

Good day. My name is James Sherry. I have been writing about environmentalism for more than 30 years and have recently focused on how diversity extends beyond biological and social multiplicity to the way ideas are framed and categorized for human and other members of the biosphere. This podcast is:

Against One Model Alone

What do you expect we poets are going to say about the environment? Shall we repeat, in a charming way, the nightly news about eco-disasters or describe its eco-beauties ad nauseum? Will natural pietism, where we love nature and think it does no wrong, introduce in an eco-commodity capital wave? Or can poetry change our correspondence with the non-human components of the biosphere, giving us a chance to adapt our culture and our selves to new conditions?

The human response to environmental issues runs a great risk if it clings to a moral or other single model of interaction with the biosphere. If, for example, we only focus on blame and redress of grievances, we lose sight of the fact that the root cause of global warming is desire. Too often we lose sight of the fact that we hope to develop a society that includes not

only all the people and their interests, but the interests of the non-human components as well from bacteria to redwoods. We seek restorative, not retributive justice.

In another example, if environmentalism focuses on a problem and solution model alone, we may fix a few things, move the deck chairs around, but recreate similar problems with our new solutions. A good example might be the cultivation of biofuel crops on land suitable for food crops. The large-scale concern remains our energy expenditure and its resultant heat, so a problem and solution model without cultural change drives competition among various interest groups—who gets to be hot?

We humans need to change how we view ourselves. Not all humans, of course, the term Anthropocene makes it seem like climate change is caused by the species and not by capital accumulation and expansion. The developed countries and the emerging markets seeking to be like developed countries need to change their minds. Not all the people in those countries. The problem is not how to educate the poor, but how to educate the rich and the aspirants to wealth. How shall we educate a person who does not see any facet of their

own point of view about the planet as contestable?

This talk redefines three underlying mechanisms that inform our attitudes toward our surroundings: social perspectives on nature, hierarchy and individual cognition? To make the tedious job of changing human points of view more entertaining, I use poetry as the prime example of transformation because while poetry seems to dig deeply into the human psyche, it also tends to resist change.

Human activity around the environment is often conditioned by a single myth about nature. Most writing about the biosphere emphasizes one of two polarized and irreconcilable points of view. One is competition, "nature red in tooth and claw," the Tennysonian model developed by colonial powers and absorbed into poetry. On the other end of the spectrum is a kind of number two, natural pietism that suggests nature is ultimately good and good for you. Don't panic, it's organic. You know the fetish. Rethink it for a minute.

We have a strong science around climate change. We can repair most of the damage with existing methods. We can arrest climate change, not a future ideal but, with a little extra cash, do it today. In addition, it will become increasingly cost effective. China's large solar industry has cut costs by 2/3 in only a few years. Similar cost savings can be achieved in the other primary contributors to climate change: transportation, manufacturing, construction, mining and agriculture.

We also have aggressive political systems to implement solutions. Both totalitarian and democratic governments can achieve results when it's in the interests of leadership. The global movement toward populism facilitates control of populations and oligarchy. The difficulty lies in convincing people to change. Nobody wants to change their minds, not the rich, not the poor. Our cultures, our will seems stuck to a tired residue of 19th century imperialism on one side, the competitive view, and various Daoisms and collectivisms on the other.

Polarity attracts denial because neither of the two points of view includes enough of the biosphere, of society or of individual interests to pressure them to change or to address the emotional storm that the desperate evidence we already have about climate change provokes. Each person and group formation possess many insights and connections.

Based on this range of views, one might draw a matrix of perspectives and interests that reflect our ecosystems as a set of embodied relationships rather than an array of things in a container where conveniently we can throw our unwanted. But we lack the will to change. Culture must support our will to act in an organized and coherent way rather than just act to survive and win. Poetry, for example, provides language constructions and images for our aspirations.

Social Structure

As we see in the news, the world as constituted by a competing set of essential views is collapsing around us. To quote British sociologist Michael Thompson, "When people argue from different premises they will, in all probability, fail to agree.... Attention is focused not on the facts of the matter but on the facts of the disagreement.... In other words, the discerning spectator begins by granting legitimacy to all these sets of contradictory premises. Nor does the fact that they are contradictory cause him any dismay. On the contrary, he sees social life as a process that depends for its very existence on the perpetual contention between these

different sets of convictions about how the world is."

A physicist's world, for example, has resources in abundance, since matter is neither created nor destroyed, whereas an ecologist's world has limited resources, and a poet's world, well, you know poetry protects poetry. The planet does not contain only one or two perspectives. We can build conflict into our creations, poets know how to do that already.

Canterbury Tales provides a clear model of contemporary society. In Geoffrey Chaucer's book, the pilgrims and their relationships represent civil society in the fourteenth century—knights, managers, householders, priests—each with a unique point of view, story and set of interests concerning their venture. Their Humanist identities are based on their jobs, what they do. They are, however, united by a common purpose. Now imagine an environmentally-oriented social structure.

As the environmental model of the planet begins to take hold as a result of climate change, a new set of social classes emerges based on the individual's view of their surroundings. Thompson hypothesizes "five distinct cultural biases each of which has associated with it a different idea of nature."

Social	View of Nature	Example
Being / Voice		
hierarchical	isomorphic nature	government, law
egalitarian	accountable nature	activism, sects
individualist	skill-controlled cornucopia	entrepreneur,
markets		
fatalist	lottery controlled	ineffectual, victim

autonomous freely available cornucopia hermit

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Each of these social beings links to a part that you might take as your role in society changes from a worker on the job where you may see nature as a threat, to your projects to conserve nature, to your conflicts as a citizen supporting regulations about conservation and then having live by them. I'm so busy, what shall I do with my candy wrapper?

If we view culture not as a set of habits of mind but as a continually renegotiated ecosystem of social relationships, we can establish a construction of nature that makes sense and sustains our focus while disruptive conditions persist, even between disruptive thoughts. Thompson proposes, and I support this approach for poetry, that the new models, forms, and other prosodic tactics resist the urge to remove conditions such as complexity, goal ambiguity, contradictory certainties, conflict, institutional inertia, and temporal change. All the issues addressed by innovative, experimental, and avant-garde writing.

While we cannot make much progress in specialized knowledge without a rigorous taxonomy, we cannot make much progress in our relationships in society or the biosphere without art and science that accommodate both peripheral beliefs—value and fact—where we acknowledge that our positions are contestable. For example, the fact of breath in American poetry is inherent in Olson's Projective Verse, but not so much NY School or Language writing. In colonized cultures poetry's acceptance of change must overcome anxiety of influence.

Differences can be explored with similarities. That fragile edifice of difference that we use to buttress our egos must be reinforced by accepting commonality and interdependence into our repertoire or it will all collapse around our pages. Environmental change

drives social change and social change drives environmental change.

Hierarchy

Next, I'd like to add to the social view of nature and the natural view of society another tool to help adjust our human self-image: inclusive hierarchies. Normally, we evaluate our status with a hierarchy that starts with ourselves, differentiated from all else in the universe. If we don't distinguish ourselves from the world, of course, we would not be able to exist. Eating, drinking, even breathing would be called into question.

Above the individual in this hierarchy are institutions such as the state and above that, if we choose to go that far, is heaven. Good, better, best; hierarchy is even a form of grammar. Of course, it makes sense to value the group above the individual, and society has developed complex negotiations to both promote ideas and bind them to the group.

Specialized knowledge like poetry and biology defends its realms like an individual defends their body. Defenses of intellectual specialization attack obvious common ground between disciplines of thought, further reflecting the creature dichotomy. My poetry is better than yours; our poetry is more

important to the canon than yours. These evaluative hierarchies, while key to survival, ignore the countless interactions, relationships and inclusions that are also mandatory for an individual's continued existence. The individual does not thrive alone.

Rather than continue to focus solely on evaluative hierarchies in culture—like/don't like, good for me/bad for me, or even subtly good/better/best—the biosphere presents us with an additional tool: inclusive hierarchy. In an example from physicist Ron Atkin, a garden can be used as a simple example. In the garden we see flowers, shrubs and ground cover. The flower is not better than the shrub, and the garden not superior to the flower by virtue of including it.

An inclusive hierarchy is easily represented:

garden ^ ^ ^ ^

flowers, shrubs, ground cover

Or as another example:

human genders

male, female, gay, lesbian, bi-sexual, transsexual, queer

In this kind of hierarchy, no gender of homo sapiens is superior. The species is not better than the gender, although it is at a higher level of abstraction. In a literary hierarchy based on form, poems, essays and novels are varieties of writing. Classical, modern and experimental are types of poetry. At the lowest level are:

Inclusive Hierarchy of Poems

N-5: marks on the page, letters, punctuation, numbers.

N-4: phonemes, morphemes, physical contours of letters

N-3: words, characters

N-2: phrases, sentences, word pair begins poetic meaning

N-1: stanzas, sonnets, thematic forms & meanings

N: Poems

N+1: books, MP3, other audio files, readings, broadsides, & other media for presenting single & multiple poems. It may include criticism of single authors.

N+2: anthologies & other definitions of poetry. This dimension also includes criticism of multiple authors.

N+3: reading interpretation & meta-theories about poetry, models of what creativity means & how poems are created.

N+4: notions of creativity, the mind & poetry's place in society & the world exist for groups of people each in their own culture.
N+5: In the eleventh dimension, environmental poetics links poetry beyond human social structure to the non-human world/the biosphere, & defines a way for poetry to interact in an environmental model.

You might want to call this kind of criticism "reading at a distance". Franco Moretti pursues this idea in his environmental criticism of English novels *Graphs, Maps, Trees* (New York: Verso, 2007).

Many more complex hierarchies, even those associated with meaning, can be demonstrated with this tool called q-analysis, introduced by the physicist Ron Atkin. Atkin describes physical dimensions in terms of q-analysis, inclusive rather than the popular misnomer of parallel dimensions. Q-analysis supports models of physics, population studies and poetry.

Although inclusive hierarchy tends to value things and relationships more equally, it is more difficult to communicate from lower to higher levels of abstraction than from higher to lower. We see that difficulty frequently in social constructs. Within society, understanding the role of workers, their form of work and function on the job, is fairly easy. Among other things the worker provides effort and time, and the programmer provides speed and reproducibility. But if you're a worker assembling engines or writing inventory software, you must study far beyond your job to grasp the entire function of the chief operating officer.

In this example, travelling from lower to higher levels of abstraction, inclusive hierarchy appears to work like evaluative hierarchy (higher as better) but only if we establish simplicity of execution as preferable in every case to a more complex routing. Fear of the complex poem pervades all our cultures. Fear of a complex idea in politics makes political speech appear uninformed. To make poetry, we need to travel from lower to higher levels of abstraction. The idea of creativity relies on leaping upward through levels of abstraction: metaphor is such a device that enables ascending within hierarchy.

Besides metaphor that allows us to bridge logical gaps more readily, parataxis and juxtaposition provide other ways of jumping upward in the inclusive hierarchy from one level of abstraction to another. The tools of poetry cool climate change. Other disciplines have methods for raising the level of abstraction; it's not solely the province of the arts.

Nevertheless, there continues to be a fundamental conflict between the biosphere taken as a whole and the survival and flourishing of any one species or group and further any group's survival versus the individual. Without such analytic tools as Thompson and Atkin provide, we cannot manage our civilized successes. Writing environmentally comprehensible poetry that adequately represents or furthers the methods and protocols of the biosphere becomes less likely if we continue to look at ourselves and our surroundings only through the lenses of prior poetries and prior notions of self, society and our surroundings. The great irony of our age appears as soon as humanity grasps the possibility of getting out from under nature's boots—plague and privation. At this very moment, we see the results of our having gone too far.

As part of the solution, Thompson asks a fundamental question: How do we treat humanity and nature together as a single complex system? Poetry provides one aspect of the will to change, to push against genotype

toward a commensal relationship with the rest of the planet.

External Cognition

The structure of survival that separates each individual organism from the rest of the biosphere infers an encapsulated, internalized thinking process with narrow sensory inputs. In addition to reductivist Cartesian notions, environmental thinking includes our interactions as well as its cognitive proof.

In the *Discourse on Method* Descartes sought to achieve certainty about his existence, "that from the mere fact that I thought about doubting the truth of other things, it followed quite evidently and certainly that I existed." But cognition may be said to extend beyond the mind in ways that are less than certain, such as any thinking about complex systems. Certainty about our surroundings in a period of rapid climate change remains unlikely.

Environmentalism can only become effective throughout our culture if we develop a model of cognition to add to the Cartesian metaphor and its personalized vision that sequesters valuable thought within the individual. If we develop the notion of external cognition, the individual is no longer conceived as a monadic mental state surrounded by a feeble body.

In his article "Environmental Epistemology" (Ethics & the Environment, 10(2), 2005), Mark Rowlands, professor of philosophy at the University of Miami, redefines cognition as taking place both inside the body and "also in the manipulation and transformation of external information-bearing structures." Several functions take place externally, especially functions of memory, like an external disk array on your computer. "In certain circumstances, acting upon external structures is a form of information processing."

Many organisms exploit external resources in a cognitive way in order to reduce their energy consumption and increase survival rates. Rowlands cites how a beaver's dambuilding skills make food more accessible with less effort and less risk. The beaver might have developed longer legs and bigger muscles to run from the pond to the tree to eat its bark before the wolf could catch him. Taking fewer risks and using less energy, the beaver, who adapts through manipulation of the ecosystem, survives more often than the physically enhanced beaver.

Recent conceptual and found poetry, for example, uses a related strategy, appropriating prior texts, recontextualizing them and publishing them largely unchanged. An example of this strategy occurs in *Oops!: Environmental Poetics* in the essay "How Language Poetry Got Its Period" written in 1995 where I made minor word changes in a biology text to create a credible poetry text.

The success of conceptual poetry, from the environmental point of view, correlates low energy input to many pages output and the strong reader response that conceptual poets attain. Ironically, with little work applied conceptual poetry achieves a great amount of consideration compared to poets laboring diligently on the page. Predictably many writers flock to this low effort poetics and many poets now consider this strategy inconsiderate especially when appropriation is applied heedlessly to other cultures Goldsmith's use of Michael Brown's autopsy report. Reusing the same text seems academic on the surface, but changing how we look at productivity, by recycling, may be an important alternative to the labor-based theory of production.

Language also represents a demonstration of external cognition. Let's say a poet is looking for a particular book on the shelf. Rather than memorize the location of Bei Dao's book

《回答》 *The Answer*, the reader runs his forefinger across the books, reading the title on each spine in turn until they find the words Bei Dao. Recognizing the position of the book he wants takes place both inside and outside the mind, creating an environmental link where cognition takes place.

The cognitive operations used to acquire points of view about and to represent the world are themselves processes *of* the world. They possess, quite literally, material, worldly constituents, not just mental ones. Even those organs that legitimately can be regarded as located inside the skin of cognizing organisms cannot easily be identified independently of the world.

Social organizations like cities and governments also exemplify materialized cognition. The fact that we build cities proves the inadequacy of an internal-only model of cognition to account for existing conditions.

Rowlands cites the case of the adolescent sea squirt that develops a brain that allows it to move about collecting food. In adulthood, to enable reproduction, totally unlike adult humans, it affixes itself to a stone and then proceeds to eat its own brain as an energysaving method when the food passing by becomes insufficient. How often in my life have I applied only things that I already know in order to get a job done and not confuse thinking with execution of the task at hand!

Establishing a model of self-interest that includes our surroundings extends the idea of environment to the mind itself, not as an abstract, impersonal value that we *ought* to support or a moral imperative that might not be shared by workers in natural resources or heavy industry. If we think of our surroundings and ourselves as composite, integrated entities then we might stop using our environs as trash bins and develop increased respect for other people.

Exemplary Texts and Connections

Experimental and avant garde poetry, from Mallarme's *Le Livre* to Silliman's *The New Sentence*, includes a great range of external subjects and materials, expanding poetry from a few monolithic subjects like love and war to complex and simultaneous concerns. Writing strategies that use diverse materials and practices open the door to an extended poetry that addresses real-world problems. Such

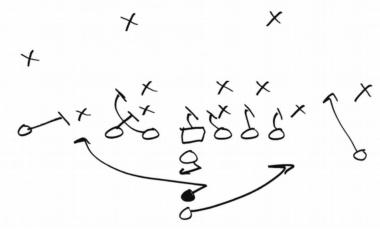
Environmental writing practice reestablishes poetry as a valid knowledge-creating process. Focusing on culture this way also reduces the limitations of innovative writing's narrowing focus on the materials of construction in a tantalizingly dialectic manner.

In Cheerleader's Guide to the World: Council Book, Stacy Doris constructs her work from internal and external components rather than by analyzing a core event or idea through internally consistent logic. The book "... sandwiches Popul Vuh Patterson/Tibetan Dead Jigme Linpa Pindar//Rah rah." (The quotation is followed by a chart of a football play as if drawn for a sports team.)

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"The good old idea//
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was that corn growth//

+ tax cuts make leisure."



(Roof, 2007, p10)

By juxtaposing these elements of language and sport, Doris builds multiple connections between internal and external components of varying strength and usefulness. Some of these links associate subconsciously, some through our knowledge of history and some through their inherent connections such as common cultural content.

In all cases, the experiment establishes a cognitive/cognizing network between a person and external components in an ecosystem on the page. The network bridges bidirectionally from the mind to the page and back. We read them again and they change; we are thinking outside as we read. I contend that all poetry builds such networks, but our individual-centered culture has built many bridges to nowhere. We enjoy walking on

them, but have largely used them to exploit external resources rather than acknowledging their ecology.

Compare Doris' lines with Milton's sonnet "On His Blindness" where, emanating from god "...thousands at his bidding speed / and post o'er land and ocean without rest..." all with the same interest, passively waiting to execute His will. While each differs, they agree on a common master. People operate within the mind linking only through god's will. The poem reifies the notion of internalized cognition and evaluative hierarchy. The world is within the mind of god and thought is within the mind of each person mirroring the family, the household, the clan.

But even in Milton's case the material of language focuses the reader on the words on the page as much as what is already in the reader's mind. Milton's poem talks about internal cognition but is read using a combined process evident of external cognition.

Doris' synthesis reveals another kind of agreement. Greater than the sum of its parts, her synthetic poetry requires more than the components of its construction to be read and absorbed. In this sense, poetry is externally understood. Meaning goes beyond the poem on the page to the experience and assumptions of the reader.

Like the beaver dam, Doris' synthetic poetry expands our access to resources that common usage would exclude. *Popul Vuh*, "Patterson," etc. arrive together in the present in the poem. Collapsing time represents one tool Doris uses to deliver cultural change and expand the possible solutions to our climate problem. By showing readers past, present and future together, new correspondences develop. But synthetic poetry requires more than juxtaposition to operate as an ecosystem.

Working synthesis also means matching solutions to the complexity of the problems they are intended to address. For example, matching a multi-dimensional poetry or environment to a one-dimensional value solution, such as the facebookian like/don't like, makes a mockery of the difficulty of any poetry even the simplest verse. Yet how often for convenience do we suggest that a poem is good or bad. How often to convince do we play emotional tunes when we know the problem of climate change requires far more than moral outrage. While simplification

helps reduce energy output, does symmetry help assure that the problem gets solved?