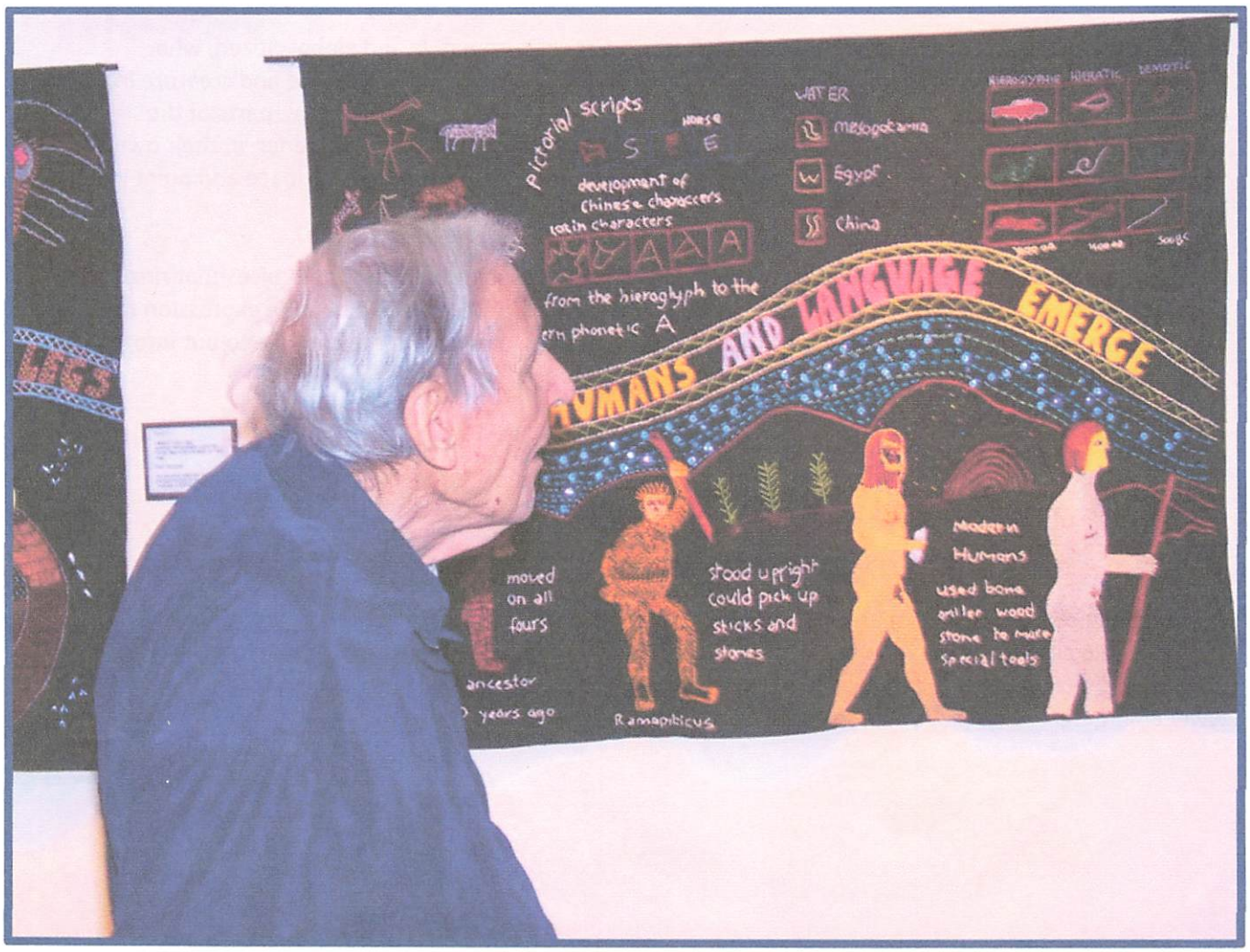
Voices from a Walk Through Time



Pictures, Poems and Prose by
F. Nelson Stover

... in the Spirit of Thomas Berry

2017

Introduction

The poems and monographs included in this collection were written over a period of three decades. They represent poetic ways to allow the animals, stones, particles and plants to tell their stories. Together these pieces weave a tapestry of the billions of years of creativity that have pervaded and enlivened Planet Earth.

These poems are written in the spirit of Thomas Berry, a Greensboro native and global citizen, who taught others how to listen to the story of the Universe as a whole and to each particle and creature in particular. "The Universe," Thomas said, "is the text without a context". In each poem, parts of the whole tell their own story, express their own hopes and fears and illumine for the listener, in their own way, a glimpse of how the past unfolds into the future through each specific place in space and point in time.

In presenting these pieces, the author hopes that others, too, will hear the myriads of voices that ring out with stories of beauty, awe and wonder. The initial attempts, herein, to give humble expression to the perspectives of the inexpressible, are also intended to inspire others with the courage to put into word, art and song the still small voices which often go unheeded.

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Greensboro, North Carolina
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Cover photo by F. Nelson Stover. Thomas Berry viewing the Kopanning Women's quilts at an exhibition at the Guilford College Library, 1999.

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Stepping Stones on The Universe's Journey to Now

14 billion years ago: Time, space, matter and energy took on individual, yet related, identities. The Universe as we know it began to unfold.

12 billion years ago: Stars began to form within the galactic clouds, some eventually erupted in cataclysmic supernova.

5 billion years ago: In the debris from countless supernova, our Sun, Earth and the other planets congealed and began their rotational dance.

4 billion years ago: In the seas of Planet Earth, life began.

500 million years ago: Life forms developed wood cells which allowed them to store water within themselves and withstand the pull of gravity on land.

250 million years ago: Dinosaurs roamed the land while fish filled the seas. The Appalachian Mountains were formed when the African and North American land masses collided.

60 million years ago: Trees with nuts and plants with flowers overtook the ferns; mammals replaced the dinosaurs on land.

2 million years ago: In the savannahs of Africa, bipedal creatures flourished on the forest boundaries; then began a journey across the Planet.

15,000 years ago: Humans crossed the Bering Straits to begin the humanization of the Americas.

Toward a Contemporary Cosmology
– A brief history of the Universe

In order to conceptualize the macro phases of the Universe's development, I described three stages in a *Guide to the Universe Story* that I printed in 1999 when Thomas Berry dedicated a Universe Story Walk on our property. More recently, I grouped the 14 one-billion year phases into seven steps, each with a two-word title. Thus, put succinctly, you can tell the whole story of the unfolding of the Universe by saying:

"The Universe has embarked on three great endeavors during which it accomplished monumental feats on its 14 billion-year journey into complexity-consciousness. During the First Great Endeavor, the Universe focused on **Turning Energy into Matter**. It spent about two billion years *Coalescing Clouds* of gaseous matter. The 2nd two billion years, saw the emergence of an abundance of *Exploding Stars*. For its Second Great Endeavor, the Universe focused on **Turning Matter into Systems**. In the 3rd two-billion-year period, the *Foundational Principles* emerged (differentiation, communion and autopoiesis) that ensured its long-term vitality. During the 4th two-billion-year period, *Complex Building Blocks* encompassed an Other World of mystery, care and compassion. Finally, in its Third Great Endeavor, the Universe has been working on **Turning Systems into Consciousness**. The first stage in this task, the 5th two-billion years, involved creating a *Life-Giving Platform* with eight planets and a host of other objects around a mid-sized star. In the 6th period, particularly on Planet Earth, the Universe *Harnessed Energy* giving it bodily form. Now, in the 7th two-billion-year epoch, all citizens of the 21st Century are helping birth *Embodied Consciousness* with self-reflective capacities ...and the future awaits."

Through Three Portals (F. Nelson Stover, 2014), presents a cosmology of an emerging Universe. The book goes on to describe how this perspective informs and shapes the decisions and actions in diverse aspects of society and within individual's daily lives and, finally, provides metaphors that foster interaction with reality's pervasive numinous aspects.

Holding On

{A story of collegiality surviving transformation.}

Stellar observers of the Milky Way's wispy spirals
Couldn't have suspected Tiamat's deep seated unrest
As the Universe's 9th billion-year birthday rolled around.

Yet each hydrogen atom within Tiamat's fiery core
Felt the unbearable pressure and the unfathomable heat
From the incessant churning of her atomic consumption.

A and B, two visionary hydrogen atoms with heightened sensitivities,
Had encountered each other in Tiamat's roiling interior
And periodically had experienced the thrill of atomic interaction.

Tiamat tried as hard as she could to maintain her flaming equilibrium.
She used everything fissionable to feed her blazing fires,
Thus trying to support her increasing mass.

Eventually, the time came when even her best efforts remained inadequate.
Wild pandemonium reigned as the massive core fell in upon itself
Obliterating most existing patterns and relationships in a cosmological twinkling.

Temperatures soared beyond bearable limits.
Atomic nuclei fused into massive associations
Forming copper, gold, uranium, zinc and other essential metals and gasses.

The energy waves from the tumultuous collapse
Reverberated throughout the fireball's sphere
Jostling, energizing and invigorating even the atoms in the outer reaches.

A and B had survived the blackness of the pre-galactic void
And had felt the buoyant exhilaration of riding solar flares;
But nothing had prepared them for this supernova frenzy.

The chaotic turmoil intensified their sub-atomic energies
And enhanced their inter-particulate propensities,
Opening new possibilities in the presence of dissimilar atoms.

Adrift in the swirl of confusion, A and B found an enthusiastic oxygen atom
And the three became one water molecule when they formed a timeless bond
As Tiamat's fires died out leaving a vagabond cloud around a cooling core.

Driven hither and yon by countless conflicting forces
The solitary water molecule manifested universal destiny
And its presence would eventually shape snails and apples.

Riding the energy waves from Tiamat's explosion
The water molecule ventured into frigid interstellar space
Where it found similar molecules formed in numerous novae and nebulae.

The little water molecules danced around each other
Forming a tiny ice ball with increasing gravitational attractiveness
Until a sizeable dirty ball floated through space.

Every portion of the swirling disk of debris
Left in the trail of Tiamat's demise
Resulted in bigger and bigger coalesced clumps of ice and minerals.

A fledgling source of heat flared in the rotating disk's center.
93 million miles away, hordes of ice balls joined dust and gas
To become the 3rd orb revolving around the nascent star.

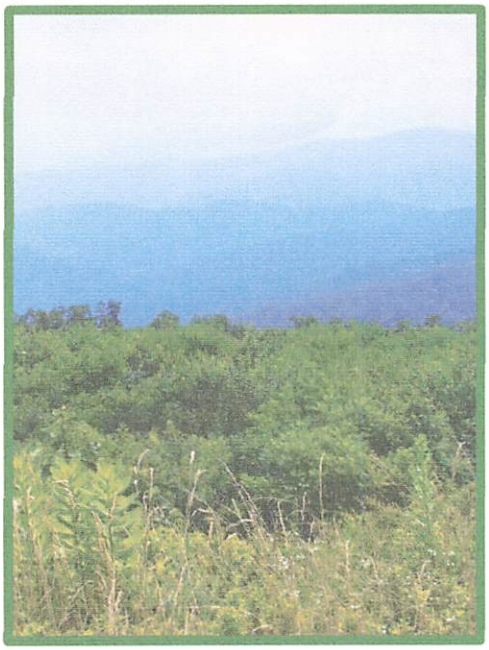
Forces in the spinning globe jostled the clumpy masses
And the warming sun changed the ice balls into flowing water
Until A and B and their water molecule friend colored the marble blue.

Memories of the fiery furnace that forged the H_2O bonding
Faded with each lapping of the gentle waves on the sandy shores
Where complex hydrocarbons thrived in the buoyant medium.

Warm breezes lifted water molecules high into billowing clouds.
Resulting electrical differentials bred wild lightning strikes
Providing heat and energy for invigorating complex life forms.

Plants and animals thrived on nutritious nuts and fancy fruits
Each of which utilized the vitalizing powers of water
For transporting nutrients throughout their structures.

A and B were still holding on to each other and to their oxygen colleague
In the April rain clouds floating above the Atlanta skyline.
They sent their greetings to the poet in the passing plane
who now passes their blessings on to you.



I've Watched a Billion Years Pass

{The Memoirs of an Appalachian Mountain Rock.}

Tumultuous times pervaded a fracturing surface, releasing lava from Earth's molten core.
Sun's searing heat seemed cool to us as we congealed atop our ancestors
Hardening them as we, too, took on solid form.
Five miles above the Pre-Cambrian oceans I touched clouds,
Diverted windstorms and forced moisture to return home to the sea.
After the Grenville Orogeny, I watched 400 million years pass while
Seeing our majestic ranges weathering away into an unnamed sea.

During this time, a blazing summer sun scorched sharp mountain ridges.
Soon driving rainstorms and fierce lightning storms
Would return to pummel our barren hillsides.
Winter winds and frigid frozen ice came when the sun headed south
And these, too, abetted the fracturing of our rocky landscape.
No living creatures had invaded any lands rising above the Blue Marble's waters,
Not even the Grenville Mountains where I had originally resided.

A hundred million times the summer sun returned to its zenith.
I watched the sea turn ever more green
As life forms proliferated among the rolling waves.
Feeding on the nutrients washed down from surrounding hills
They grew larger, more complex and wiser and more adventuresome.
We could see greenness coming our way, as creatures crept ashore
Overcoming the crush of gravity with cells both strong and yet flexible.

Another hundred million spring times nourished ferns and mosses.
I watched the eastern horizon change ever so slowly
As another land mass crept across Earth's molten mantle.
The stresses of geologic creativity opened gaping holes
Through which tons of molten lava flowed covering my mountain home.
The colliding land masses wrenched the weathered hillsides
And formed the Appalachian Mountains along a new ocean's coast.

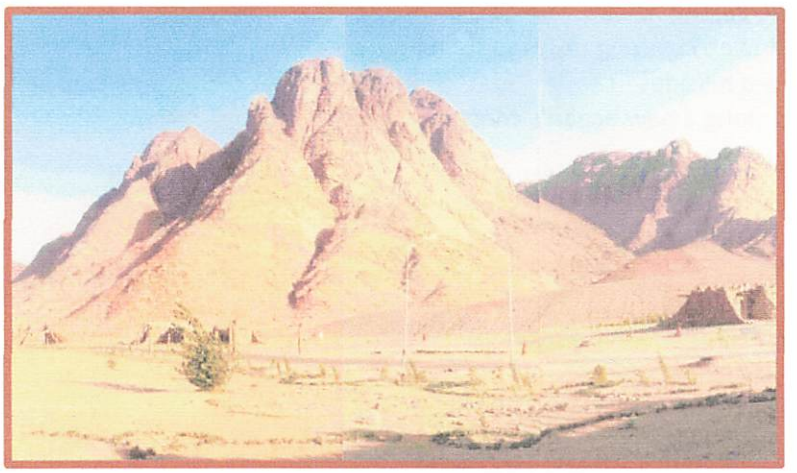
Two hundred million winters passed on the still rising Appalachian peaks
Below which I had been buried in the tectonic transformation.
Thriving ferns grew to astonishing heights
Turning sunlight into sugar and oxygen in their willowy leaves.
Oxygen breathing reptiles, too, flourished on land and sea
Eating plants, and each other, to nourish their ever-larger forms.
Eventually dinosaur footsteps reverberated across the land
Whose grassy ground cover slowed the erosion of my mountain home.

Something new came down beside me after another hundred million autumns.
Though deep below the surface, I was joined by a nutrient-seeking tree root.
Capitalizing on complex nutrients built by countless ferns and reptiles.
The tree could produce seeds and multi-hued flowers.
Adventuresome mammals learned to eat the nuts and berries
And the Cenozoic Era blossomed across the Planet Earth.
While the pace of geologic change slowed and the fiercest storms had subsided
But consciousness grew ever more rapidly as carefully choosy creatures proliferated.

Layers of rock above me slowly fell away until I once again
Could watch out over the green valleys and roaring springtime streams.
The long narrow valleys below provided the human settlers with fertile lands
For hunting deer, growing crops and raising families.
The rapidly flowing waters provided energy for turning mills
To grind flour and drive gears for looms and lathes.
Periodically, armies marched through en route to distant objectives
And perched their scouts and sentinels near my lofty perch.

I'd watched and waited to see new levels of vitality and cooperation
Would emerge among the increasing diversity of Earth's life forms.
In times of economic hardship, scores of teams crossed our ridges
To build a scenic parkway for visitors from near and far.
One special sunny summer day brought a wandering Carolinian
Listening for narratives of geologic and sociological history.
So I shared my story with this passing poet who wrote it down
To encourage you, too, to participate in the Planet's on-going creative process.

I Could Have Been Oil



My ancestors flourished
in the warm humid swamps
Where the midday sun never quite
shone directly overhead.
I, too, joined in the tropical scenery
And longed for the time when the
next generation would come.

But I was the last.
For the salt-sea rose,
And layers of mud covered our
tropical homeland
Some 400 million years ago.

In the excruciating pressure, my neighbors and I became one with the rock.
Though we felt the pull of the sun far above,
We saw not its light
From our new home now under the sea.

Our rock home was shaken as the land masses collided.
We rose far above the waters around us
And felt once again the warmth of the glorious sun
While the wind and the rain eroded our surroundings away.

Not so long ago, Moses passed by on his way to meet God.
Then came the blows of thousands of hammers
As robed monks chipped a stairway to the sanctified summit.
And generations of footsteps from the tourist bands on their personal pilgrimages.

I was carried by one far away to the north,
And now sit quietly on a secluded shelf.
People see only a carbon imprint of my ferny shape
But I remember my past and ponder tomorrow.

When cars pass by, I wonder
If they're powered by my relatives from just to the west
Who, unlike me pressed under the tons of sandstone,
Were dissolved in brown liquid beneath a shale dome.

I consider, where I'll be in
Another 400 million years.
And I wonder, too, where the people will be
When they get to be my age.

By a Factor of 24

In an hour, the two friends update each other on their lives,
Share coffee and agree on detailed plans for working together
Then shake hands and go on their respective ways.

In a day, the Earth turned once around its axis,
The sun rose over the eastern horizon and set again in the west
While the grass grew a bit longer in the lawns of everyone's houses.

In a month, the moon journeyed through its phases in the dark night skies
Businesses executed their detailed monthly plans
And the weather embodied a relatively consistent phase.

Over two years, government elected congressional representatives
The house on the corner was designed, built and inhabited
And the tree on the edge of the forest grew noticeably taller.

After forty-eight years, the couple celebrated a long and happy marriage
Respected projects marked their successful careers and joint ventures;
Fond memories linger in the minds and journals.

Twelve hundred years passed between the days
When Charlemagne rode across Europe and Neil Armstrong walked on the moon,
And the human species flourished on Planet Earth.

Human consciousness blossomed on the Blue Marble
Through language, art and song
During the span of thirty thousand years.

Upright creatures spread out of Africa, across recognizable land forms
While the ice caps advanced and receded across the North American land mass
Over the past six hundred thousand years.

Within the last 15 million years, the land beneath eastern Tennessee creating a lake
Which would become the fossilized resting place
For tapirs and giant sloth for millions of years.

About 300 million years ago, the great land masses collided
Beginning the uplift and folding of the Appalachian Mountains
While life-forms flourished beyond the oceans of Planet Earth.

In the aftermath of the explosion of an ancient supernova,
The shimmering Sun and its family of planets coalesced in a swirling system
Over a span of eight billion years.

Bridging Chasms

5 billion years after the debris of star-destroying supernovae
In an outer arm of the Milky Way Galaxy
Coalesced into an orbiting sphere circling a hydrogen fired sun
At a distance where water stayed liquid but silicon became solid,

And

4 billion years after the complex hydrocarbons
Swirling in the tidal pools where the crashing seas
Tumbled over the mineral rich rocks under lightening filled skies
Crossed the threshold from inanimate existence to living being,

And

2 billion years after chlorophyll-filled creatures devised ways
To capture fleeting photons from the distant solar fusion fires
Then harness this readily available energy
To make food for their own on-going survival,

And

250 million years after ocean-dwelling plants developed wood cells
That allowed them to encroach on the vast landmasses,
Storing water within themselves while withstanding the rigors
Of gravitational forces unknown in the buoyant seas,

And

65 million years after the eons when the descendants of the dinosaurs
and seed producing plants
That escaped the mass extinction of species around the planet
Began developing symbiotic life patterns fueled by proteins
And enriched by spectacular colors and diverse songs,

And

5 million years after the fracturing plates beneath
the tidal waters
Swirling between the North and South American
landmasses
Could no longer contain the molten
magma rising from deep below
Thus allowing fiery eruptions to build
a land bridge across the gaping chasm,

And

60 thousand years after tribes of bi-pedal adventurers
Set out from the northwest corner of their African homeland
To find creative ways to meet their basic needs
And to thrive within diverse plant and animal kingdoms,

And

15 thousand years after Asian families crossed over the briefly passable Bering Straits
Then headed south along the flowing rivers and verdant valleys
Eventually settling along the volcanic hillsides where they
Mastered gold smelting techniques to enhance their celebrations and daily activities,

And

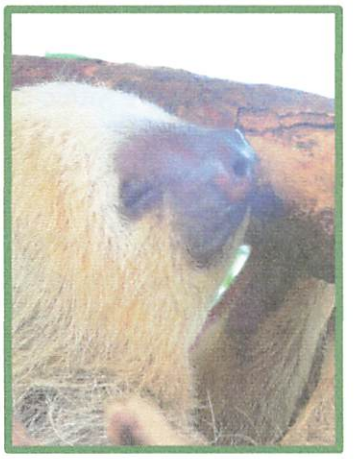
500 years after Spanish sailors in search of wood and spices
To enable their European families to survive harsh winter months
Landed on the Central American shores carrying iron tools
And disease resistances acquired from living near domesticated animals,

And

150 years after freedom-seeking Costa Ricans
Declared their independence from Spanish rulers
Eventually creating their country as a social democracy
Committed to caring for all its people AND the environment,

In early 2013

On the steep slopes of the spit of land connecting
Quepos and Manual Antonio
Travelers from around the globe gathered
Beside the calming poolside waterfalls of
La Colina Hotel
Sharing stories with each other and
emailing their friends at home



While gracious local hosts provided accommodating hospitality,
Knowledgeable guides allowed exploration of natural beauty,
And the three-toed sloth relaxed in the tree tops
Assured that:
It would find food for its young one during the moonlit night
And that the sun would once again pass overhead tomorrow.

(Photos and poetry from central valley and the Pacific coast of Costa Rica by F. Nelson Stover)

The First Fire of Autumn

The gentle north wind cooled the night air
On a morning long before the moons were named
Or the days demarcated into hours.
The chill brought a twinge of color to the leaves and
Left dew drops on the spider webs
But no electronic devices or motor-driven vehicles
Felt the encroaching cold
On this morning long before long before.

The old man had been watching the movements of the stars in the heavens.
While others enjoyed the sunny days of summer
He had stacked a pile of dry logs safely away from autumn rains.
Before the breaking dawn of sunrise, he built the first fire of autumn.
He sat quietly warming his feet and hands
Inviting his friends to join him in the peaceful calm
Before beginning the tasks of preparing for the bleak days ahead
On this day long before long before.

The wild dog, too, had been noting the changing of the trees in the forests.
The persimmons were falling from their trees
Marking the end of nourishment until the spring berries burst forth.
He had followed the old man's family in their wanderings through the piedmont
Ferreting rabbits from their hiding places to feed the human clan and
Gained nourishment from the bones and skins that remained.
He lay down just beyond the people yet within the flames' delicate warmth
On this day long before long before.

Slowly, imperceptibly slowly, the dog slid closer to the fire.
Coming up beside the old man, he made no noise,
No gesture of fear or of attack.
The old man realized what was happening and joined in the calm.
Although some fearful ones around the circle grabbed sticks to ward off impending danger
He continued to sit in awe of the wonder of the encroaching dog
Then reached out his hand to rub the creature's soft floppy ears
On this day long before long before.

Neither the man or the dog could then vaguely imagine
The uncountable wonders that lay before their far-distant descendants
Who continued to beckon each other to their species-specific greatness.
In the long ago autumn lay only the earliest seeds of cuddles during Skype calls,
Sharing bones and deposit slips with the friendly tellers at the bank,
Eating ice cream from two spoons in the same tasty cup or
Chasing orange squeaky balls through freshly mown grass
On a day long after the morning so long, long ago.

My Story

(Told by the rock shown at the left

As it rested in the valley
of McCormick's Creek, Indiana
– photo by last stanza)

Some of my mineral components still recall
The tremendous explosion that destroyed the star
In the outer spiral arms of the Milky Way Galaxy.
Trying with all its gravitational strength to maintain its starry integrity,
The second-generation star finally exploded into a luminous supernova.
The fierceness of the destruction built pressures and temperatures in which all the elements
That would eventually be needed for building life on Planet Earth could form.

Over a billion years passed as the planets and asteroids materialized
By coalescing the debris in the disks encircling the nascent Sun
Into diverse amorphous globs of rock and gas.
When the turbulent seas calmed to engulf the Earth's spherical surface,
The rocks formed into giant plates sliding across the molten core
Of a Blue Marble encircling an energizing star
With a nearby moon to light the nighttime skies.

My oldest parts took solid form in those early landmasses
Along the shores pounded by the rolling seas
Which rose and fell tugged by the Sun, the Moon and the spinning globe.
Single-celled life forms began to populate the nutritious oceans within the Planet's first billion years.
They learned to catch the energy of the ever-present Sun and
Rather than perish, began to use the oxygen-enriched atmosphere
To further enhance their vital functions and reproductive energies.

The comfort of the North American Plate where I had found my home
Was shattered when it ran into the African plate nearly 400 million years ago
Causing an upheaval and folding of sunbaked rocks and life-filled sea beds.
Changing temperatures and freezing water separated me from my Appalachian neighbors and
Whittled away my edges into the smooth roundness of a little ball.
This same weathering covered the remnants of dying life forms in fertile sea,
Preserving them as liquids and gases to meet the energy needs of future generations.

Washed by the rainstorms which fell on the sloping hillsides
I rolled into the sandy mud not far from the pools of deceased creatures
Being incessantly buried under rising seas.

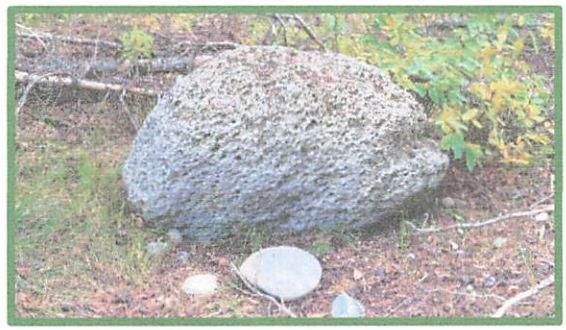
Land masses rose under the blistering sun and sank below the seas
As living creatures overcame the horrendous forces of gravity by creating wood cells
Allowing them to escape the buoyancy of the oceans and
Explore the wonders of the barren landscape.

Two hundred million years later, another collision of my tectonic plate gave rise to the Rocky Mountains
On the opposite side of the sea above my head.
Once again rivers changed their courses and ocean shores moved.
Life flourished on the borders of the rivers and in the soils on the hillsides.
Ferns collected carbon and other life-giving molecules into evermore-complex forms.
Day by day the pulse of life – the dance of life and death – continued
While the rains washed the debris into the pools and ponds.

As the sea between the mountains dried and the glaciers grew and receded
My part of the Planet Earth was once again exposed to the sun and rains
Giving new turbulence to my pulsating environment.
Glacier run-off hastened the shaping of McCormick's Creek gorge into a place of peace and calm
Where settlers and urbanites would seek relaxation and respite from the hustle and bustle
Fueled by the energy stored in the coal and oil from long-dead plants
Under the ground just downstream from my river-gorge home.

... and on a cloudy August day,
A guy with a digital camera,
Photographed his wife and I,
So that eyes could see and
Minds could envision
The billions of years of turmoil
That brought us to
this moment of quiet.

We Met in a Glacier



In August 2016, two rocks in Grand Teton National Park shared their story with a passerby on his 71st birthday which was also the National Park Service's 100th birthday. Lava Round and River Rock (see photo right) recounted their long journeys to their now quiet resting place near the trail toward Heritage Point at Jackson Lake. The passerby has recorded their story for others to read.

Like all of the creatures and entities on Planet Earth, the rocks' ancestral roots lie in the 14-billion-year old primal flaring forth of the Universe. In the early frothing chaos of these primordial times, early atoms formed as the cooling processes allowed positive and negatively charged particles to form stable pairs undestroyed by highly charged photons. When these hydrogen and helium atoms congealed into great galactic clouds, the great clouds separated and began to spread out through the expanding Universe. Within these clouds dense gas cluster reached excessive temperatures and the stars ignited. Over several generations, the ancient stars exploded into immense supernovae, the intense pressures and heat of these eruptions formed the heavier elements which would eventually comprise the rock pair and all the passing creatures on Planet Earth.

About 5 billion years ago, River Rock recounted, in a wispy arm of the Milky Way galaxy, the planets and asteroids began to collect themselves together around a nascent Sun. On the third planet outward, the minerals squeezed themselves together. The heat from the not-to-distant Sun began to warm Planet Earth to temperatures such that the ice molecules turned to water and separated from the heavier materials that would eventually become dirt and trees. River Rock's ancestors formed themselves into the great tectonic plates that would journey across the globe for billions of years.

River Rock's personal forbearers dwelt on the western boundary of the great North American plate as it slowly drifted westward. About 2.7 billion years ago, soil being washed off of the main part of the plate sank into a shallow sea. Over hundreds of millions of years, the deposits built up, sank deeper and became ever harder. Sometimes, molten rock from far below squeezed into cracks and fractures. Always, the rock at the bottom of the sea got thicker and harder. When the life forms began to venture out of the ocean about 500 million years ago, the decaying debris from their deaths also washed into the seabed; eventually this would become the coal and oil which fueled the travelers on their journeys to the Yellowstone Ecosystem and all of the other rampant development of the 19th and 20th Centuries.

Conditions began to change for River Rock's ancestors when their edge of the North Atlantic plate began to collide with the plate sliding in from the Pacific Basin. About 120 million years ago, this collision crumpled the continental plate's western landscape and lifted much of the seabed high into the air. Layers of hardened seabed became exposed to torrential rains and the searing heat of the summer sun. Plants and animals could roam across the now hardened sea bed. The dinosaurs wandered the hillsides and enjoyed the ferns and other fauna. By about 64 million years ago, when the ferns were replaced by the flowers and deciduous trees, the mammals and birds would overtake the dinosaurs as the dominant lifeform on the western landscape.

Lava Round's ancestral roots lay in the molten core of the Blue Marble. The gravitational pressures of the swirling globe kept all of the minerals together, continually intermixing in their liquid state. For billions of years, Earth's internal fires withstood the compressing forces. Periodically, these roiling

liquids would pierce through the more solid rocks that surrounded the inner core. Here and there around the Planet, magma from deep within the Planet would thrust through layers of rock to create enormous volcanoes.

About 70 million years ago, while River Rock was still in its solid bed of layered rock but after the Rocky Mountains had been lifted high into the air and folded into the spectacular landscape of the revitalized western bounds of the North American plate, volcanic eruptions came to this part of the Planet. From the depths of Earth's center, hot flowing liquids burst forth fracturing long-stable rock forms and spewing dust, smoke, fire and flowing lava across the landscape near what would eventually become known as Jackson's Hole. Pioneers and travelers would come to know the remaining hills as the Absaroka Range out beyond the Snake River.

For centuries, the rock beds felt the tremendous stress of the pushing and pulling from beneath. One day, about 9 million years ago, the land along the Teton Fault could no longer hold itself together. In one gigantic shaking the ground broke along a weak point. The beginning of the Teton Mountain Range had begun it journey into mountainhood; thus becoming the Planet's youngest mountains. Every now and again, when the pressures built, the rock beds jumped upward again. The rumblings of the quaking earth could be felt for miles around. Over the millennia, the plants and animals of the North American plate scrambled to find new homes as the landscape changed beneath their feet.

In the winters, when snow melt crept into fissures and then froze, the expanding ice broke even the hardest rocks. Rivers carried pieces of broken rock downwards toward the seas. During the fracturing and breaking, River Rock was born as a winding stream undercut its comfortable abode in a layer of now-risen ancient seabed. Each day for the next 6 million years, the raging waters wore off minute parts of River Rock's rough edges. River Rock saw animals come to drink from the edges of its stream and saw the birds flying overhead.

Just east of where River Rock broke from the beds of the Teton Mountains, Lava Round left the comfort of the Absaroka hillside to face the same weathering and rounding. By about a million years ago, both River Rock and Lava Round began to feel a new kind of warmth rising beneath their feet. From a crack in the lower reaches of the Earth's mantle a plume of magma was rising up, slowly. Water seeping into the rock was warmed by the deep lava plume and rose to the surface in geysers and other steaming pools. Pressure and heat from below began to buckle the ground into a gentle bulge which redirected the rivers and stretched the overarching rocks in the Yellowstone Plateau.

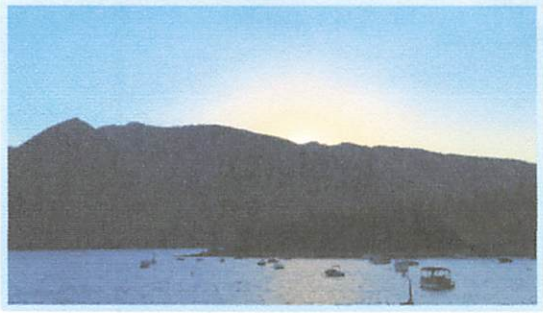
Thrice it happened, noise beyond bearable, rumbling unknown in previous times, destruction beyond imagination. Over a period of 1½ million years, the top blew off of the Plateau. Maybe as much as 36 cubic miles of rock and dust were blown into the air by the first and largest of the explosions. By the time the final eruption occurred about 640 thousand years ago, early human ancestors were exploring Africa and Europe. Fear filled their hearts when the daytime sky turned dark as the Yellowstone dust cloud obscured the noon-day sun. Summer heat never came because the warmth of the distant Sun could not reach the ground. These early human pioneers and the animals they depended on for food barely survived the impacts caused by these far-away explosions. But River Rock and Lava Round remained in the stream beds as the sooty waters flowed by.

Seasons passed, storms came and went, the Moon passed through its phases and the Sun continued its journeys from the north to the south and back again as it crossed over the rivers and mountains. Within the annual rhythms, the great temperature fluctuations ebbed and flowed over their 1,000 year cycles. During one of the cold cycles, about 16,000 years ago, the snows kept falling longer each season. Great mounds of snow piled up in the mountains and even on the plains. The summer sun could not melt all of winter's snow. When the snowpack reached depths of several thousands of feet, the pressure at the bottom of the pile caused great sheets of ice to form. After decades of piling on, the ice itself began to slide down the hills and across the valleys. Nothing on the valley floors could stop the force of the oncoming glaciers. Rocks that had formed the sides of hills and valleys got swept up in the movement, rocks that had laid in raging rivers were displaced from their long standing homes.

The glacier heading down from the volcanic mountains picked up Lava Round and its friends as it headed south. The ice pack coming down off of the Tetons dislodged River Rock. When the two glaciers collided, the rocks found themselves together – both far from their original homes. As the temperatures warmed and the ice fields melted, the movement of the slow flowing ice ceased. River Rock and Lava Round found themselves on the side of a lake.

The same great glaciation that had moved the two rocks, provided an opening for early humans to cross onto the northwestern shore of the North American land mass. Eventually, these pioneers would make it to the obsidian fields of the Yellowstone basin and the shores of Jackson Lake. Thousands of years later, the explorers from the US Army would find their way into the mountains. The two rocks heard their voices and watched their campfires. When forward thinking leaders set aside the land as a National Park, the rocks relaxed knowing that the natural beauty of their area would be preserved for the enjoyment and nurture of generations to come.

For the last several years, River Rock and Lava Round have sat side by side next to the trail heading out along Coulter Bay at Jackson Lake. Some days, they listen as the rangers introduce their guests to the writings of John Muir and then invites young girls and boys to count the number of people in the groups. By helping a ranger, they work their way to becoming Junior Park Rangers. Maybe, one day, they too will be able to hear the rocks tell their stories.



In the evening as the sun slides behind the hills, when there is nobody around and the moon is rising overhead, the two rocks ponder what will be going on around them a million years from now. They figure they'll be about 500 miles southwest of the hotspot that is now firing the Yellowstone geysers. The rest they can only speculate about.

As the passerby headed back to his home on the continent's eastern foothills, he realized that he had heard a story of what his mentor Thomas Berry called the three governing themes of the Universe: Communion, Differentiation and Autopoiesis. Communion refers to the great urge that pervades all time and space for entities to come together in ways that form relationships in which the whole is greater than the sum of the parts. Differentiation describes the inexorable tendency for things to fall apart, for structures to collapse and for even things that tend to get along well to become separated from each other. Autopoiesis describes the deep-seated propensity of every entity – large or small, conscious or unconscious – to act and to make decisions within the realm of their capacity that exhibit their own uniqueness and, one way or the other, affect the long-term sweep of history as well as the immediate environment around them.

The narrative of the early history of the Universe is based on *The Universe Story* by Thomas Berry and Brian Swimme. Details of the Greater Yellowstone Ecosystem are from *Recent and Ongoing Geology of the Grand Teton and Yellowstone National Parks* by John M. Good and Kenneth L. Pierce. Additional information is from the National Park Services' *Grand Teton* information sheet. All interpretation of this information is the sole responsibility of the author. The photographs were taken by the author during his 2016 trip to the area.

TIC and TOC

(A Story about Navigating Change
During the Transition of Eras)

Dinosaurs of all sizes and shapes gathered
On the fern-filled plain
Midway between the two rolling oceans.

They had walked or flown from their diverse homelands
Honored to be able to attend
The International Council (TIC).

Everyone was hungrier than usual
And they all knew they had to share
The dwindling supply of their favorite ferns.

The mood at TIC was sour and glum
As the wise dinosaur elders pondered
The widespread decline of the life-giving fern.

Some had considered trying to eat the colorful flowers,
But the general agreement remained
"It's not food, if it's not green." and "If it's brown put it down."

In the flowery forest surrounding the ferny plain,
A group of energetic squirrels quietly convened
The Other Convention (TOC).

Knowing they were no match for the monstrous dinosaurs,
The squirrels and other small mammals tried to avoid confrontation
As they scampered up tree trunks and looked for food under leaves.

The squirrels who had organized TOC
Had long ago learned how to crack open the nutritious nuts
That appeared each year after the flowers had wilted.

The cleverest squirrels led special classes at TOC
Devoted to improved methods of burying nuts.
They gave special attention to finding the treasure again in the spring.

The teachers went on to assure their pupils
That if they didn't find them all next year
At least they would help the seed-producing plants increase in numbers.

Many years earlier at pervious gatherings of TIC,
The flying pterodactyl had proposed eating seeds
And shown its dinosaur colleagues some good ones to try.

At first, the pterodactyl was mocked for the stupidity of their idea,
The next time they suggested eating seeds they were scorned and reprimanded
And at the current TIC, all seed and fruit eating was explicitly banned.

So, a few hungry pterodactyls made a peace treaty with the mammals.
As a sign of peace, they filed off their claws on sandstone outcrops.
Later they joined the squirrels at a nutty feast.

The crowd partied all night under a smiling full moon
And by the end of the cross-species celebration
Some compassionate pterodactyl offered rides to emboldened squirrels.

As the TOC drew to a close, forward-looking friends
Began to envision larger gatherings in the years ahead
And some pterodactyl organized aerial services for crossing lakes and rivers.

But the fern-eating dinosaurs at TIC
Could find no one with the energy to organize another event.
Tears flowed as they said their final goodbyes.

And so it was that as the flowers and trees overshadowed the fragile fern,
Planet Earth experienced the changing of an era.
The mighty Mesozoic Era gave way to the colorful Cenozoic Era.

Many plant and animal species would disappear forever during the changing of the eras.
The squirrels and their mammal friends would eventually thrive
And the flying pterodactyl would proliferate into myriads of multicolored birds.

During the next 65 million years on Planet Earth,
The birds and the squirrels would watch the Himalaya Mountains form
And witness the spread of the human species across the Planet.

This story was told to me on a warm spring morning by Squirrel and Cardinal
Whose mothers assured them it was entirely true;
And now I've passed the story on to you.

F. Nelson Stover
December 2003
Updated: June 23, 2017

TIC TOC

A Story of Transition

On dry warmish summer and autumn mornings, my dog, Tony, and I get up with the rising sun. We spread out our blanket and sit on the cement patio for tea and tummy rubs. We listen to the birds singing in the trees and keep a keen eye out for squirrel and deer who usually don't have much to say.

One morning, we overheard a rather lengthy conversation between Mr. Red Cardinal and his friend Sammy Squirrel. They were sharing stories their grandmothers had told them that had been handed down in their species for generations and generations.

With great pride, Sammy Squirrel went into extensive detail about the honor his long-back ancestor had experienced at attending the first international conference of mammals. He thought it must have been about 65 million years ago at the beginning of the Cenozoic Era when a diverse collection of small mammals figured out how to gather together to share experiences and have fun. As they were relative new-comers on the face of Planet Earth, they were all just learning how to survive – and how to stay out of the way of the dinosaurs who were big, strong and apparently everywhere.

Red Cardinal listened attentively, and then chirped in. "I think one of my ancestors came to the same meeting." Red went on to explain that for millions of years before the mammals' first convention, the dinosaurs had been holding their own international councils. They called them "The International Council", TIC for short. Dinosaurs were the biggest creatures around so they thought they were the only ones who needed to have a global gathering.

On regular intervals, groups of dinosaurs would gather in a great TIC to discuss matters of common concern and to share helpful advice. They talked about how to care for their eggs and how to train their young. They told about where to find delicious ferns and how to stay strong and healthy.

Red went on to say that slowly but surely, the time between TIC meetings got longer and longer. Each time the dinosaurs gathered, there were fewer and fewer participants because everybody was having a harder and harder time finding ferns to eat both at home and on their way to the huge gatherings. Around Planet Earth, colorful flowers with crunchy seeds and sweet nectar were crowding out the ferns. Furthermore, tall, leafy trees were overshadowing the fern shrubs.

Red's forbearers were flying dinosaurs. They often helped smaller dinosaurs get to TIC and carried messages for many of the large lumbering behemoths. ... And they were learning to enjoy the trees which were strong enough to provide landing places. Some of the flyers were also learning to eat nuts and other seeds which were highly nutritious and surprisingly full of energy.

The ground-based dinosaurs mounted a big campaign to promote fern feeding. They held seminars promoting their belief that "If it's not green, it's not food." This eventually became a regular lesson for their young. They simply said, "If it's brown, put it down."

The conflicting opinions of the flying and the land-based dinosaurs came to a head, Red reported, the same year that the mammals were holding their first gathering. The arguments became so heated as to whether nuts and seeds could be eaten that the land-based dinosaurs forbade the seed-eating flying dinosaurs to come to any of their meetings during TIC. So they flew away.

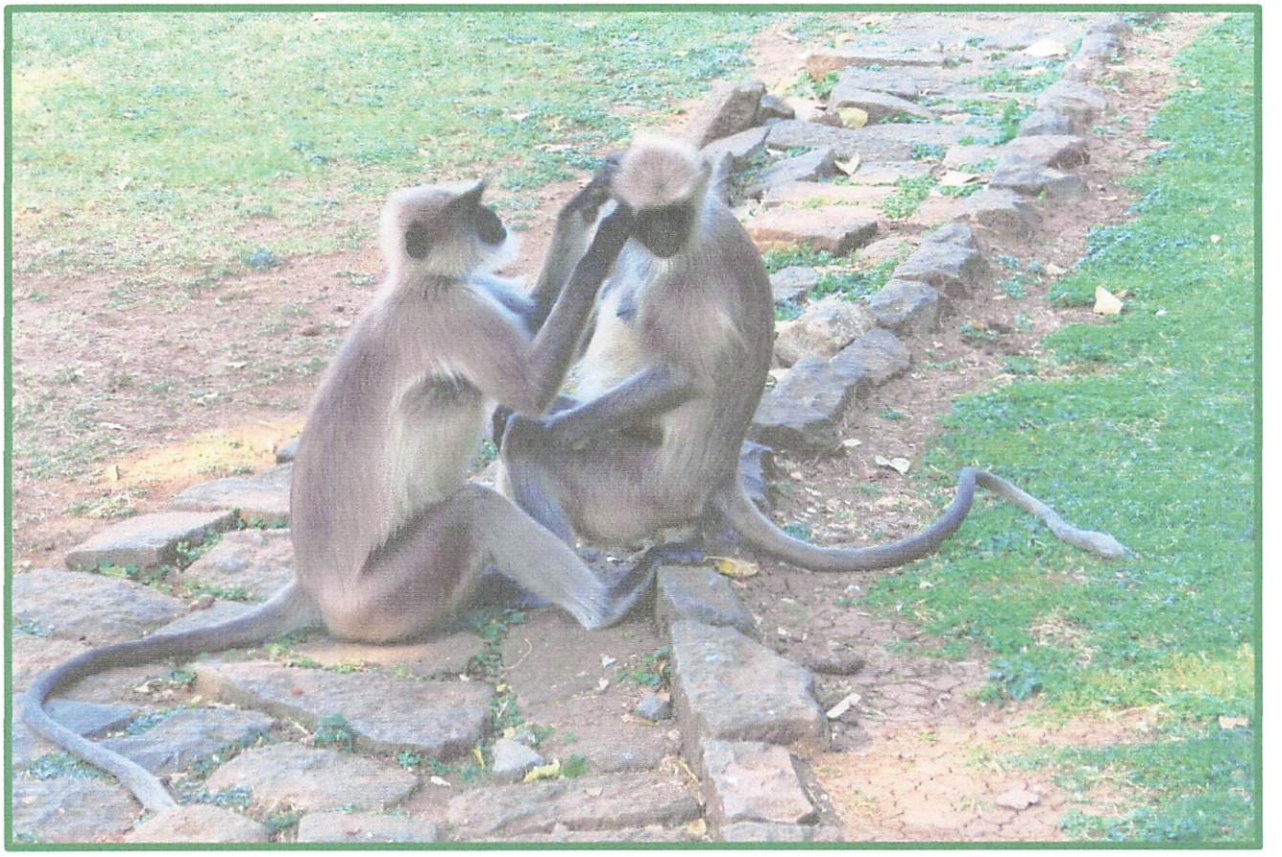
Squirrel remembered that his grandmother had told him about this very same time. Although the little mammals were at first afraid of the flying dinosaurs who appeared above their meeting, the two groups soon found common interest in learning how to spot tasty seeds and exploring the possibilities of living up in the strong tall trees. When they were all together, the mammals and the flying dinosaurs – who would eventually be called birds – named their gathering The Other Convention (TOC).

One of the mammals' big concerns had been how to get rid of the big dinosaurs who often stepped on them and destroyed their houses. The flying dinosaurs worked hard to discourage any plans of attack or assault. Red said that his ancestors helped the mammals understand that the dinosaurs were slowly running out of food because they would only eat ferns. The flying dinosaurs said they would help speed up the process by dropping seeds into fertile ground. Squirrel's ancestors came up with the idea of burying extra tree seeds in the ground. Some they would eat in the springtime; others would become more trees.

Everyone agreed that this plan of action would have a much better chance of success than trying to figure out how even a group of small mammals could take down a monstrous dinosaur. Plus, the plan insured that both the birds and the squirrels would have more and more food and comfortable places to live and raise their young. Thus, they thought, the solution would provide a mutually enhancing relationship between the animal and non-animal realms.

As Tony and I listened to Red Cardinal and Sammy Squirrel continue to recount the details of those long ago meetings, we realized how the TIC TOC of the pendulum of time continually marks the transitions between creative approaches to the on-going growth of Planet Earth. Squirrel ran up a tree, Red flew off to meet his wife Brown and Tony and I folded up our blanket and headed to breakfast; and the sun crept over the tree tops on a morning at the beginning of the Ecozoic Era.

Larry and Ursula's Big Decisions



The blustery wind blew across the waving grasses
Into the swaying tree tops
On a spring day
At the edges of the forests in Africa
Four million years ago.

Larry, the energetic young monkey
With the strong long tail,
Was jumping from one tree to another
Having fun with all of his friends
Until ....

A big gust of wind blew the next treetop
Just out of Larry's reach.
He fell all the way to the dry ground
And felt a pain in his front arm
Much worse than he had ever felt before.

Not far away, Ursula, a kind and friendly young female monkey,
Felt her joy from yesterday turn into a big sorrow.
Her mother had gone up in the tree with Ursula's new baby brother
But the strong spring wind blew too hard
And the young little monkey fell to an untimely death.

Ursula's friends told her about Larry's accident
So she went to see if she could help him.
As she made her way through the tall grass toward Larry's clan
She made a big promise to herself –
She would never again go up a tree, ever.

For months, the two young monkeys took care of each other.
Ursula got food and water for Larry and tried to lighten his pain.
Larry understood her sorrow and the depth of her resolve to stay out of trees.
Larry's arm got stronger, but it healed crooked.
They both knew he could never climb a tree again.

Larry and Ursula were together day and night and they came to love each other deeply.
Eventually, the time came for them to start a family of their own.
When their children arrived,
They were taught to STAY OUT OF THE TREES.
They found plenty to do among the grasses and rocks.

Even when their friends made fun of them, Larry and Ursula's kids stayed on the ground,
And this tradition was passed on from generation to generation.
Year after year, the two-legged ground dwellers acquired new skills.
They wandered to the furthest corners of Planet Earth
Until today, they came to look like you and me.

And this is how Larry Longstride and Ursula Upright's big decisions
On a windy day that didn't go according to their original plans and desires
Opened up the doors of possibility for people like you and me
To walk, run and dance into the 21st Century;
And now we only climb trees to retrieve kites and pick fruit.

Poem photo, Monkeys at the Ellora Caves, Maharashtra, India, 2015.

Pendulum Swings

{Recounting the 5 great endeavors of the human species.}

In the land between forest and savannah, the Pendulum of Decision swung.
Whether to keep walking on four paws or to start walking on two legs,
Became a challenge confronting individuals and species across Africa.

A vertical body stayed cooler, having no heated backside facing the blistering sun,
And nimble hands could carry food home to growing families
Once tricky balancing skills were mastered across the rolling landscape.

Upright backs allowed female's pelvic opening to gradually expand
Permitting delivery of off-spring with larger brain capacities
While everyone's vocal chords loosened to enhance tonal variations.

After 3 million years of experimentation and effort by unnamable ancestors
The lands of the ocean-bound continent in the tropical sun
Became filled with humans committed to upright travel in community.

At the edge of the northeastern land bridge, the Pendulum of Decision again swung.
To stay in familiar forests or to venture into unknown landscapes
Prompted deliberations among the complacent and the concerned alike.

Daring ventures and periodic painful tragedies
Allowed the capture, care and control of fire for cooking meat
And providing dependable heat on cold winter nights.

New found animal friends like horse, dog and cow
Had social patterns compatible with the 2-legged species
Permitting easier travel, additional energy and a protein-enhanced food supply.

After nearly a million years of exploration and discovery
All of the life-sustaining niches of Planet Earth
Had been visited by the roving vanguard of the human species.

Population density increased in each bioregion, the Pendulum of Decision again swung.
Choosing between learning the cycles of their present place or keeping exploring
Challenged clans and tribes across the Blue Marble.

Settled sages marked the solar cycles and named the stellar bodies.
Stories of seasonal patterns enchanted children
And reminded citizens when plants and animals would become available.

Using their particular languages, symbolic representations and cultural patterns
Tribes developed sophisticated social systems and appropriate technologies
Allowing reflection on their situations and an understanding of their environs.

For more than 30 thousand years, the Indigenous Ones enlivened their locales.
Their spirits pulsed to the rhythms of the surrounding flora and fauna
And they knew themselves ingrained in the four elements and directions.

For the fourth time, the Pendulum of Decision once again began to swing.
Along the rivers of the temperate climates in Mesopotamia and China
Individuals and societies debated the merits of tending crops rather than foraging.

Secure and sufficient food supplies allowed social stratification and political protection.
Manufacturing classes produced tools, arts and comforts
As societies tapped into energies stored in wood, sun and fossil fuels.

New explanations emerged to help citizens comprehend the world in which they lived.
The gods cared for priests who cared for people who cared for plants
As social hierarchy and historical progress became foundations of wisdom.

Fueled by carbohydrates and proteins from farms, pastures and plantations,
The Human Species seemed to manage the progress of the planet
While growing in numbers and consumptive capacity for 10 thousand years.

Now again, across the Planet, in villages and cities, the Pendulum of Decision swings.
Each one choosing whether to continue rampant extraction of non-renewable resources
Or to invent lifestyles promoting the mutual enhancement of all species.

Those electing to participate in creating the Ecozoic Era draw on past wisdom
Yet learn the Universe's ways of communion, differentiation and autopoiesis
And build sustainable systems of social and environmental interaction.

Scientists utilize schema of incommensurate numbers to refine quantum calculations,
Sociologists understand that each individual actively participates in creating tomorrow
And sages find the Holy in every moment and action.

The unborn creatures and un-manifested potentialities of countless future eons
Await their turn on the time-space stage of reality
And the celestial clock ticks as the interminable future
Passes through the embodied present
To join the by-gone actors in the annals of history.

Second Thoughts

TV weather personalities proudly announced
That the Winter Sun was once again heading north.
Ancient pagan festivals marking the Winter Solstice
had been reenacted in the Year 2000
And Santa was resting after delivering presents to
Good girls and boys of all sizes and sects.
Once again Blue Earth turned around Blazing Sun.

Winter Sun had been sighing over fume-filled skies
Polluted by autos burning irreplaceable ancient reserves of liquid sunshine.
Days of indecision had passed as Sun watched a divided nation
Unable to choose between consumptive patterns and calls for environmental responsibility.
And in too many homes, Christmas Sun feared,
The things that appeared failed to answer the deep longings for meaning.
Yet time marched on in a thriving Universe.

As sometimes happens in the celestial wanderings,
Moon passed between Earth and Sun.
For just a few hours, Sun hid behind Moon
And wondered whether to resume its energizing role.

But Sun remembered earlier concerns about its third planet
Like when oxygen nearly killed all living plants.
Or the horrific meteor collision that darkened the planet
And wiped out scores of species, even the dinosaurs.
Yet transformations always seemed to occur
And the drive toward consciousness continued to flourish
On the jewel which circled it in 365 rotations.

Sun recalled that it had been heartened to see signs of creativity
Like cars which charged their own batteries and polluted less.
The humans, it appeared, were recycling things more
And signs of restraint were breaking through the shopping frenzies.
Listening to the silent darkness, Sun heard generations past
Encouraging it to resume its enlivening role.

And on Second Thought
Sun decided to return
To continue empowering the growth of the Universe
As it slid out from behind Moon.

Beautiful Memories

A myriad of dancing dew drops
Floated through crisp Carolina darkness
Looking for leafless branches and delicate needles to adorn
Before the brilliant sunshine could illumine their beauty.

They remembered the winter of '00
When multitudes of pines and hardwoods
Felt the water's frozen presence surround their outspread branches
And the morning sun's light created a terrain of sparkling diamonds.

That winter's water on its journey to nourish Piedmont citizens
Had the joyous opportunity to pause a day
Surrounding nascent buds with protection from nighttime cold
And inspiring passing consciousness with glimpses of magnificent wonder.

Sadly, as they fell only phone wires and microwave towers
Or wings of cargo jets on runways and tarmacs could now be found.
Ice particles attached to what they could
But knew the sun would find no splendor when it arose this year.

Droplets pondered among themselves what value had been gained
By exchanging all their perches for straight flat pavement and tall walls,
Hiding porous red clay and hastening their return to salty seas.
Ground water and dazzling beauty lost to economically profitable ventures.

In that winter with no trees
The Universe's teardrops fell on hard soulless surfaces.
Yet hopeful for the future, they sought fissures to fill and crack
With the prospect of restoring trees to adorn on forthcoming journeys.

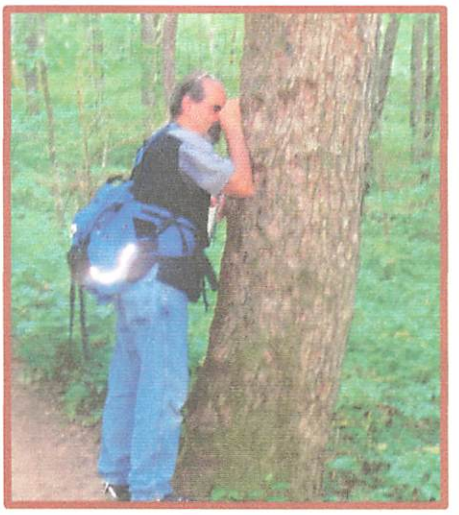
Forest Time

The melon-sized hole in the flattened boulder on the winding forest trail
Had, once again, filled with water on the day the hikers passed by.
How long, one walker wondered out loud to the breeze,
Does it take for snowflakes and flowing streams
To bore a hole in a rock?
The breeze reminded the walker that in the forest everything
has just enough time.

Across the valley at the foot of a flowing waterfall,
Rapidly flowing water poured through a crevasse
between two boulders.
The weary hiker sat with his feet
in the cool mountain water
Which called him to look at the ever-so-slowly
growing indentation it was carving
In the floor of the streambed.
The water reminded the walker that in the forest
everything has just enough time.

The giant poplar trees stretched
out their leafy branches
Catching the incoming sunlight and
casting a quiet shade
over the landscape below.
Though no one knows for certain,
the hikers realized that many
of these poplars
Had watched the sun head south
while the winter snows fell
For, probably, more than
four hundred times.
The trees, themselves, served to remind
everyone that in the forest
everything has just enough time.

A blanket of moss thrived atop the once vital tree trunk
That now lay horizontally along the sloping valley floor.
The resident expert who had studied well the habits of plant communities
Suspected that this lush carpet of bright green moss
Had taken forty years to grow to its current expanse.
The moss assured everyone that in the forest everything has just enough time.



The botanist with a magnifying ring paused by a tree
along the trail
To minutely examine the lichens and mosses
growing in the cracks of the bark.
His carefully trained eyes found five different species,
Each thriving in their own unique way,
Sharing a space hardly visible to the casual observer.
The botanist, the hikers and the moss had just enough time
to commune with each other in the forest.

The car with four hikers departed a bit later than planned
On the appointed day for the journey into the Joyce Kilmer Memorial Forest.
The worried team tried in vain to contact the other vehicle that was to meet them
But city-based cell phones could find no connecting tower.
So, the walkers waited and fretted as the meeting time passed.
Before visiting the trees, streams and mosses there seemed to be not enough time anywhere.

Storm clouds gathered in the skies as the hiking party drew near the end of the trail,
And sounds of thunder called tentative warnings of potential dangers.
While the walking party agreed to limit further in-depth investigations
Their pace varied little from the observant watchfulness of the previous hours
As they headed back to their cars and set out to find a spot for lunch.
The forest had taught them that there is always, everywhere, enough time to carefully pay attention.

The Universe Cares

Two bold geese block adjacent lanes of traffic
Stopping homebound motorists on a spring afternoon.
The geese's care-filled companion herds her flock of fuzzy goslings
Safely across the now quieted thoroughfare.

And onlookers see the Deep Heart of the Universe
Expresses Care as
Risking present safety to nurture the new.

Stately oak spreads its strong branches across the corner of the glen
Shading the under story from harsh summer sun.
Delicate dogwood thrives below oak's sun-side branches
Blooming in spring's sunshine before oak's leaves appear.

And onlookers see the Deep Heart of the Universe
Expresses Care as
Sharing abundance to meet individual needs.

Seemingly sleeping dog erupts in clamorous barking
Apparently unwarranted on a dark moonless night.
Cohabitants of the dog's isolated home check their surroundings
To discover the arrival of unexpected late-night guests.

And onlookers see the Deep Heart of the Universe
Expresses Care as
Unceasing vigilance guarding corporate well-being.

The geese and their goslings,
The oak and the neighboring dogwood,
The dog and the guests in the night, and
All the countless creatures of the Universe
Call forth Care – the unending Work
Of the Heart of the Universe.

About the Author

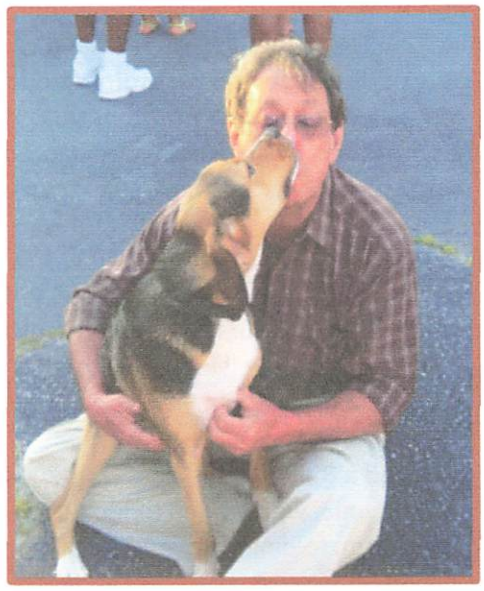
F. Nelson Stover – cultural engineer. Nelson received his Bachelor of Science degree from Purdue University and completed his graduate work at Chicago Theological Seminary. During his formal education, Nelson was influenced by the works of Pierre Teilhard de Chardin, Joseph Wesley Mathews and Paul Tillich. For two decades, Nelson conducted human development training programs for individuals at all levels of society. For another two decades, he designed and implemented computer software solutions for professional associations in North Carolina.

He and his wife, Elaine, have been associated with the Institute of Cultural Affairs (ICA) since 1965. They worked in locations on four continents in a variety of capacities. Nelson served as President of the Institute of Cultural Affairs International Board of Directors from 2006 through 2010. He and Elaine received the Greensboro Public Library's 2012 Thomas Berry Award for their work in making Thomas' work more generally available.

A collection of 60 of his poems entitled *The Rocks Sang Om* was illustrated and published in Nepal and sold internationally with the proceeds being used for women's literacy training in the Himalayan foothills. His book *Through Three Portals: Helping Tomorrow Unfold*, was published in 2014. Both are available at www.EmergingEcology.org/books.html.

In 2013, Nelson was elected President of Emerging Ecology (www.EmergingEcology.org), a non-profit organization committed to *promoting a worldview for the next generations' solutions*. He leads courses dealing with contemporary social issues and the individual journey to profound consciousness. Mr. Stover has lectured in Australia, Bangladesh, Belgium, Canada, India, Japan, Nepal, the Netherlands, Sweden and across the US. His current works are highly influenced by Thomas Berry, Robert L. Powell, Sr. and Ken Wilbur. His lectures and writings focus on foundational principles and practical actions relevant for developing a mutually enhancing relationship between the human and non-human worlds.

Nelson and Elaine have lived in Greensboro, North Carolina since 1991. Nelson can be reached by email at NStover@EmergingEcology.org.



Nelson and Tony, 2013

Note: All photos were taken by the author except the galaxy photo which is from NASA's website and the above picture which was taken by a passer-by at a street festival in Greensboro.

Background of Each Poem and Monograph

Beautiful Memories (January 2000): The only poem in this collection set in the future, it mourns the day that the last of the trees were cut down to pave highways and runways. The poem was written while experiencing the expansion of the nearby airport and driving across the state on an 8-lane expressway on a snowy winters day.

Bridging Chasms (February 2013): Traveling through the streets and tropical forests around Manuel Antonio in Costa Rica each new vista allowed a fresh story to be heard. This narrative starts with the formation of Planet Earth and ends with a sloth resting in a tree. The photos were taken near the places that inspired the verbiage.

By A Factor of 24 (July 2016): Written during an Emerging Ecology workshop at the Gray Fossil Site in eastern Tennessee. The poem explores timeframes from one hour to the history of the Universe by describing what can be done at each interval. Each successive interval is 24 times longer than the previous one.

Forest Time (July 2017): During a Story Telling workshop in the Joyce Kilmer Memorial Forest, a chance comment by one person sparked the theme of "enough time" for everything in the forest. This poem catches other instances of the same theme arising during the events of the day's journey.

Holding On (April 2004): While flying into the Atlanta airport, the water droplets in the clouds below seemed to have a story to tell. How and when did water, H_2O, first take form in the Universe? Maybe this story of two hydrogen (H) atoms finding an open-minded oxygen (O) atom in the fiery furnace of a supernova gives a glimpse into what took place. This poem uses the naming convention proposed by Thomas Berry and Brian Swimme in their book, *The Universe Story* (1992). Thus, Tiamat refers to the star in whose remains the Milky Way galaxy formed.

I Could Have Been Oil (June 1987): On a family celebrative outing, we climbed Mount Sinai, the mountain on which Moses received the 10 Commandments. Near the top of the mountain, after climbing for several hours, we found a fossilized fern. Its story focuses on the fact that had it been growing further west in what are now productive oil fields, it might have become gasoline. This poem was originally published in *The Rocks Sang Om* (F. Nelson Stover, 2000)

I've Watched a Billion Years Pass (July 2004): While on vacation in the Appalachian Mountains of northern Virginia, we stopped to look out over the hills and valleys. The rocks had a long story to tell of their formation, folding, and uplifting. Then they added in what they'd seen in recent centuries as human civilization arrived in their area.

Larry and Ursula's Big Decision (March 2015): Several years' of conversations with people relative to the topic of building a worldview centered on the understanding that we live in an emerging Universe that we actively participate in shaping not a created reality into which we must fit in led to the conclusion that most people have no way to conceptualize how humans could have evolved from the primates. This story proposes one plausible option.

My Story (August 2012): McCormick's Creek State Park, Indiana, lies not far from the author's birthplace in the oil fields of southern Illinois. Walking along a creek bed, one particular rock held the key that unlocked the area's vast history in a way that explained why a refinery would be located in Robinson, Illinois. This rock's story includes some of the specific geological activity that formed the central portions of the North American continent.

Pendulum Swings (August 2004): Thomas Berry proposes that each generation has a *Great Work*. This poem outlines each of the great swings of the Pendulum of Decision that have evoked the great works of the human species over several millions of years.

Second Thoughts (December 2000): The national political confusion of the 2000 election and the proposed airport expansion which was going to replace acres of forest with concrete runways provided cause for environmental consternation. Watching a solar eclipse provided the possibility that even the Sun had cause for concern.

The First Fire of Autumn (with Tony, October 2014): Sitting in front of the first fire of the season in our office's wood stove, it was not difficult to imagine a day long past when a man and a dog first shared the warm glow of the first fire of autumn.

The Universe Cares (May 2002): Wherever one looks, if their eyes are open to seeing and their hearts sensitive to the deep pulses of being, a person can see that the Universe cares. Three examples are given in this poem.

TIC TOC (June 2016): In preparation for story telling workshops and an upcoming sermon, the poem TIC and TOC (see the following item) was rewritten in prose. The narration begins to highlight the theme of a mutually enhancing relationship between realms.

TIC and TOC (December 2003): This poem is either a portrayal of a period in evolutionary history or a lesson is structural social change in the modern era – the reader can decide with perspective to heed. The historic narrative relates the transition during the decline of the dinosaurs who held TIC (The International Convention). Their primary place on the Planet was being overrun by the birds and mammals who had convened TOC (The Other Convention). Like "Holding On" and "Larry and Ursala's Big Decision" above, this poem focuses on one particular period in evolutionary history.

Toward a Contemporary Cosmology (October 2013): This statement was originally written for inclusion in *Through Three Portals: Helping the Future Unfold* (F. Nelson Stover, 2014). By grouping the 14 billion years of the Universe's history into two-billion-year phases, it presents seven easy-to-remember tasks of the unfolding Universe; these are organized into three master transformations. This formulation provides the overall context in which each of the poems in this collection resides.

We Met In a Glacier (August 2016): While visiting the Grand Teton and Yellowstone National Parks the rocks had a story to tell. The Grand Teton Mountains are the youngest mountains on Planet Earth. This is the rocks' story in the largest possible context.

Back cover: Old Faithful erupts, the Planet takes a breath.