

A Lizard by Day & by Night

By Donne Hayden

Last week during Michael Dowd's presentation on "the marriage of science and faith," he pointed out the different language used by science and religion. I mentioned this briefly last week, but to refresh your memory, here is the explanation from his book, *Thank God for Evolution*:

It is vital to remind ourselves, from time to time, of two complementary sides of the one coin of our experience. On one side is the realm of what's so; the facts, the objectively real, that which is publicly and measurably true. Let's call this side of reality our day experience. We talk of write about it using day language—that is, normal everyday discourse. The other side of our experiential coin I call night experience. It is communicated through night language, by way of grand metaphors, poetry and vibrant images. Our attention is focused on What does it mean? This side of our experience is subjectively real, like a nighttime dream, though not objectively real. Night language is personally or culturally meaningful. It nourishes us with spectacular images of emotional truth.

...

Problems arise when we fail to distinguish the factual, objectively real from the meaningful, subjectively real—when we mistake our interpretations for what's so. The two are not the same. Facts are delimited; interpretations are manifold.¹

¹ Michael Dowd, *Thank God for Evolution* (New York: Viking Penguin, 2008), pages 113-114.

Unfortunately, our contemporary culture values objective day language more than subjective night language when it comes to what we perceive as “true.” One measure of this is to see where a culture puts its money; scientist and mathematicians, practitioners who use day language, command high salaries and prestige in this country. Those who specialize in night language, however, such as artists, writers, musicians, and other liberal arts majors, often have trouble finding jobs or funding. As Garrison Keillor will tell you, most restaurants are staffed by English majors.

To see the different kinds of truth each language addresses, let’s take something simple—a lizard, for instance—and consider the truth about it through day language and night language.

1) First a lizard in the “day language” of straightforward scientific observation:

A chameleon’s colorful beauty is truly skin deep. Under the transparent outer skin are two cell layers that contain red and yellow pigments, or chromatophores. Below the chromatophores are cell layers that reflect blue and white light. Even deeper down is a layer of brown melanin (which gives human skin its various shades). Levels of external light and heat, and internal chemical reactions cause these cells to expand or contract. A calm chameleon, for example, may exhibit green, because the somewhat contracted yellow cells allow blue-reflected light to pass through. An angry chameleon may exhibit yellow, because the yellow cells have fully expanded, thus blocking off all blue-reflected light from below.²

²(<http://www.pbs.org/edens/madagascar/creature3.htm>). Article by Christopher J. Raxworthy, who is a curator of Herpetology at the Kansas University Museum of Natural History and has worked in Madagascar since 1985.

Detailed as this description may be, i

2) From Darwin's diary entry for September 17, 1835, containing his notes and observations from the Galapagos Islands:

Iguanas are a "most disgusting, clumsy lizard. . . They are as black as the porous rocks over which they crawl & seek their prey as from the Sea. — Somebody calls them "imps of darkness". — They assuredly will become the land they inhabit. —"

and on Oct. 1 on Albemarle Island,

We here have another large Reptile in great numbers; it is a great Lizard, from 10-15 lb. in weight & 2-4 feet in length; is in structure closely allied to those "imps of darkness" which frequent the sea-shore. This one inhabits burrows to which it hurries when frightened, with quick & clumsy gait. They have a ridge & spines along the back; are colored an orange yellow, with the hinder part of back brick red. They are hideous animals; but are considered good food: this day forty were collected.³

Darwin actually uses some "night language" in his observation; for instance, the metaphors "black as the porous rocks" and "imps of darkness."

3) Day language, 170 years later, from a newspaper article:

Richard Glor, graduate evolutionary biology student in Arts & Sciences at Washington University in St. Louis, has found extensive genetic differentiation among populations of numerous Anolis lizard species inhabiting single Caribbean islands. While to the naked eye the lizards appear to be uniform, these lizards from the islands

³ Charles Darwin's *Diary of the Voyage of H.M.S. "Beagle."* Edited from the MS by Nora Barlow. Accessed 02/10/08. <http://www.galapagos.to/TEXTS/DIARY.HTM>

of Cuba, Puerto Rico, Hispaniola and Jamaica all show a surprising amount of genetic diversity. Glor goes to the islands and collects lizard samples to study morphology, or body features, and color patterns and then sequences DNA from the different species.

"The levels of differentiation we're seeing genetically with anoles completely blows away any kind of variation in humans," Glor said. "We've found an unanticipated dimension of biodiversity, far greater than ever thought to exist. If you look at DNA in any widespread species, it suggests that several species may actually be present."

The variation that Glor has found startles evolutionary biologists and challenges researchers to understand what is causing the DNA evolution, said Jonathan Losos, Ph.D., Washington University professor of biology, and Glor's co-adviser.

"What's so exciting about the variation Rich has discovered is that it's completely unexpected," said Losos, who has studied Caribbean lizards for more than 15 years. "These lizards have been a model system for understanding evolutionary diversification for 30-plus years, including by a number of famous scientists, yet Rich was the first to discover this. He's uncovered a whole different layer of speciation and diversification in these species. It's possible that one group is not just one species but represents maybe six or eight species. At the very least, it shows within species there is a lot of genetic diversity that we had been clueless about beforehand."⁴

⁴ "Biologists Find Unexpected Rapid Evolution In Caribbean Lizards." *Science Daily* (Jul. 16, 2003).

4) In the book of Genesis in the Bible, not intended as “day language” describing factual and discrete events, but as metaphor and story, we find this “night language” with a slight reference to lizards as “creatures that move along the ground”:

God made the wild animals according to their kinds, the livestock according to their kinds, and all the creatures that move along the ground according to their kinds. And God saw that it was good.

Then God said, “Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all the creatures that move along the ground.” (Genesis 1:25-26 NIV)

The only other mention of lizards *per se* in the Bible occurs in the book of Leviticus, which sets forth purity laws for the Hebrew tribes. Several thousand years ago, these purity laws described daily, objective reality for the Hebrew people, so for them, this was “day language.” Because it is so far removed from our 21st century daily, objective reality, however, it may sound to us like “night language”:

“Of the animals that move about on the ground, these are unclean for you: the weasel, the rat, any kind of great lizard,

the gecko, the monitor lizard, the wall lizard, the skink and the chameleon.

Of all those that move along the ground, these are unclean for you. Whoever touches them when they are dead will be unclean till evening.

When one of them dies and falls on something, that article, whatever its use, will be unclean, whether it is made of wood, cloth, hide or sackcloth. Put it in water; it will be unclean till evening, and then it will be clean.

If one of them falls into a clay pot, everything in it will be unclean, and you must break the pot.

Any food that could be eaten but has water on it from such a pot is unclean, and any liquid that could be drunk from it is unclean.

Anything that one of their carcasses falls on becomes unclean; an oven or cooking pot must be broken up. They are unclean, and you are to regard them as unclean.

A spring, however, or a cistern for collecting water remains clean, but anyone who touches one of these carcasses is unclean.

If a carcass falls on any seeds that are to be planted, they remain clean.

But if water has been put on the seed and a carcass falls on it, it is unclean for you. (Lev 11:29 – 38, NIV)

5) Finally, here is a description of an iguana in “night language” related to aesthetics and meaning from Karen Blixen, a Danish writer who lived in Kenya from 1914 to 1931. (You may know her by her pen name, Isak Dineson, and by at least one of her books, *Out of Africa*, which was a Hollywood movie some years ago.) When Blixen was new to Africa, she spent time in the Kenya Reserve, writing down observations in her journal.

In the Reserve [she wrote] I have sometimes come upon the Iguana, the big lizards, as they were sunning themselves upon a flat stone in a riverbed. They are not pretty in shape, but nothing can be imagined more beautiful than their coloring. They shine like a heap of precious stones or like a pane cut out of an old church window. When, as you approach, they swish away, there is a flash of azure, green and purple

over the stones, the color seems to be standing behind them in the air, like a comet's luminous tail.

Once I shot an Iguana. I thought that I should be able to make some pretty things from his skin. A strange thing happened then, that I have never afterwards forgotten. As I went up to him, where he was lying dead upon his stone, and actually while I was walking the few steps, he faded and grew pale, all color died out of him as in one long sigh, and by the time that I touched him he was grey and dull like a lump of concrete. It was the live impetuous blood pulsating within the animal, which had radiated out all that glow and splendor. Now that the flame was put out, and the soul had flown, the Iguana was as dead as a sandbag.

Other experiences of lizards that might result in using “night language” to talk about them might be the affection someone feels who has a lizard for a pet; of a Buddhist who understands that the lizard and I are one, or a deist who sees a lizard on a rock as the scrawled signature of God.

Day language speaks to our need for information about objective, material reality; night language addresses our need for information about non-material reality. Day language gives us understanding; night language gives us meaning; day language speaks to our minds and intellects; night language speaks to our hearts and souls. We need them both. If we acknowledge this and don't limit our Truth to day experience and day language alone, our lives become immeasurably richer.