



A video clip on the New York Times website about the coal ash spill at the TVA Kingston Fossil Plant near Harriman, TN on December 22nd, ended with a somewhat bewildering segment: a bald, moustache-ed man holding a fishing pole next to his truck—and in the background a river oozing gunmetal gray—spoke with a telling drawl, “actually, there’s some really good fishin’ holes there, and I hope they’re not ruined.” The shot would’ve been at home on the local news filler story—but here, in an otherwise concise, informative, and nationally, if not globally, conscious short, this man and his concerns seemed quaint and even silly.

We, as a modern people, have become trained to look at our world from the Google Earth view—which is to say, hyper-globally and removed; and yet, while ‘global’ is the word I would use, there is an implication of reliance—cause and effect from one ecosystem to the next—which certainly does not apply. This removed point of view cannot, to reverse the cliché, see a single tree in the forest—or blade of grass, or hillside, or bush, or cactus, or grain of sand in the wash of green that is land; nor can it see a drop of water in the blue that is ocean. Everything, in effect, is

an act of God—meaning we do not see the intricate web of causes, only an inescapable event, a recurrent *deus ex machina*—and this from a people who usurped God a long time ago. Yet, I have to believe that an astronaut standing on the moon and experiencing—actually experiencing rather than via screen and cables and satellite imagery—such a view of our planet would return to see a world in a grain of sand, infinite spaces in a nutshell, and, most relevantly here, the importance of a single clod washed away by the sea—or coal ash washed down the Emory River, or a mountain topped... or a fishing hole ruined.

And it is with this purpose—to try to understand the importance of what experts are calling the largest environmental disaster of its kind in the United States outside of its mere relevance as news, and in context, even, of this man’s fishing hole—that my colleague and I make the trip down I-75, armed only with cameras to capture for ourselves the devastation, and with what we hope is an alive and breathing, empathetic and awake consciousness.

But first, we take a minor detour west to a cabin in Somerset, KY where we have been granted free lodging. The cabin is on Lake Cumberland, a 65,530 acre lake with as much



The Tycho Crater's ejecta rays stretch across our Moon's pocked surface

as 1,255 miles of shoreline—more shoreline than the mainland of Florida. This reservoir is the ninth largest in the United States. My grandfather, long before I was born, actually worked as a dozer operator on the construction of Wolf Creek Dam—a hydroelectric dam that contains the Cumberland. They say it cured a flooding problem which was costing millions a year in emergency and restoration funding; but I have to wonder if they cured it, exactly, by damming it completely. And that makes me wonder if there really was a flooding problem or a problem with people living where it always floods.

We arrive at the cabin late, but can still see the water, a milky gray-green in the moonlight. By day this water is a beautiful emerald green tinged with a slight blue and rising like a wall from the trees beneath this peninsula promontory on which the cabin rests. But that is by day. From the back deck, wrapping the whole rear of the cabin and reaching out toward the point, we lean out against the railing toward the darkness, staring at the nearly-full moon and hatch a plan that will take us deep into the night: Josh, my accomplice, borrowed a Canon 600mm/f4 telephoto lens (price tag: \$7,000—we handle with care) and has been itching to put it to some sort of use. The only thing we can find in the lens that is bright enough to focus on is the moon. And in the spirit

of American superfluity, we quickly decide the lens, per se, isn't enough—this being the same mind state that took man from gazing at the moon from the Earth to gazing at the Earth from the moon. (“Man would not be man,” Loren Eiseley ominously opens his volume on the U.S. moon landing, “if his dreams did not exceed his grasp.”) Two 2X converters and three hours of focusing efforts later, the heavenly body fills our glowing LCD in a clarity and intimate proximity unlike anything we’ve ever seen. Every crater, pock and striation—steeped in harsh, angular shadow and edged with a kissing albedo from the hidden sunrise and fall along the lunar surface. Ridges reminiscent of Adena mound formations wander about the gaping impact craters and Tycho stretches his fingers across the southern polar region like the tertiary arms of the lake beyond the deck on which we stand.

The Tycho crater is fifty-three miles across and nearly three miles deep, with ejecta rays spanning almost a quarter of the surface of the visible side of the moon. It is named after Tycho Brahe, a Danish astronomer from the 14th Century whom, an initial web search reveals, had a gold nose, a pet moose, a dwarf jester, and was believed at one time to have owned 1% of the total wealth of Denmark. This flamboyant character got a section of the bridge of his nose cut off in a drunken college brawl with rapiers; he replaced it with a prosthetic piece of precious metals. His pet moose died when it drunkenly fell down the stairs in a friend’s castle. However exaggerated these accounts might be, he was nonetheless an extravagant man.

The following morning I wander the woods of the point overlooking the water in a drizzling rain and contemplate the mystery of our Earth’s single satellite. Why are we drawn to space, to planets, away from that which we are so adequately and perfectly acclimated—drawn like tides swelling by a groping compulsion—an undinal vast belly, as Hart

Crane describes it, moonward bending? There is a scientific explanation for the phenomenon of tides, but I can't understand it. And I have a feeling, if I could, it would be nonetheless a miracle. They say that the moon is like a magnet, pulling constantly on the earth and large bodies of water are alive with the magnetic heaving—rising and falling and rising again every twelve hours and twenty-five minutes.

The moon has its own seas as well, though such a name is deceptive. The light and dark sections of the moon that mimic the contours of earthen land and sea are called terrae and maria. Maria, or, in singular, mare—Latin for seas, because that is exactly what they were assumed to be—splotch the visible side of

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the moon. We know now—because we stuck a flag in Mare Tranquillitatis, or 'Sea of Tranquility'—that these are not seas at all, but rather expanses of solidified basaltic lava. As for me, I'm partial to Earth and the lake just beyond this cabin—even if it is man made. And this makes me think: if the Sea of Tranquility, as peaceful and beautiful as it sounds, is made of basaltic lava, then what sinister compounds give Lake Cumberland its often-praised color? I couldn't tell you, but I know that I won't eat the fish I catch from my regular spots on the Kentucky River because of the high levels of mercury in the water and, in turn, in the fish. Well, I probably could, but pregnant women and children are limited to one fish per week as recommended by the Kentucky Department of Fish and Wildlife. And when it comes to calculating just how much mercury one can consume without being poisoned, I find it easier to catch and release—Tycho Brahe died of mercury poisoning, you know.

When the mid-morning sun appears, it finds us making our way down Highway 27—we have decided to avoid the interstate and opt for what we hope is a more scenic route—but as we near our destination, the sun has disappeared and a steady rain falls. We stop for gas and pick up a local newspaper—"Ratepayers may bear costs; Corker tours area, meets with TVA," reads the front page of the Roane County News. The headline refers to the inevitability of the cleanup costs of the coal ash spill falling on those who are provided electricity through Tennessee Valley Authority, despite the Knoxville News Sentinel's heraldry of the most jobslost since World War II; and, also, to Senator Bob Corker touring the disaster area. And

another headline chronicles neighborhood meetings on the spill—a refreshingly local viewpoint. And yet another story announces Erin Brokovich's arrival to look over the cleanup. But my favorite from yesterday's paper has little to do with the events of the last few weeks: a woman by the pen name Looseleaf Laureate looks forward to the spring arrival of hepatica in the Appalachian foothills despite it all.

There are no road signs directing us to what we are looking for, but there are the immediately recognizable, ominously looming smokestacks of the Kingston Fossil Plant on the horizon. We pass Kingston on I-40 and peer over the bridge and the plant. In Harriman we loop back around through the decrepit Main Street and a failing industrial area to the river. The Clinch and Emory rivers join each other beyond the plant and flow into Watts Bar Reservoir. Watts Bar Dam, like Wolf Creek Dam, is hydroelectric; it is owned by TVA, who estimates on their website that the dam has saved some \$4.9 billion worth of flood



A Kingston Wildlife Refuge sign washed downstream of the Kingston Fossil Plant

damage since its construction. But from the other side of the tracks—that is, from the softball field perched on the Clinch River in Harriman, beyond the stretch of parallel tracks that haul coal to the Kingston plant—it is obvious that the \$4.9 billion were in no way poured back into the community... at least not this one.

Not seeing an immediate route to the plant, we take I-40 back to Kingston and ride the white line well below the interstate minimum speed, gazing at the river to see the atrocity. But there is little to see. At the Kingston exit we trace the river and cross back over it on a smaller bridge; following the first turnoff, we end up directly beneath the interstate, parked next to a group of white trucks with ‘Eagle Construction and Environmental Services’ on the sides. Next to one of the pillars supporting the interstate and the cars humming by above our heads sits a pile of what looks like the contents of a school janitor’s closet. Various mops and jugs of liquid sit by some unmarked boxes and a couple of cases of water. In the river, yellow tubing floats in strategic places to catch surface pollution from the spill. Some gray-colored froth has collected there, but nothing overly alarming.

As Josh begins photographing, I make

notes on what I see: signs closing the river between interstate milemarkers; a wildlife management area sign half-buried in the shallows; aluminum boats carrying men with neon yellow and orange rain coats with reflective material on them, shuttling from a ramp by the plant to somewhere just around the bend beyond our view. At almost the exact point of the bend where we lose sight of the river, there are more men in reflective coats standing on the bank. One is wading waist deep. As I copy the words of the sign, “Emory River closed from mile marker zero thru four. US TVA Police” (as odd as it is to follow a river by an interstate), the workers begin walking the bank towards us. It is their lunch

hour. They pay us little attention but seem distrustful, so I start the conversation: “Who do I have to speak with to get on one of those boats,” I ask. They direct me to their Safety Manager.

“I really don’t think they would let you do that,” he replies.

“Who would I have to ask to find out?”

“They’re just not going to let you,” he reassures—a nice way of telling me he is refusing to answer.

“Could we photograph your crew’s cleanup efforts?” I ask him.

“We’re on lunch,”





A young fisherman angling for Rock Bass on the Emory River

he says already walking away from me and toward his pickup truck.

“We’ll wait,” I say with a smile. When he returns he tells us that we will have to check with TVA before we can take any pictures. It sounds like a well-rehearsed speech, so we politely nod and ignore it. Following the crew along the bank toward the bend, we are walking in the manicured backyards of the upper class of the area. Even from the backs of the few houses on the small cul-de-sac, we can tell they are large and new. These are the people, I think, who held the neighborhood meeting with TVA officials. It wasn’t the folks from the houses in the aerial photos in the large newspapers—those houses were small, slightly unkempt ...and ruined.

Past one of the docks another man in waders stands in water over his waist. I think it is another Eagle employee until I see that his waders are camouflage, and he has the hat to match. We continue around the bank and notice a rod in his hand. He finishes tying on his spinning lure and begins that familiar pattern of cast and reel. We have found our fisherman. The workers don’t seem to notice him, but I stop to shoot the breeze.

“Catching anything?” I ask.

“Not yet,” he replies. “I just got out.” His voice is a higher pitch than I expected and his face is smooth. This is clearly not the same man from the video on the New York Times’ site. No, that man showed uncertainty about fishing the area, and here was a kid, barely sixteen years old, fishing immediately downstream.

“What are you after?” I pried.

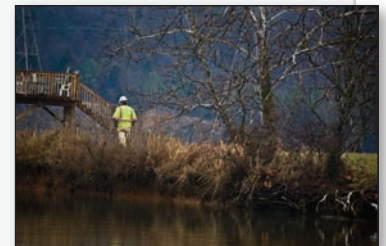
“Rock fish,” he explained; “striped bass. I came down here a couple of weeks ago, before... uh—well, before that big thing happened, and I lit ‘em up.” That Big Thing he ominously and ignorantly called it; and why should a young kid with a bent for bass angling have to be aware of such issues? The water looks the same today as it did, probably, a couple of weeks ago... you know, before that big thing happened. And the stripers are still navigating the currents of this kid’s imagination, even if they have been pushed down stream by the heavy concentration of mud and coal ash.

“I haven’t caught anything since,” the young man continues.

“If you did, you wouldn’t eat it would you?” I can’t help but ask.

“Nah,” he says, alluding to an understanding of a risk, “I can’t catch anything big enough to eat anyway.”

“Good luck,” I offer and head toward the workers on up the bank. I pass piles of heavy-duty black fifty-gallon trash bags—black as coal. I am tempted to tear into one to see what they are collecting,





Fishing for "stripers" just downstream from the spill

but I've already seen their gloves and safety precautions. Josh stands idly by, having taken all the photographs necessary. Sidling beside him, I can think of nothing worth saying or asking. We offer half-hearted thanks and work our way back to the truck, which waits beneath the interstate overpass. We had found our fisherman, and found too that we, like everyone else, are really only interested in the more tangible events, in the devastation and destruction, ...in the news.

Back across the small bridge running parallel to the interstate overpass, we see the road to the Fossil Plant. Prior to the turn, there is a brown sign with a graphic of binoculars, designating a wildlife viewing area. This happens to be immediately adjacent to the plant. We turn off Highway 70 and there is a Y in the road. To the left there are temporary, lighted stop signs and several police officers directing cars. Caution signs designate it a disaster area. To the right is the plant with signs saying "Authorized Personnel Only," and, as it happens, a park and wildlife viewing area—though I wonder what wildlife can be seen directly adjacent to a coal-burning power plant. We aim for the disaster area.

"Where you trying to go?" an officer asks.

"To see the spill." We are honest.

"We are only allowing residents and cleanup crews," he informs us.

"Well, what about the wildlife viewing area," I ask. I have a pair of binoculars in the center console and I hold them up as explanation. Josh waves a camera with a long lens attached. The officer is distrustful and a bit confused.

"We're not letting anyone around here on account of what happened." He steps in front of the truck and begins unwaveringly swinging his baton in the direction of the way we came. We give up and turn around.

Back in Kingston, we pass a sign that reads, "TVA Outreach Office." With Josh waiting in the truck, I wander into the office through the glass doors. I can see the employees looking me over. A police officer sits in one of a row of chairs along a cubicle wall near the entrance. He looks somewhat disinterested, but I catch him stealing glances as I walk to the receptionist's desk. "Are you all speaking with members of the media and journalists?" I ask.

"About what?" the woman replies.

"About the ash spill," I retort obviously.

"No, I'm sorry," she says, attempting to hurry me out.

"Do you know who is?"

"Is what?" she asks. Perhaps she is trying to confuse me.

"Talking to media persons," I explain. She again looks at my double-plated work pants and rubber boots before responding.

"Hold on one minute, please." She leaves. Some employees, half-standing, crane their necks and peek over their cubicles. I hear them whispering. One motions to the officer who smirks slightly. When she returns she asks whom I am with.

"No one," I reply. A wrinkle of confusion appears on her brow. How do I explain to her that I am from Kentucky, that I came as a concerned citizen of the world, that I too drink

water, and that somehow those things are connected? How do I explain that sometimes someone is compelled to do something by an invisible attraction, like a wave by the moon, and I was compelled to see—though we found nothing—the largest environmental disaster of its kind?

“I’m freelancing...” I offer after a moment. She nods in understanding—or at least to exude a sense of understanding, for I think she is very befuddled by this—and again passes through a doorway.

“I’m sorry,” she says upon returning, “but we aren’t speaking with freelancers.”

“What about Erin Brokovich?” I ask. She says nothing but offers a consolatory smile. I smile and turn toward the door, walking back through the river mud that I tracked in on my boots.

Coming to terms with the fact that we simply are not going to get to see the designated disaster area, we decide to hit the Great Smoky Mountains National Park while we are nearby. We pitch our small tent in the Cades Cove campground in pouring rain and read newspapers about the continuing saga of the ash spill until late into the night. The most poignant piece I find is an opinion editorial by a resident of Kingston whose aging mother had made the connection between the failure of the impoundment dike and the possible failure of another: the dike which holds back the Clinch River from washing away the town of Kingston. I like her associative learning. The author and her mother, through a citizen’s interest, began attempting to find out just who was in charge of the maintenance of the dike. It is a bureaucratic trap—each agency deferring to another, and so on. The editorial is a plea for the community leaders to find out who, if anyone, maintains the dike and if it is currently in an adequate working condition.

I think of my grandfather as a young man working on Wolf Creek Dam. I wonder if he had any idea what a hydroelectric dam was.

He was raised on a farm in central Kentucky and never had running water until my mother was a teenager. How then could he have fathomed hydroelectricity? He was probably ignorant of the workings of the dam beyond the retention of water, just as this editorial author’s aging mother is ignorant of one dike versus another except that both are fallible. For that matter, I am not sure I understand hydroelectricity, but we as a race call electricity by that ominous word, “power,” and I know it takes just that—power, whether by burning coal, harnessing wind, or fusing particles—to create electricity, our modern Apollo, on which we have become completely reliant.

Power from Wolf Creek Dam comes from the force of the water turning massive turbines within the dam. Force, like in politics or war, is where power comes from. And we have always thrived by forcing nature. Yet many environmental disasters were not acts of God as they were termed, but a returning of the element to its original, or natural, state. “Force maketh Nature more violent in the return,” Francis Bacon wrote. And so the degree to which we force the element is directly correspondent to the intensity of the return or the calamitous ‘act of God.’

Despite my grandfather’s probable ignorance, and my own definitive ignorance, of hydroelectricity, Lake Cumberland has always been a source of family pride. But whenever my family drives by those emerald sparkles, no one mentions the millions of dollars—four times the original construction cost—in repairs that came only a few years after the initial construction, and millions more in following years. And, as I lay here with paper in hand, the water levels are lower than they have been since the 1970’s because the Army Core of Engineers feared failure of the dam and have initiated yet more repair efforts. If the dam were to fail, Nashville, TN, among others, would be significantly flooded. No wonder this old woman, who probably doesn’t care to

understand the coal ash spill beyond the breach of a dike, has her doubts about a dike for which she can't even find who is responsible. Especially, I think, as I open the Knoxville News Messenger and see that TVA had another spill of a different kind in Alabama—one of a string of relatively recent mishaps. And who could forget the Buffalo Creek flood where a slurry impoundment broke and leveled houses and cars and destroyed the entirety of families' possessions. This, too, was called an act of God by the coal company who took no responsibility for the deaths of 125 people.

And this is not the end. Coal is constantly surrounded by environmental mishaps and political controversy. Coal ash exists as a by-product of the creation of electricity from

in abandoned underground mines where it begins immediately leeching into ground water, but this is only detected if it ends up in drinking water—we haven't even considered the ramifications of ground water pollution outside of that which we, as human beings, drink. And this detection generally occurs haphazardly: patterns of strange health concerns are noted until someone—through the same method of association as the woman who doubts the competence of the Clinch River dike—notices that they are geographically connected, and still more that the geographical connection is specifically a link among shared watersheds or drinking water sources. Trial and error.

Many environmental groups are pushing

At least 30% of environmental mercury contamination  
...is from coal-burning power plants.

coal just as coal slurry is a by-product of mining it. Ash is, by all calculations, a better by-product than the black smoke that used to pour into our atmosphere from towering smokestacks, eating massive holes in our ozone. Nevertheless, as the TVA disaster proves—by releasing toxic chemicals like arsenic into our waterways—ash pond impoundments have their flaws. Neither are these flaws as apparent as the TVA spill. The federal government does not regulate coal ash disposal, and has instead left it up to individual states, few of whom have required necessary precautions like plastic liners which keep the chemicals from leeching into groundwater, and which, in turn—just like the Kingston spill but without the infamy—end up in watersheds and drinking water. At least thirty percent of environmental mercury contamination—the same contamination that makes me leery to eat fish from the Kentucky River—is from coal-burning power plants.

Some plants have begun dumping coal ash

for the EPA (Environmental Protection Agency) to list coal ash as a toxic waste. This classification would nationally restrict its disposal as refuse and limit exactly what can be done with it. But that begs the question, what can be done with it? In any case, at least its disposal would be regulated. Yet, only recently the EPA failed, again, to make the classification.

The next morning, having slept away my pondering, we arise from a cramped tent to a drizzly winter morning in Cades Cove. With our tent rolled up and packed away, we pull out of the campground and turn left toward the eleven-mile loop that meanders around the circumference of the cove. The park is, despite its immense beauty, the most disgustingly tourist-appropriated that I have seen. Along the loop there are probably hundreds of pull-offs where people travel countless miles to simply drive incessant circles around this path and sit in the car to see what they can see. And maybe—only maybe—get out of the



A young buck studies tourists in the Great Smoky Mountains National Park

car when they hear reports of a black bear in the wood line, running toward it like children flocking to a piñata after it has broken.

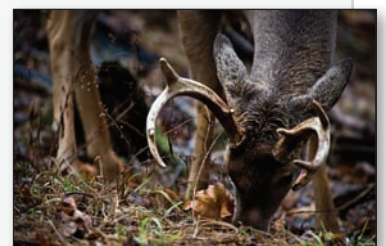
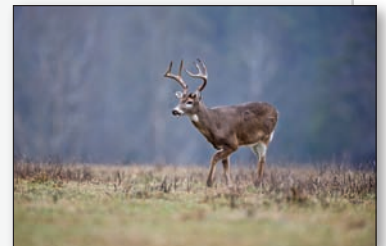
We begin our loop like everyone else, but quickly exit the truck to get a better look at a regal buck in a misty morning field. To our dismay, Josh's massive lens was, dare I say, too powerful. We walk nearly right up to the stoic animal. He is indifferent to our presence. We continue to find several other bucks, all much larger than this, and turkeys as well—though we find no black bears; and every single animal allows us within fifteen yards of it. One trophy buck, grazing right next to the road, has a throng of photographers virtually on top of him when we happen upon the charade. Josh has to stand well behind the line of other photographers to fit the buck's massive rack in the frame of his camera. I can't help but think of Tycho Brahe and his pet moose. These deer are not pets, exactly, but I walk within ten feet of the buck before it becomes annoyed and moves away from the crowd. While he isn't a pet, I could hardly call him a wild animal.

With this distaste in our mouths, we retreat from the cove itself and the tourists and photographers and docile deer and find ourselves on a trail that we decide to follow to its end. Five exhausting miles later, we stare down at the cove from a flat rock on a mountain ridge just beneath the low-hanging cloud line

so typical of the Smokies. From our lofty vantage point we watch the tireless stream of cars slowly weaving their way through the cove and its undeniable beauty. We can see the roofs of the small houses, barns and churches that have survived, and been restored many times, since the original white settlers came to the area. From here, however, they look little different than any other small, dilapidated, holler-shanties scattered throughout the Appalachian Mountains.

I am reminded of the philosopher William James' analogy of traveling in North Carolina. He recounts seeing the many coves and those inhabiting them in "unmitigated squalor," and is aghast at the way they have chosen to live—by girdling and killing all the nearby trees and leaving burned stumps amidst a sporadically sewn crop. "The forest had been destroyed," he says, "and what had 'improved' it out of existence was hideous, a sort of ulcer, without a single element of artificial grace to make up for the loss of Nature's beauty." While these surviving homes and churches are preserved and celebrated here in this cove, they are recoiled from and scoffed at across the rest of this vast mountain region. And, if you ask me, they do nothing for the beauty of the area, nor do the hundreds of cars or the paved road.

But my cynicism has been exaggerated by the long hike. James' account of those less-fortunate Appalachian homes is nothing more than analogous; and I, of course, like everyone at times, have forgotten the purpose of the analogy. "Wherever a process of life communicates an eagerness to him who





One of the many cascading waterfalls that line our hiking path through the Smoky Mountains

lives it,” he goes on with his point, “there the life becomes genuinely significant. Sometimes the eagerness is more knit up with the motor activities”—like fishing for stripers or building a dam—“sometimes with the perceptions”—like (maybe all to literally) photographing deer, or wildlife viewing—“sometimes with the imagination”—like myself sitting here imagining a drunken buck, like Tycho’s moose, terrorizing tourists and reminding them what a wild animal should be—“sometimes with reflective thought”—like these thoughts themselves. “But, wherever it is found, there is the zest, the tingle, the excitement of reality; and there is ‘importance’ in the only real and positive sense in which importance ever anywhere can be.”

Whether from the eyes of the original settlers of Cades Cove, clearing land and building cabins, or from the open doors of a minivan as a family follows the caravan of automobiles along the path, or even from hundreds of feet above the cove peering down—all are in awe of the natural beauty of the area. No perception is better than the other—each life as important to the one living it as any life could ever be—as long as all recognize that which is bigger than themselves, than the whole of the human race put together, that which is wise enough to create such beauty which is self-sustaining and self-renewing.

Leaving the Great Smoky Mountains, we drive through Gatlinburg, TN—“The Land of The Rubber Tomahawk” as a friend of mine once called it, along with its sister cities, Pigeon Forge and Sevierville. It is surreal to emerge from the towering trees with the lightest snow now falling from the mist at dusk and see the large illuminated snowflakes hanging from the sides of lampposts as the road widens into four lanes. These snowflakes—the man-made, illuminated ones—are the only transition from the serenity of the wooded region to the harsh neon lights of what seems like the loneliest town in Appalachia during this off-season. This is the land of Tycho Brahe and 600mm lenses and moon landings. This is the land of dreams exceeding grasps. This is a land powered by polluted rivers and topped mountains; and while I know I too am guilty, a land of such dreamt decadence is scary. And later, as we near its outskirts, we see that it hints at its own undoing, with abandoned go-cart tracks, and empty buildings with darkened, crooked signs. In fact, Progress in general betrays itself by what it leaves behind, like empty shopping malls not a couple of miles from new ones going up, or the waste of mountaintop removal filling valleys and streams.

“If the gap between organism and creature grows too large,” John Dewey once wrote, “the creature dies.” The distinction between creature and organism necessary to an understanding of what Dewey means is that a creature is a singular thing, like a cat or a dog or a person; but an organism is an intertwined element, a piece of an ecosystem—merely one thing in Lao Tsu’s ten thousand things, all of which are reliant on one another. And to see it this way is to understand that one piece of a puzzle is never any more important than another when completion of the puzzle is the goal. The blue and green seen in a satellite image of Earth are not simply land and ocean, but lands and oceans. Within those lands are mountains and prairies and canyons and

deserts and trees and bushes and grass. Grass: “the flag of my disposition, out of hopeful green stuff woven,” as Walt Whitman called it. Within those oceans are subtly distinct ecosystems and within those ecosystems are organisms which rely on one another and, as a whole, rely on other subtly distinct ecosystems. The ancient Greeks spoke of River Ocean as an all-encompassing water source from whence, and into which, all of the flat Earth’s water flowed. The sun rose from and set into this great River Ocean. Clearly this was ignorant, but in ignorance a sort of wisdom. The closer one is to the land, the flatter it appears; and the perception of one interconnected watershed is much closer to the truth than our currently prevailing,

a vague, underlying and often overstepped connection between all life on Earth. Coal lies in a seam in a mountain for a reason—it was put there by the force of heat and compaction and time, and we extracted it with force and destruction and time, and it will be put back there with Force and Time. And if one day we run out of coal, it will not be an act of God as we will want to call it—making, as Ovid once observed, the gods partners in our abominations—but a creature elevating itself above the other organisms until that creature fails to see or understand the Force by which organisms live and continue living.

“Man, too, is a different expression of that natural force,” Loren Eiseley wrote. “He

When man confronts himself, it will be to say, “this is too much” ...

and unbelievably ignorant, opinions of the necessity of watershed health. If we, as human beings, fail to see our world—whether pragmatically, scientifically, mathematically, or mystically—as a living, inter-working miracle, we cease to be organisms and begin the downward spiral of separating ourselves as creatures by defying things that we think merely occurrence. If we lose sight of the importance of a single fishing hole in a river in Tennessee, we begin the descent of this separation, because the aquatic health of the Clinch River effects the aquatic health of the Emory, which effects that of the Watts Bar Reservoir, and so on to the Little Tennessee River and the Tennessee River, and more.

It is only as organisms, members of ecosystems and the Environment as whole, that we are able to observe, compare, coagulate, and learn. It is by association that we learn, and by an understanding of the patterns of association that we hypothesize. Just as there is a vague but reliant connection between Tycho Brahe, Erin Brokovich and Walt Whitman so there exists

has fought his way from the sea’s depths to Palomar Mountain. He has mastered the plague. Now, in some final Armageddon, he confronts himself.” And so it is. As we see the last lights of Pigeon Forge stretch out behind us, I see that the answer is simply human constraint—moderation in consideration of the ecosystem and its many other organisms. Whether we are finding cleaner burning coal or harnessing alternative forms of energy through wind or water power, the answer is still moderation. William Blake said that you can’t know how much is enough until you know how much is too much. When man confronts himself, it will be to say, “this is too much,” and he will turn back to find where in his long, arduous and sprawling progression was the golden mean between his comforts and the Earth’s sustainability. Let us hope by that time he is wiser. 🌿