A Linkage Analysis of the <u>Piscator</u> Gene: or The River of My Life, in Nature and the Arts

"In reality, every reader is, while he is reading, the reader of his own self. The writer's work is merely a kind of optical instrument, which he offers to the reader to enable him to discern what, without this book, he would perhaps never have experienced in himself. And the recognition by the reader in his own self of what the book says is the proof of its veracity" (Proust)

My goal is to honor the artistic history of the fisherman and his place in the natural world, framing the conversation in an experiential way, consistent with "the river of my life." The river engages and sometimes overwhelms ones senses, is continually on the move, and has neither an ending nor final answers. If my presentation is authentic, its artistic representations should engage all our sense and should reflect not just the certainties but also the ambiguities of my experiences. I hope my recollection of my adventures in the outdoors, enriched by my exploration of their Romantic artistic interpretations, my training in the Enlightenment world of science and medicine, and the difficulties I have encountered synthesizing these sometimes times compatible, at other times seemingly disparate experiences, will provide abundant material for a critique of current ways of thinking about the place of man in the world. I also hope to provide a glimpse of how the Enlightenment agenda of the humanities and science can be instrumental in preservation of our natural resources. My experience have been enriched by family friends such as the native Eskimo Nutchuck, who throughout his life struggled to find a place in modernity, yet always displayed a memorable aura emanating from his millennia old heritage, relying on yet revering nature. My inspiration also comes from another friend and family mentor, the Northern Michigan minister, artist, philosopher, and naturalist writer Harold Kohn. A part of my father a World War 2 scarred veteran, who found refuge in the outdoors and the influence of

number of friends and fishing guides who escaped modernity for nature and water is in my blood. My life in the reductionist scientific arena and later clinical medicine has given me enough familiarity with opportunities and dilemmas arising from scientific progress and societal expectation, to appreciate the importance of a fresh way of thinking about the methods of science and its relation to the humanities, politics, and the natural world. My hope is that this presentation will demonstrate that man in nature is experiential, evolutionary, mysterious, best articulated by our most creative artistic examples. John Fowles says, "Our fallacy lies in supposing that the limiting nature of the scientific method corresponds to the nature of ordinary experience. Ordinary experience, from waking second to second, is in fact highly synthetic, and made of a complexity of strands, past memories and present perceptions, times and places, private and public history, hopelessly beyond sciences power to analyze. It is quintessentially 'wild'... in fact it corresponds very closely-despite our endless efforts to 'garden', to invent disciplining social and intellectual systems- with WILD NATURE." (Fowles, "The Tree")

My earliest memories are of water and fish. As though it were yesterday, I see myself, standing knee deep in cold crystal clear lake water, the sun warming my back, a prism, both illuminating and amplifying my prized catch, the aptly named sunfish. Forward five years, its 1953 and I'm stuffed in the back seat of a small unairconditioned car with my brothers and dog on the way from Texas to Canada. Its funny, I don't remember the long hours of travel, rest stops, or hurried cold meals, but I can still vividly picture worms, rock bass, walleye, smell the pungent gasoline fumes from a 31/2 hsp Johnson motor, and taste sticky sweet blueberries, sensations and memories more profound than a '89 Chateau Latour or King Cole chateaubriand! In an instant, I'm an adolescent in Northern Michigan, bedazzled by the beauty and mystery of brook trout and girls. Less than three miles from the scene of these adolescent awakening lies Horton Bay, the location of Hemingway's short story "Up in Michigan." (The Complete

Short Stories of Ernest Hemingway: The Finca Vigia Edition) Penned in 1921, the 6-page narrative evokes timeless themes; adolescent gender identification, sexual awakening, and the place of man, in this instance a young woman, in the natural world. Memories of my enlightenment in the same place 50 years ago, pale in comparison to that of the naive, bewildered, but nurturing young woman, surrendering her virginity to an older woodsman on a beautiful but cold winter evening lakeside! For me, this vignette symbolizes one extreme of man's interpretation of nature, impervious to our anthropocentric illusions, Darwinian in its unvarnished depiction of the implied themes, survival and reproduction. As compelling is another more Romantic memory of that time, a nighttime fishing odyssey, in a small aluminum boat captained by my Dad! I recall adolescent boredom, discomfort from hours spent sitting expectantly in the cramped bow, the inevitable bird's nest, line hopelessly tangled in the dark, and ever present mosquitoes. But I remember most vividly that enigmatic figure, my Father, mesmerized by the intricacies of fishing technique, impervious to my preoccupations, fast cars, sex, and fascination with his unexplained wartime experiences. In my imagination, his European odyssey could have as easily occurred on the moon illuminating our night time fishing adventure, as on that continent familiar only to me from the pages of my textbooks. I also recall the magic of a night transformed by the brightest stars, the atonal symphony of frogs, and the anticipatory blurb, blurb of a top water popper. Suddenly there came the denouement, the startling explosion of sound and spray of a magnificent large mouth bass, paying us its ultimate calling card, a transcendent instant in my young life! This Dionysian event has been reinforced by retracing my Dads' WW2 Bavarian fishing recollections, exploring the high country of Wyoming, Colorado, the Sierras in search of cutthroat trout, fishing with sons and daughters for steelhead salmon on Michigan's Manistee River.

In the blink of an eye 50 years have passed! Roaming hospital corridors I sometimes feel like Kafka's Country Doctor, at

times a partner, and at other times a captive in my efforts to decipher the narratives of the body's mystery. I am a prisoner in a 40 year old enterprise, vastly different from the home I left years earlier to tend my patients, restrained from returning to my origin by unmanageable forces, one black horse an entrepreneurial octopus, the other a bureaucratic morass, compounding my despair on encountering my young patient's incurable rose red wound! (Franz Kafka, "The Country Doctor") Emotional and physical toil have slowed my pace, but my appreciation for universal existential themes, reason and passion, pain, loss, and death, has deepened. 3AM REM induced recollections transition into walking hours, leaving more time for reflection and wonder. I'm now content to fish familiar small rivers and lakes in Michigan, only occasionally venturing away from my comfortable surroundings to the waters of the Florida Everglades. These rare Everglade adventures, remind me of the young woman's Horton Bay encounter. The event on the dock, so clearly described by Hemingway, and my more opaque observation of the endless cycle of life and death occurring in the waters of Ponce de Leon Bay, oblivious to my inquisitive gaze and egocentric interpretation, remind me of my encounters with my charges in and out of hospitals. The vulnerable, yet nurturing young woman on the dock of Horton Bay, the quiet, almost reverent conversation of an Everglades guide with his friends, the fish, are emblematic of the small miracles that surround me as I witness daily acts of courage, brotherhood, love and faith in the presence of loss, pain and death. My struggle to reconcile the empiric world of reductive science with that of nature's mystery, reminds me of that night on the lake 50 years ago, struggling with fishing line hopelessly tangled on my green dime store reel. My adolescent strategies were no match for the puzzle presented by that crude reel. Unlike my father, in spirit the brother of Hemingway's Nick Adams or cousin to our Eskimo friend Nutchuk, expertly delivering his invitation to just the correct address, my amateurish efforts were marked by futility. As I struggled in the dark to unravel one knot, pulling on a promising loop, I created two more knots! Entropy

doesn't allow me the luxury of inventing a 50's Chautauqua, its agenda "Art of Zen and River Fly Fishing", with me, Chris on the river bank interpreting, the epic of my Dad and Nutchuk, writ in the language of rivers and fish!

But 50 years brings the dawning of a new day and the recognition that Ariadne's golden thread, lies shimmering in the depths of my tangled line, its promise both mystery and enlightenment! Through literature the golden thread becomes a golden chain! My literary discoveries include the humanistic writings of James Prosek, David Duncan, James Maclean, Al Gierach, Henry Bugbee, and the entomologist and secularhumanist, EO Wilson, who's objective has been to find consilient ground for the supposed antipodes, the science and humanities, and their application to preservation of our world. I experience a sentient moment on encountering R H Bloch's Yale angling club essay, "Marcel Proust and the Art of Fly Fishing". The Yale author and French professor explains it's permissible to relate ones professional existence to fly fishing! Bloch contends that both pursuits are a form of reading; analyzing the terrain of an unknown stream, matching the hatch, and meticulously preparing for and completing the perfect presentation! Bloch evokes classic literary referents for characteristic elements of the stream, the Fire Hole on the Madison is compared to a bolgia from Dante's Inferno, the slow measured flow in another part of the stream is likened to a novel by Austen. "Rivers like books fall into genres, and our generic expectations determine how we begin to read them...and the process of forgetting time: stepping into the river involves reading the river and everything that surrounds it" Recalling that magical night 50 years ago on the small Michigan lake, I'm captivated by Bloch's evocation of the rise of the trout to a fly. In keeping with the title of his essay, Bloch summons Marcel Proust, who never fished, yet compared the rise of a fish to a fly," a participant in the miracle of creation", to the effect of metaphor on the reader! My awakening to this insight has become the crucial link in my golden chain! Could it be that Proust has more to teach me about the

dilemmas bedeviling me at 3AM? Exploring the Penguin edition of Swan's Way, I quickly realize that recognition and transformation by the timeless themes of this masterpiece, including, memory, lost time, unrequited love, and personal recognition of the marvels of ones own mundane existence, would require not just a single, but several close readings, coupled with time for introspection and interpretation of Proust's messages according to one's life experiences. Lydia Davis, the translator of the Penguin edition implies that mastery of this classic could easily require a concentrated period of study not unlike the 12 years it took Proust to partially complete his opus. It is said that on reading Proust, the literary giant Virginia Wolf, overwhelmed by his genius, lamented that he had said it all and her feeble efforts could add nothing to the canon! In "How Proust Can Change your Life" Alain De Botton says, "a genuine homage to Proust would be to see our world through his eyes, not to look at the world through our eyes." De Botton explains that through art, in literature, music and painting, Proust encourages us to see our quotidian world in a new way, recognizing the unique beauty of everyday places and events. The seven volumes "In Search for Lost Time" are replete with references to works of art, strengthening our visual impression of his literary creation. In "Paintings in Proust", Eric Karpeles, reproduces 206 illustrations, from Botticelli to Monet, paying tribute to Proust's statement "Thanks to art, instead of seeing one world only, our own, we see that world multiply itself and we have at our disposal as many worlds as there are original artists..." Proust was particularly taken with the genius in the works of Chardin and Vermeer, whose use of light and shadows transformed everyday, objects into transcendent examples of man's aspirations. Central to Proust's artistic vision is the concept of ekphrasis, first described by Homer, a written text aspiring to the condition of a picture, "painting is the way they (the Venetians) wrote, writing is the way Proust painted." My nascent skills notwithstanding, Bloch, De Botton, and Karpeles convince me that Proust is the perfect guide as I reexamine my world, past and present, day and night, on

rivers, in fishing, the arts and the world of medicine! Enough! De Botton emphasizes Proust's plea that his transformational method of appreciating the world comes not solely from examination of literary or pictorial masterpieces, but from living life in a richer, more meaningful Proustian way.

Grasping the Proustian link in my golden chain, my curiosity impels me to follow Theseus into the labyrinth in search of the origins of fishing literature. Although James Prosek and others have attempted to explore the origins of trout and fishing in the headwaters of the Tigris River, thought by Milton to be the center of the Garden of Eden, my exploration will be confined to English literary antecedents. Can the poetry of that age, paying homage to the beauty of the waters, the fish, the trees, foul, the birds and mountains, awaken us to the grandeur of what remains of our natural world? The poetic diary of Henry Bugbee adds another crucial link in my golden chain, "The moment of the leaping fish... promises a place in and toward creation... I wish for no more than to do justice to the instruction I have received from moving waters. This is thought alive at the source and on the move." (Henry Bugbee, "The Inward Morning")

The Fisherman, by: Johan Von Goethe

The water rushed, the water swelled A fisherman sat by, And gazed upon his dancing float With tranquil-dreaming eye.

And as he sits, and as he looks, The gurgling waves arise; The maid, all bright with water drops, Stands straight before his eyes. She sang to him, she spake to him: "My fish why dost thou snare, With human wit and human guile, Into the killing air?"

Couldst see how happy fishes live Under the stream so clear, Thyself would plunge into the stream, And live ever there.

"Bathe not the lovely sun and moon Within the cool deep sea, And with wave-breathing faces rise In twofold witchery?

Lure not the misty heaven-deeps, So beautiful and blue? Lures not thine image, mirrored in The fresh eternal dew,

The water rushed, the water swelled, It clasped his feet, I wis, A thrill went through his yearning heart, As when two lovers kiss!

She spake to him, she sang to him: Restless was her strain: Half drew him in, half lured him in; He ne'er was seen again.

It occurs to me I could be a caddis larva, of the order Trichoptera, cousin to Lepidoptera the butterfly, nosing about in the rubble of the stream, awaiting my metamorphosis! As I explore, I'm protected from predators such as Salmo Trutta, by a calyx of twigs and mud. Although I may appear drab in comparison to the

beautiful adult mayfly, I have adapted to warm water and pollution better than my brethren! When compared to Homo sapiens, my 6cm length and one-year lifespan seem insignificant. However on the cosmic scale, in a rapidly expanding light year circumscribed universe, 13.5 billion years old, comprised of 5% visible ordinary matter, the larger part unseen, (20% dark matter, and 70% dark energy), I suggest that I am as meaningful to the biodiversity of the river's ecosystem and it's environs as any other animate order! Remembering Bloch, I incline my ear to the subtle language of the river, constantly in motion, sometimes whispering almost inaudibly, at times drowning out the cacophony of urban civilization, its' semiotics a universal language, begging for translation by our impoverished culture! I'm amazed at the treasures I've discovered grubbing about the bottom of my streambed! Burrowing beneath the silt almost to limestone of a remote quiet dark pool, hidden from the noise and hurry of the river's endless cycle of creation and destruction, I discover the remains of a manuscript describing the first modern sporting writing, "The Art of Falconry." (John McDonald, "The Origins of Angling" pp. 11-15) I learn its author, Fredrick II, was not only instrumental in publication of the first sonnets, but relying on direct observation and experience, published a seminal treatise on the aesthetics and techniques of sport. He provided a template for all subsequent sporting literary creations, rationale or meaning before science and technique.

In my haste to place my imprimatur on this discovery, I disturb the silt, uncovering 16th century historical fragments of more general interest to a new class of sportsmen, merchants and tradesmen, inhabitants of new centers of commerce such as London. When compared to the elaborate Norman French of Fredrick's text, I discover fragments written in two to three syllable English speaking in a more direct way to this new egalitarian audience, about "The Art of the Angle." (McDonald, ibid, pp 17-21) Dame Juliana Berner's manuscript, opened with a prescription for the life and values of the angler, temperance, exercise, careful

observation, and respect for nature and property. The treatise then analyzed equipment and technique for this novel leisure activity. As my vision acclimates to the murky depths, I stumble on a more recent, more poetic extension of Berner's earlier text entitled "The Compleat Angler: or The Contemplative Man's Recreation!" Its author Izaak Walton, born in 1593, spent his first 51 years as a London tradesman, meeting John Donne and other notable literary figures. Like William Harvey, another devotee of Charles I, Walton fled London during the occupation of Cromwell and the Long Parliament, to our credit, spending the rest of his life in the English countryside on or near water. His masterpiece, takes the form of a conversation between Piscator(Walton), a fisherman: Venator, a hunter: Ausceps, a falconer: and Viator, a traveler. meander along the River Lea, each recounts the virtues of his sport, ultimately ceding superiority to the art of angling. This frequently reprinted English classic retains its appeal, not because of its discussion of fishing technique, but by its evocative literary style and admirable personality of its author. The cheerful, humble, thankful author and his lyrical, description of the English countryside and different forms of fishing has become the exemplar for all subsequent authors who bring their unique perspectives and personalities to the outdoors and piscatorial pursuits! Says Russell Lowell, in his introduction to the 19th century edition of this classic, "To read him is to go a-fishing with all its bewitching charms and contingencies. If there be many a dull reach in the stream of his discourse, it is also full of nooks and eddies where nothing but our incompetence will balk us landing a fine fish." Or, as Walton gave thanks to the Creator for a longer ripening, more abundant old age, Lowell observes, "A fine morning, a meadow flushed with primroses, are not only good in themselves, but sweeter and better because they give him occasion to be thankful for them. We may be wiser, but it may be doubted whether we are so happy, in our self-reliant orphanhood. He had two pleasures where we have but one, and that one doubtingly now that the shadow of the metaphysical cloud has darkened nature." Is it

possible that the fortunate encounter with these masters, could lead to a metamorphosis in of the least of these in the teeming river, the inconspicuous lowly caddis larva?

I marvel in the increasing clarity of the message the filtered sunlight brings to the tablets lying in the slowly settling slit. Suddenly I am captured by the inexorable current of the river, emptying into a rapids, a prisoner of gravity and water's hydraulics, tumbling along in a foamy mixture of air and water, barely glimpsing pebbles, their granite glistening like jewels, a passenger in an underwater subway, destination unknown!

As the river's centrifugal force flings me from one bend to another, I am propelled perilously close to ominous undercuts, home of predatory brown trout. As the river slows, I pause to rest in a safe sandy pool.. Basking in the noonday sun, I am startled by an immense shadow, which sends me scurrying to the protection of a prehistoric log! Peering from the log, I'm amazed to see the outline of a giant creature, as unexpected in my natural habitat as a visitor from another planet! Half submerged, yet gently floating down the river, propelled somewhat inefficiently by four long appendages, above and by me is a hideous pale apparition, its coat as white as lime stone bedrock, silky brown tendrils like last years weeds, lazily fanning its head and shoulders. Piercing blue eyes, full of mystery leads me to the conclusion this must be a messenger from another world. What stories lie behind those penetrating blue orbs, perhaps a promise of riches unknown to my world, perhaps providing clues to my origin and fate? Again I am startled as this strange life form seems to lose its bearing, thrashing about, creating a tsunami, almost dislodging me from the safety of my hiding place. As the creature retains its balance, the water clears, and it drifts along in the current, I apprehend a distant musical chant, describing my ecosystems' "Immense Journey." Its cantor, Loren Eiseley, slowly floats "from an alpine spring, the warmth of the Gulf pulling southward...the immense body of the continent itself, ... flowing like the river down to the sea... streaming over ancient sea beds thrust aloft where giant reptiles had once sported... I slid

over shallows that had buried...the mixed bones of mammoths. I was streaming alive through the hot and working ferment of the sun. I was water and the unspeakable alchemies that gestate and take shape in the water, the slimy jellies that under the enormous magnification of the sun writhe and whip upward as great barbed fish mouths, or sink indistinctly back into the murk out of which they arose. Turtles, and fish...are watery concentrations--as man himself is a concentration--of that indescribable and liquid brew which is compounded in varying proportions of salt and sun and time. It has appearances, but at its heart lies water..."(Eiseley, "The Immense Journey") The current slowly carries the creature around the river bend.

I emerge from my hiding place into water warmed and illuminated by the sun, for the first time apprehending just a fragment of the significance of the river's 3.5 billion year past. eagerly anticipating the next chapter in it's odyssey. Lazily exhilarating in the gentle current, I am treated to magenta then royal purple hues of filtered light signaling sunset. Presently I find myself near the bottom of a deep dark pool, barely illuminated by the full moon. As my eyes acclimate to the pitch-black depths of the pool, I glimpse the warm glow of a golden thread vanishing into a mysterious void far above me. The days' earlier encounter fresh in my memory, my pulse quickening, I follow the threads' beacon into the unknown. The light draws me upward into a frightening but invigorating unfamiliar world. My lungs burn with a new sensation, that of the night air. I stumble toward a magnificent natural amphitheater, filled with excited guests as diverse and numerous as the countless creatures comprising my ecosystem, all anxiously looking to the empty stage illuminated by the moon and countless stars. I am seated as the guest of honor at the premier of Opera Natural, the mist qua curtain rises, and my program alerts me to the haunting call of the soprano diva, the loon, the constant murmuring of the frog coral providing baritone accompaniment. For a second time, I am spellbound by a recitative from the same magnificent creature, this time articulating the bond between my underwater

home with this magnificent cathedral, above it depths. I am hypnotized by the universal message uniting water's depths with the heavens. "I drifted in the gentle night breeze, now and then feeling a slight vibration along it (line), indicative of somber life prowling about its extremity...It was very queer, especially in dark nights when your thoughts had wandered to vast and cosmological themes, in other spheres, to feel this faint jerk which came to interrupt your dreams and link you to Nature again. It seemed as if I might next cast my line upward into the air as well as downward into the element, which was scarcely more dense. Thus I caught two fishes as it were with one hook." (Thoreau, Walden) I faintly recall a boy and man, on a moonlit lake transformed by the magic of a magnificent fish.

Drifting slowly to the bottom of the pool, my senses awash with my encounters with the river's story, its central role in the mystery of life and affinity with the magnificence of the heavens, I succumb to my genetically preprogrammed life cycle. I envelope myself in a cloak of finest silk, integrating the river's message and heaven's promise into a mature casing, promising I may soon achieve the pinnacle of caddis hierarchy, the Cinnamon Sedge.

Resting in the lee of the river, I undergo a metamorphosis, my new wings and imagination lifting me above the river, to soar with the birds among the clouds. Peering down on the distant river through my Walton polished Proustian lens, I am amazed to witness an elaborate dance between two unlikely candidates, Homo sapiens and Salmo Trutta, I discern a woman, Joan Wulff, knee deep in water, displaying her artistic skills with the same genius one might imagine of Monet, were he to be with his brush and paints beside her on the river bank. The minuet like precision of her rod and trailing line, back and forth, back and forth, is hypnotic! First a powerful backward motion of the magic bamboo wand, the tethered line, shimmering in the sunlight, obediently unfolding behind; an expectant pause and then the confident forward motion of the creative instrument, the trailing

dancing line, a gently rolling wave delivering with calligrapher's precision a savory delicacy, to the doorstep of Salmo Trutta. I can imagine the inspired Monet with his genius for melding light and color, capturing "the fleeting moment," the distorting properties of moving water, creating for us a lasting impression of, "the rise of the brook trout to a dry fly, a participant in the miracle of creation!" Light and shadow, on moving water, framing the shimmering outline of the colorful fish, the special properties of this marvelous liquid, adding an ethereal quality to the élan vital animating the magical creatures sharing with me this ecologic paradise!

With higher magnification, the lens directs me to an inanimate form lying almost forgotten in the knee-deep grass beside Monet. My elation instantly turns to despair as I realize the rigid specimen is a lifeless brook trout, perhaps the sister of the marvelous fish celebrated a moment earlier. The contrast could not be more profound. The ethereal life affirming quality of the trout in its natural element is replaced by the cold hard outline of the forlorn dead creature, now the captive of a new order, the domain of man. The fish's protective film, accentuating its jewel like crimson, azure, and golden markings, is gone, the pale red, blue, and yellow markings a poor imitation of their past splendor. Brownian like constant motion, dark, vigilant, adaptive vision transitions to the despair of a cold rigid corpse, pierced by dull lifeless orbits! Is the contrast between the magic of the animate brook trout, secure in its element and the forlorn pitiful imitation lying lifeless on the riverbank, symbolic of Nature in the absence and presence of man?

Suddenly the jet stream carries me far away to New Orleans, the frontispiece in the epic, the Odyssey of Man's Abuse of the Natural World, or the true story behind the devastation of Hurricane Katrina. I learn Hurricane Katrina was as much a human and political, as a natural disaster. Harry Eyres contends New Orleans is wounded, the wound the consequence of a deliberate acts committed by man. He explains the wound is the result of depletion and degradation of the river delta, the loss of 2,500

square miles of protective barrier islands and cypress-rich wetlands, the transformation of the Mississippi from an ecological marvel to a commercial navigation system. (Harry Eyres, The Slow Lane, Unnatural Disaster, Financial Times, Nov. 6, 2009) Eyres cynically notes that in the case of the Mississippi, where money, people and nature are considered, money comes first, second, and third, and the ecology of the river, its environs, and people are forgotten! Eyres explains that what happened in New Orleans is a microcosm of what is happening in the wider world. "We had become disembodied in our thinking, we had forgotten the 'river is within us, the sea is all around us." I'm not surprised that Jacques Barzun entitled his survey of Occidental cultural history from the Enlightenment to Postmodern times, "Dawn to Decadence!"

My existential despair mounts as David Duncan, in "My Story As Told By Water," describes the degradation of countless Montana Rivers and ecosystems by rapacious cyanide gold extraction business interests, and the states' elected officials complicity in the crimes. He describes the damage the federal Bureau of Reclamation ("Bureau of Wreck the Nation"), did when they damned Nevada's Truckee River, lowering the water level of Pyramid Lake 40 feet. He decries their heedless diversion of water into the Carson Valley money mill, absent any environmental concern, devastating the lake, Stillwater Marsh, fish, flora, fauna, the Paiute People, and threatened survival of over a million of the Western Hemispheres' migratory birds. Duncan lists 50 major rivers, including the Columbia devastated by environmentally insensitive, financially motivated, politically pressured damn projects. In praise of the least of these, ME the caddis fly, Duncan says, "if the mine (cyanide leaching) goes in, these fragile species will be the first to die; industrial dust alone can kill them. So I've got to say it now: the river-born insects I'm praising in that blue light are the publicly owned foundation of a Chain of Life that leads from ocean to cloud to snow to river to water-borne organism to nymphs to flies to evening rises, trout, joy, famous Norman Maclean novellas, and thence to the heart of you and me. This land

is your land: these bugs are your bugs: this river is our river: its intact and entire Chain of Life was made for you and me. And when you stand in the Blackfoot during a rising of fish and falling of joy such as this, I don't care how urban you are, you feel it immersed in the muscles of the wild river's flow, you feel it in your 78-percent liquid body and steadfast heart how even you, even now, are part of the same wildness and flow"

Die Forelle, by; F Schubert

Across a clear brook gentle, there shot in eager haste
The trout, so temperamental:
Quite arrow-like it raced.
I on the shore was gazing
And watched the brook disclose
The merry fish's bathing
To me in sweet repose.

An angler's reel unrolled
From where he stood below.
He watched with blood most cold
The fish swim to and fro.
So long no stone or sod
Stirred up the water pure
The trout from line and rod
Would stay, I thought, secure.

At length the thief lost patience And made the brook obscure With crafty agitations, And ere I could be sure The rod had started curving; The squirming fish was hooked. With pounding blood observing, At the betrayed, I looked.

You, at the fountain golden,
Of youth, so free from doubt,
Be to the trout beholden;
At danger's sign, clear out!
Tis of for want of reason
That maids will shun the straight.
Beware the anglers' treason
Else you may bleed to late!

The poetry of the natural world, the river and its ecology is as essential to our well being as the wonders of science and technology. My survey of the diverse artistic impressions of man and nature, particularly fish and rivers convinces me there must be a Piscator gene, a phenotypic symbol, its poetic vision so beautifully articulated by Proust, Walton, Eisely, Thoreau, and Bugbee. EO Wilson argues constituents or memes characterizing cultural expressions of human nature such as my Piscator gene are the product of gene culture coevolution. (EO Wilson, "Consilience") While characterization of the human genome and application of sophisticated techniques such as linkage analysis to identification of gene mutation in disease has revolutionized medicine, characterization of common human traits such as height and presumably my Piscator gene have not enjoyed the same success. (Hardy, NEJM, 360:17, 1759; Goldstein, NEJM 360:17, 1696) I conclude that although there undoubtedly is a genetic, evolutionary basis for our fundamental affinity with nature, rivers, and fishing, to try to understand it by available reductive

scientific techniques, including genetic analysis, would be unproductive. Nonetheless EO Wilson would argue that as a cultural manifestation of human nature, the Piscator gene must be the evolutionary product of gene culture interaction in response to the environment. He believes that all forms of human behavior have a biologic basis. are on a "genetic leash." If one agrees at least in part with EO Wilson's sociobiologic approach and my review of Occidental fishing artistic depictions, my Piscator gene should reflect the principle of "habitat selection," a precise harmonious adaptation of body and mind to a beautiful world, a world to be treasured and protected, a world of majesty, mystery and promise poetically described by humble, thankful, respectful writers such as Dame Juliana Berners, Izaak Walton, and David Dennis. Nowhere in the works cited above does one find a rationale for the exceptionalist position, its example Homo proteus, Wilson's "shape-changer" man, standing apart from, ruling over and exploiting nature. Wilson acknowledges that the study of gene-brain culture evolution has not progressed far enough to validate these characterizations. He summarizes his treatment of sociobiology with the humility of an experienced scientist; speaking with the passion of inspiration, confidence in method, yet recognition of complexity and future contingency. He concludes that as a consequence of the complexity of the emergent brain bombarded by countless external stimuli, interpreted in the context of unique past experience, "there can be no simple determination of human thought, at least not in obedience to causation in the way of physical laws...because the individual mind can not be fully known, the self can go on passionately believing in its own free will." (EO Wilson, "Consilience," p120) A month ago we heard an eloquent presentation on The Odyssey. Homer's

admonition to Wilson's shape changer man, Homo proteus, is more pertinent today than 3000 years ago. Were Jacque Barzun, with us this evening, I have no doubt, he would suggest we include EO Wilson with Homer as interlocutors in a responsive dialogue addressing Barzun's bleak cultural perspective. (Barzun, "Dawn to Decadence")

So although the Piscator gene arguably has genetic constraints, I conclude it should by analyzed from a cultural perspective and should include an examination of the history of artistic imagination. Perhaps a quick review of the history of artistic expression will shed light on our misuse of the world of nature.

The earliest extant artistic records, found in the Chauvet cave are thought to date to upper Paleolithic times, 30 thousand years ago. (Chauvet et al, "Dawn of Art: The Chauvet Cave") These ritualistic, yet realistic depictions of large mammals are thought to be a form of magic, an effort by pre-scientific people to control the objects they depict. The images speak to the earliest existential contradictions of the emergent mind, intelligence, tempered by the first recognition of vulnerability, finite existence, and environmental chaos. They represent an effort across and through time to impose order on and control forces important to survival and reproduction. Magic begat religion, a balm for man in his psychological exile.

Cultural evolution in the Neolithic era, is signaled by transition from small hunter gatherer nomadic bands, to settled, stratified agrarian communities, and later large hierarchical societies dominated by religious figures. Lynn White describes a world of Antiquity, ordered by pagan animism, where spirits inhabited every natural particular, tree, brook, and hill. Greco-Roman culture demanded that each spirit must be placated when

man altered natures' objects, exercising a restraining influence on ecologic misadventures. Dr White cites the development of 8th century agricultural practices dependant on a new plow and depictions on Frankish calendars, signaling the transition of man FROM a participant in, TO an exploiter of nature. He contends these attitudes stem from the transition from the pagan to Christian worldview. He evokes the Judeo-Christian linear impression of time and the creation story, man created in God's image, resulting in dualism of man and nature, and the belief that man should utilize nature for his own ends. He explains that most early Enlightenment scientists explained their motivations and achievements in theological terms. The scientific and cultural tectonic shifts of Darwinism notwithstanding, White continues, "modern science is an extrapolation of natural theology...modern technology is at least partly explained as an Occidental, voluntaristic realization of the Christian dogma of man's transcendence of, and rightful mastery of, nature." (Lynn White Jr., "The Historical Roots of Our Ecological Crisis" Science, Vol. 55, (#3767), Mar 10, 1967, 1203) He contends that our ecologic misfortunes are in part the consequence of rapid scientific and technological innovation by a culture mired in its earlier anthropocentric mindset. He forcefully argues that science and technology must be tempered with a new religion or ethic for a solution to the current ecological dilemma. He suggests that the humility of St Francis of Assisi should be a guide for a new way of grounding us in the natural world. White says, "St Francis tried to depose man from his monarchy over creation and set up a democracy of all God's creatures"

This worldview supposes we find ways to reconfigure the finality of death, to find meaning in life in the face of "the collision between freedom and deadening

constraint, between our sense that our lively existential projects and self-conceptions have some non-illusionary significance, and the contrary conviction that nature takes our presence indifferently, even hostilely..." (Mooney:Meditations, JRCT 10.1, 2009, pp 42-62) In this tribute to Henry Bugbee, Mooney imagines the collision of brute force and freedom as an instance of the "sublime." He describes a momentary suspension of the routine, an emotional cleansing or elevation by a terrible storm, a mountain, or Job's encounter with the Whirlwind. He adds, "self-emptying may be salutary, a quasi-antidote to the pervasive liability of overweening pride in a release from a drive to mastery...When a Whirlwind accosts Job, his will-to-protest is silenced. Under stars or great whirlwinds we may realize we're only dust in the largest scale of things- and melt, as before great music. In this, we learn the wisdom of letting be, of forgoing mastery, of a submission to the world that is a kind of love, and acceptance of it." In the diary "The Inward Morning," Bugbee sees the sublime as "wilderness," experiential encounters, with alpine meadows, rivers, people and even horrific wartime events "articulating a true prayer," for "Answering lived-out compassion somehow commensurate, if only marginally, to the suffering in which he is implicated." (Mooney, ibid, 57) Bugbee's journey in the wilderness, suffused with small, sublime wonders, never ending, continually evolving, is surely a "true prayer." In my imagination this journey, or "true prayer," frames the call of St Francis "for a brotherhood of all creatures."

In the preface, entitled Wonderings, to his book "Reflection, on the Nature of the World and Man," Reverend Kohn, articulates his life's value, his destiny, his essence, in the poetry of his home in the woods, Hidden Brook. Fifty years ago alongside my brother the

caddis fly, I followed the twists and turns of the lively bubbling Hidden Brook in its ½ mile odyssey to Lake Charlevoix, through cool refreshing scented cedar thickets and life giving, sun drenched clearings, dotted with nature's jewelry, trillium and orchid. Teen angst dissolved, replaced by an ineffable sense of wonder at nature's beauty and mystery, (ALL FOR FREE,) a warm glow, rather a reverence and thankfulness, for the Origin of this place and the beneficence of my experiences. In my recollections and dreams, this is the source of my awakening to brook trout and girls. Harold Kohn says, "The wondering-place I feel most fully alive is Hidden Brook...While water may be inorganic, the brook still seems the most vitally alive creature I have ever met...Here the myriad hosts of creeping and crawling and running and swimming and flying things excite the eyes and set thoughts astirring...Hidden Brook has done much to us and for us...It is the promised rest just beyond exhausting work, the welcome silence beyond the din of civilization, the realm of the natural that lies but a step on yonder side of the artificial... We need time for wondering-and a wondering place. May you find your own wondering- place somewhere near." (Harold Kohn, ibid, viii-xi)

The Fish, by: Elizabeth Bishop

I caught a tremendous fish and held him beside the boat half out of water, with my hook fast in a corner of his mouth. He didn't fight. He hadn't fought at all. He hung a grunting weight,

battered and venerable and homely. Here and there his brown skin hung in strips like ancient wall paper and its pattern of darker brown was like wallpaper: shapes like full-blown roses stained and lost through age He was speckled with barnacles, fine rosettes of lime and infested with tiny white sea-lice, and underneath two or three rags of green weed hung down. While his gills were breathing in the terrible oxygen -the frightening gills, fresh and crisp with blood, that can cut so badly-I thought of the coarse white flesh packed in like feathers, the big bones and the little bones, the dramatic reds and blacks of his shiny entrails, and the pink swim-bladder I looked into his eyes which were far larger than mine but shallower, and yellowed, the irises backed and packed with tarnished tinfoil seen through the lenses of old scratched isinglass. They shifted a little, but not to return my stare. -It was more like the tipping

of an object toward the light. I admired his sullen face, the mechanism of his jaw, and then I saw that from his lower lip -if you could call it a lipgrim, wet, and weapon-like, hung five old pieces of fish-line, or four and a wire leader with the swivel still attached. with all their five big hooks grown firmly in his mouth. A green line, frayed at the end where he broke it, two heavier lines, and a fine black thread still crimped from the strain and snap when it broke and he got away. Like medals with their ribbons frayed and wavering. a five-haired beard of wisdom trailing from his aching jaw. I stared and stared and victory filled up the little rented boat, from the pool of bilge where oil had spread a rainbow around the rusted engine to the bailer rusted orange, the sun-cracked thwarts, the oarlocks on their strings, the gunnels-until everything was rainbow, rainbow, rainbow! And I let the fish go.

While fishing on Michigan's Manistee River a few years ago, my brother hooked, or rather my brother was hooked, by a sturgeon as large as his twelve-foot boat! The leviathan, likely over seventy years old, was the genetic identical of his 200 hundred million old ancestor, perhaps the direct descendant of a participant in Eisely's "Immense Journey...over giant sea beds thrust aloft where ancient reptiles once had sported." The sturgeon is known to be a marker for the ecologic purity of its habitat. The monster. with its coat of aquatic plant life, and scores trailing fishing leader and line, hooks and lures of all types towed his boat up and down the river for over an hour and then "let my brother go!" In the distance I hear Elizabeth Bishop's HOORAY! I record this event in "The River of my life" as an instance of Bugbee's sublime, a "true prayer." The chance meeting of this late Silurian relic with postmodern man, its indifference to our egocentric preoccupations and testament to the diversity and purity of its ecosystem reminds me of our rightful place on this magnificent planet; with Dame Berner, respecting place and property, along side Walton giving thanks for "a fine morning, a meadow flushed with primroses," for our days and friends, a member of St. Frances' "democracy of God's creatures." Tomorrow I plan to visit Eagle Creek, or perhaps the White River near Lilly Lake or Holcomb Gardens, in search for my "wondering time", my "wondering place"

Α

quote by Albert Einstein on mystery, wonder art and science, "The most beautiful thing we can experience is mysterious. It is the source of all true art and all science. He to whom this emotion is a stranger, and who can no longer wonder and stand rapt in awe, is as good as dead; his eyes are closed."