at the Old Manse in Concord, Massachusetts, a house built by his grandfather. Looking over his writing desk out a second story window he saw old fieldstone walls dating to the 17th century, a yard-like pasture, the lazy Concord River, and the Old North Bridge of revolutionary fame where the “shot heard round the world” was fired. From that desk came a small book published in 1836 with the one-word title: *Nature*. This extended essay marked a turning point in American thought... a bold manifesto that Nature – rather than liberal Christianity -- *should* lie at the heart of spirituality and religion. From evening discussions of this and other ideas, emerged an informal movement dubbed American Transcendentalism by outsiders.

Instrumental in getting that group going was our own William Ellery Channing, namesake for this church, and whose bronze statue faces our front door. After laying the intellectual groundwork with famous 1819 Baltimore Sermon, and after helping to organize the group’s first few meetings, the young radicals of the day took over, many of which were Unitarian ministers. Among them were Margaret Fuller, Emerson, and Frederick Henry Hedge, Bronson Alcott, Elizabeth Peabody, Henry Thoreau, Theodore Parker, James Very, Orestes Brownson, George Ripley, and many others.

As a historical philosophical movement, American Transcendentalism is dead. But as living religion, its very much alive, because many of its core ideas unite for form a strong

strand in modern Unitarian Universalism. Central to Emerson's text is a pan-*theistic* approach to Nature with a capital "N," the notion that god is a pervasive force subsumed throughout it all. Not a pan-*deistic* approach to nature, in which a creator god gets things going and steps aside but as a continuing force, something like magnetism but more fundamental. Yes, even more fundamental than the ...invisible...ubiquitous... guiding... protective... counterintuitive...and almost magical force of magnetism.

With the mysterious force of natural magnetism as my starting point, I now move to three additional ideas central to Emerson's *Nature*, all of which I ascribe to and practice daily, and which I share with you today.

- The first idea is that of "*correspondence*." That *natural* facts correspond with *spiritual* facts. Those are 19th century words. I prefer to say that concrete objects and processes correspond with a nuggets of meaning when they are extracted by meaning-seeking humans. For example, it's a well-known natural fact that the needle of the physical compass – a concrete object-- is guided into alignment by Earth's dipole magnetic field, a concrete process. A corresponding nugget of meaning for me is that that the needle of my *inner* compass follows the *force field* of my heart.
- The second idea is *self-reliance*. Having this trait requires that one keep their "inner compass" in good working condition. You'll need it to decide where to go during times of darkness, where to go when the stratus clouds of depression block out the sun, and where to go when the storms of emotional turbulence confuse you. Without your inner compass, you could not be as self-reliant as you are, and therefore probably not be a member of this, or any other, Unitarian-Universalist congregation.
- The third idea is *holism*, the notion that each of us is part and parcel of one great thing, in this case the whole earth system. I refer to a system so inclusive that it takes in everything from the solid massive core of crystalline iron at the center of the planet, to the custard-like core of soft, gray, nervous tissue within our skulls. The low frequency electromagnetic waves emanating from my brain this morning as a result energy provided by my breakfast, are somehow linked with the electromagnetic waves emanating from the swirling mass of molten metal in earth's outer core. As Sigurd Olson wrote: "those northern lights were part of me and I of them. "

Now let's do a thought experiment. Close your eyes if it will help. You find yourself suddenly blind. The first thing that goes missing is the visual image of your surroundings, the wooden pews, the people near you, the stained glass, and some guy in the pulpit. It's as if you were a digital camera and your battery just went dead. In familiar terms, we say that you can no longer "see" because you can't construct an image of the environment.

But a more fundamental part of you can still see, provided the sun keeps shining. I refer to the navigational component of sight, which uses light not to *image* something, but to

know where one is on the planet. Even through your closed eyelids, you can use the position of the sun as a *fixed point* in the sky, from which you can take a crude bearing. Even through your eyelids, you can detect if you are moving toward or away from the fixed reference point of the sun. This primitive navigational component of sight, predates the imaging component by more than a hundred million years of vertebrate evolution.

Dandelions and sunflowers, for example, use this component to track the *sun* through the day, and do so without bothering to make an image of it. During their long migrations insects and birds use the navigational component of sun to stay on track ... they've even learned to polarize sunlight to obtain a better directional fix. Mariners on the open sea use the location, strength, and height of the sun to keep themselves from being lost.

Many creatures, however, ranging from sea turtles to bats to naked mole rats, use a different place in the sky as a fixed reference to keep track of where they are -- the north magnetic pole. Inside the bodies of such animals are tiny bits of a special mineral crystal called magnetite, an oxide of iron so sensitive to earth's magnetic field that the crystals sometimes grow in alignment with the prevailing field. When this happens, the crystal becomes a natural magnet in its own right. The ancients called it *lodestone*, which means: "*leading* stone," because it *led* them where they needed to go.

Our familiar hand-held compass is nothing more than a bit of lodestone that's free to rotate in a nearly frictionless environment: whether dangling from a string, floating on a leaf in water, or delicately balanced on a pivot point. In each case, the pointer moves into position and points the way.

My wife Kristine and one of *my three sons* are "directionally challenged." Absent familiar landmarks, or a memory map of where they've been, they have trouble figuring out where they are, especially with respect to the cardinal directions. In contrast, my third son and I have, a natural ability -- and in my case, an almost uncanny instinct -- of knowing where I am at most times. It's as if some part of my brain keeps track of my motion with respect to the North Pole. Perhaps I do have a bit of sea turtle or naked mole rat in me, having been raised in the North Star State in the flatland grid of north & south and basin & range.

But even if I do have a biological compass inside of me, that's not the kind of "inner compass today's sermon is about. Today's sermon is about the symbolic inner compass inside each and every one of us. The one inside of YOU [...point...] and YOU [...point...] and YOU [...point...] and even YOU. ...the impulse that guides you all when logic falls short. Though immaterial and completely irrational, this inner compass is very, very real. It's your pathfinder, the decision-making component of your self-reliance.

Many physical compasses contain a bubble of fluid in which the needle moves, perhaps the one on the dashboard of a car, or near the wheel on a sailboat. Such a liquid bubble is analogous to the private bubble of our individual consciousness, something called the self. In infancy this personal bubble universe is only about a foot in diameter, the distance between a mother's milk, a loving smile, and an arm to hold us. As we grow, our private bubble universe expands from lap to room, to house, to neighborhood, to town, to nation, to globe, to solar system, to galactic space and beyond. Yet through all that expansion, our sense of self remains the pivot point around which the needle of our thoughts sweeps the horizon, seeking direction. To this person or that one? To this opportunity or that one? To this place or that one? Quite often, we rely on reason, weighing the pros and cons, and with good results.

But sometimes the scales of logic are evenly balanced, two choices at rest in perfect tension with one another. Sometimes the scales of logic don't work at all, perhaps because we are too emotional. What then? That's when I reach into my subconscious, pull out the handy-dandy *inner compass* of my intuition, and ask it to point the way. When it settles, I move confidently in that direction. Self reliantly.

What force tugs this *inner* needle? Partly, it's our biological instincts for self-preservation, evolved behaviors regarding personal safety, mate selection, or the protection of children. But after these animal needs are largely satisfied, the pull of morality strengthens until it dominates. What matters then are: right vs. wrong, generous vs. selfish, rational vs. sensual, good vs. evil. The moral tug on my inner compass is relentless, ...the needle free to move...never at rest...always being tested.... .. or as Henry David Thoreau said... "never a moment's truce between virtue and vice."

There are those humans with an inner compass overwhelmingly dominated by biological instincts. Sometimes, we uncharitably refer to them as being like "beasts." And then there are those whose moral instincts dominate, for example Ralph Waldo Emerson. These we call ministers or rabbis or priests or philosophers, or judges, or simply wise men and women... like most of us in this room. Only rarely does, the moral instinct overwhelm the biological instinct. Martyrdom is the result.

There's more to the metaphor of the inner compass than the pointing of the needle. There are quadrants as well. The physical compass has four of them: northeast, southeast, southwest, northwest. My inner compass has four quadrants as well: heart, mind, body, and spirit. My *body* responds to tactile encounters with physical reality, for example the texture and graininess of rock. My *mind* responds to whatever rational thoughts I might have about that rock, for example its description or classification. My *heart* responds to the meaning symbolized by the natural fact of that rock, for example its stability in the shifting sands of my life. My *spirit* responds to my natural sympathy with the rock...my

resonance with it, so to speak, the idea that the rock and I are related... in this case, being made of the same star stuff, elements like carbon, hydrogen, oxygen, sulfur, nitrogen, phosphorous, and of course...iron. For example, the iron that makes my blood red and brings oxygen to my brain that allows my inner compass to work was dissolved from some ancient lava flow.

Early humans must have discovered the magical properties of the physical compass during the time of Adam & Eve. Perhaps it was some magnetite-bearing dust held by the surface tension of water on a pool, left free to align. This I have seen myself. Written proof of the use of the physical compass is nearly three millennia old, recorded in early Greek and Chinese texts. Understanding how a compass works, however, didn't happen until the year 1600 AD, when William Gilbert, personal physician to Queen Elizabeth the First, figured it out. He suggested that the earth contained a giant bar magnet roughly aligned with its north and south poles or rotation. The essence of this model remains valid today, though no such bar magnet could exist inside the earth. It's way too hot.

Earth's inner core is a dense mass of something resembling stainless steel, a crystalline alloy dominated by iron and nickel, and kept from melting by the extreme pressure. Surrounding the inner core the pressure is lower, allowing the same metal alloy to melt, creating a silvery fluid so weak that it flows like liquid mercury or water. Above this swirling metal outer core is a thick mantle of dark silicate rock...and above that a rocky crust...and above that a thinner film of watery ocean...and above that a veil of gas so insubstantial that it would not even reach the ceiling of this room if it were compressed into a liquid. Indeed, the world as we know it literally floats above earth's liquid outer core.

Earth is hottest at the very center. It loses heat outward by liquid motions within the outer core, a convective movement similar to what takes place in thunderclouds. In the atmosphere, moist air rises upward, molecules rubbing against one another to create the electrical field responsible for lightning. In the outer core, pockets of extra-hot liquid metal rise upward, atoms of iron rubbing against one another to create fairly strong local electrical fields.

But of course, the earth also spins on its axis, and at a velocity of a thousand miles per hour near the equator. This constant spin orients and aligns the convective flow of liquid metal to create a giant swirl rotating around the conductive solid core. The result is the whole-earth magnetism of the north-south dipole field. Without this field, the steady stream of ionizing radiation called the solar wind -- mostly electrons and protons -- would strike planet earth with deadly force. Instead, it's deflected away, permitting life to exist. It's also channeled downward along the magnetic field lines, giving rise to the beauty of the light show called the aurora.

Consider a compass held in the hand of a child. The needle aligns. The child smiles. This convergence requires that human intelligence and earthly intelligence interact. Without the proper planetary spin, without the proper chemical composition, and without the proper flow of heat, there would be no magnetic force for the child to appreciate. And without the geological singularity called the origin of life and prolonged natural selection through eons of evolution, there would be no smile. This convergence is close to a magical experience.

When I'm not in my laboratory or classroom, I'm free to speculate on things outside of science. Being in such a situation now, I'll let loose. I'd like to think that my inner compass is more than metaphor, that my non-biological intuition is in part rooted in the alignment of two electromagnetic fields: the *weak* but close electric field of my consciousness, and the much *stronger*, but *distant* electric field inside the earth. Could the two be interacting in ways that my senses preclude? I simply don't know. But at least I posed the question.

If there is such a link between the electrical force field of my mind and that of the whole earth, I know it cannot be a static condition. *That our minds* are in a constant state of flux is self-evident, for psychologists tell us that we can hardly hold on to a thought longer than about 20 seconds. *That the earth's* magnetic field is in a constant state of flux is also well known to geophysicists. Like our minds, at least ten percent to the earth's magnetic field at any time is random and transient. At a scale of centuries, the direction of the field migrates in a process called secular variation, just as our important ideas drift away from a central axis. At the scale of epochs, transient intervals of magnetic chaos arise and the polarity of north and south reverse, and vice versa. Likewise, there are those rare times in our lives, particularly when we are young, when our attitudes shift dramatically.

At times, the earth's magnetic field seems temporarily confused. The same is true for us, even those with the most stable personalities. I wonder if there's a connection? Could it be, as Sigurd Olson suggests, that: "those northern lights were part of me and I of them." Conversely, could it be that that northern magnetic pole and my inner light are aligned?

In conclusion, I return to the main theme of Emerson's *Nature*....that God is suffused throughout it, like magnetism but even more mysterious. I agree. I also return to three principles of historic Transcendentalism that I, and many other Unitarians, still practice today.

- *Correspondence*: The outer compass of my physical travels, corresponds to the

inner compass of my spiritual travels. I'd like to think that I am moved by the same strange sympathies that moved Emerson when he decided to be a naturalist, a poetic naturalist.

- ***Self Reliance***: Without my inner compass, I'd be lost. It is my guide, with me always, ready to use when logic fails.
- ***Holism***: Earth's electromagnetic field is created by a swirl of liquid iron in its core. The electromagnetic field of my consciousness is created by flow of oxygen to my brain, carried there by iron in liquid form. It is possible that my inner and outer compasses are one in the same?

Amen.

BENEDICTION

As we leave, let us be thankful for the ***natural fact*** of earth's magnetic field. Without it, there would be no life on Earth, more confusion, and less beauty.

Let us also be thankful for the ***spiritual fact*** of the ***inner compass*** inside us all. May it be with us always to guide us through the times of darkness and shadows, and through the storms of life yet to come.

Amen