

We humans tend to see “our place” through the filter of that thin band of air between earth and sky that we inhabit. Prevailing cultures hold humanity as the noblest life form, separate from and superior to all others. We see ourselves apart from bacteria and plants, on rungs above other sentient animals, remote from oceanic life or from distant stars and galaxies. For our superior ability to “tame,” harvest, and profit from our planet, her oceans and other creatures, we celebrate “the great story of man.” Indeed that story can seem impressive.

But pause to consider another idea. Leave that familiar harbor and enter the ocean. Penetrate the water’s surface and its reflection of the known; descend gently beneath the waves. Grasp the ocean as guide, and time as viewing glass. Look and listen closely for the stories they reveal.

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The veil that gives descent into the blue a sense of peace and quiet, at depth lifts to reveal something else: an ensemble of creatures, color and motion, of singing, crunching, grinding, grunting and clicking; of chases, captures, escapes, competing, curiosity; loyalty, partnering, mating and nurturing. Eight hundred times denser than air, this inner liquid cosmos has shaped an unimaginable profusion of life forms and functions.

No empty quarter, our oceans are rich with sentient creatures that for some 500 million years have been tuning their lives within the oceanic orchestra.

It is a complex yet finely synchronized score in which our own notes have also played. See this in our embryonic shape and gill arch structures, our spinal cord and brain, or the twisted courses for our blood and nerves: from this place, we too emerged. We evolved from ancient fish and carry the stamp of all their progenitors. Our own biochemistry, our anatomy, and the story etched upon our genome all

echo our history here. We are family to those that, like us, emerged from the water, and those living here still.

How far back does our shared story go?

Billions of years say astro-chemists whose sampling of asteroids and powerful radio telescopes have let us travel back through time. Life, it seems, came not by the hand of earth alone. It emerged from a cosmic partnership with life-essential molecules that formed in deep space -- eons before our solar system was a twinkle in our galaxy's eye.

From the hearts of red giant stars our elemental makings came - flying on wings of interstellar dust to a nascent watery earth. The newest findings point to life first arising nearly four billion years ago from an elixir between these stellar materials and those of natal earth, deep in its archaen oceans.

What exactly sparked life out of these molecules remains the realm of scientific theorists and poets. Yet from it came our last universal common ancestor. To all life hence, that first life form bestowed a genetic code of instructions – as immortal as anything we may ever know - for transforming cosmic and earthen molecules into life.

So it is that from the ashes of those stars have come the iron for our blood, the calcium of our bones, the oxygen we breath, indeed the cellular elements of every plant that blooms, every bacteria, every bug that bites and every fish swimming in the sea. We all embed the cosmos.

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The true magnificence of our story, then, lies not in human exceptionalism or superiority, but in our profound unity. Through their worship and lore, many indigenous cultures seemed to have intuitively sensed this elemental truth.

Those distant stars lent us our atoms; oceanic plants make our oxygen; bacteria reside within and sustain us. Zebrafish share 85 % of our genome. While duly crediting the 15% by which we and zebrafish differ – an ability to build nuclear weapons is not the sole criteria for evolutionary merit. Cetaceans have had 50 million more years to evolve than humans; we should not be surprised that their big brains are capable of comprehension, compassion, relationship and language that in some dimensions exceed our own.

From single cell to fin to brow, the same set of ancient genetic instructions drives not just humans but every living species to its most opportune form and function. This life essence connects us all.

Our own brilliant melody is one of many such in a complex orchestration of profoundly interdependent parts. Altogether it is the grandest of all compositions - borne of the universe, cradled in the sea - ever improvising across circumstance and time the marvelous forms and capacities that life will take.

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While browsing these photos, then, savor this sampling of our Garden of Eden.

Too, consider this: astrophysicists have found no similar Eden within our reach. The nearest exoplanet that the Spitzer telescope has found is 21 light years away. In a mortal lifespan, we can't get there. Even if we could we wouldn't survive its heat.

Earth, life's cradle, is beyond beauty: it is our only home. It is our only home even if, in carving room and resource for human expansion - this anthropocene moment - we clear every jungle and forest, dam every river and fish out every sea. Even if, with the detritus and effluent of our choices, we speed the geological processes cooking our biosphere: we have no other home.

In pursuing unbounded population and economic growth, we may be hastening the planet's sixth "great extinction." Humans hoping for only benign impacts mean nothing to a natural system answering only to rules of physics, chemistry and biology – and now reeling from human-induced overload.

And yet, our sun is poised to sustain this moment for life on earth – as long as a billion or so more years of possibility to keep our Garden living. So ask: How would our future children judge what we did in our moment to affect their possibility? If we could visit those progeny and see what our choices produced - would we be proud, or haunted?

Choices we make may seem of little consequence now, but they affect how our descendants will live and what other life remains in their time. It is true that we live amidst other forces unfolding on cosmic and geologic time-scales that we humans cannot control. Even so, our own choices may well, in a far shorter time-span, become existential for many species - including, possibly, our own. May wisdom and compassion be our guide.

