

# Earthscore Overview

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By Oliver Lowenstein

Editor of Fourth Door Review

New uses of video and television for the green movement and its media dimension have been relatively few and far between. Where such use has occurred it has been piecemeal and has tended to apply the conventional vocabulary of TV and video to green issues. Video, after its radical countercultural birthrites, has settled into being merely another technological art genre, its promise as an instrument for perceiving in new ways significantly displaced. The hopes of TV have largely turned sour, with the galaxy of commercial stations Americanizing and Disneyfying the horizon, also dissipating the expectations of what could have been realized.

Paul Ryan is an American artist, primarily a videographer, who was in at the beginning of experimental videos and their extended use by the outer counter-culture. Since the late sixties he has been involved in a unique artistic and philosophical project, at once completely practical, yet with a sophisticated theoretical basis, to develop the possible uses of video for what could be described as relational ends, and ultimately he believes, the survival of the living planet. He views video as an evolutionary tool. The range of strategies which he has developed out of this project are potentially far reaching and possibly transforming the philosophical ground on which he situates himself. In turn, this opens up significant developments both within

the technologies he uses and interacts with video, and to a lesser extent, television and computers, and also in the field of personal interactions and relationships.

Ryan, once a teenage Catholic monk, originally studied with Marshall McLuhan in 1968. Partly in place of the Vietnam draft he immersed himself in the educational possibilities of video as an alternative to print and classroom based educational orthodoxy's. In the early seventies Ryan explored the cybernetic ideas of Gregory Bateson and Warren McCulloch. Cybernetics, the science of systems of control both in living creatures and machines in Bateson's words, recognizes that the self as ordinarily understood is only a small part of a much larger trial-and-error system which does the thinking, acting and deciding. Thus the much larger, all embracing system is often referred to as Mind, and the systems in relation to Mind are considered Units of mind. Bateson is recognized as one of the key figures in the development of a holistic cybernetics. He has stated that he believed cybernetics was the biggest bite out of the tree of knowledge to come along for a long time. His major work, *Steps Towards an Ecology of Mind* was published in 1972 whilst McCulloch's *Embodiments of Mind* had already appeared in 1965. Since 1972 Ryan began synthesizing these concepts of thinking in circuits of cybernetics, with the work of the leading American turn of the century semiotician, Charles Peirce. Where the semiotician thinks in signs Ryan's thinking moved towards thinking in both circuits and signs. Although the results Ryan offers us is a synthesis, it is also an indication of the richness of imagination of Bateson's influence, and a continuing of the fragmented if quiet Post-Batesonian tradition of which Ryan is part, it could be said. Whilst much of cybernetics has become a hard

technocratic science ranging from ecology to AI, there is another parallel soft cybernetic stream which continues as a source of rich if quiet influence. Ryan is involved in this stream.

The book is an ensemble of essays which catalogues his journey through video from the late sixties to the present day. They comprise 24 years work from 1968 to 1992, envisioning how video, and to a lesser extent, television, can be used systemically in the service of developing this shared perceptual apprehension of the ecological webs of nature that exist in the midst of our lives. Thus with the aid of video human communication, could find a grounding in eco-systems outside the limitations of language explored here.

Near the close of the book Ryan outlines perhaps the most inclusive example of how his theoretical ideas can be put to practical use. He draws from his video and TV experiments and proposals, for ecosystems, arriving at what he calls, perhaps rather grandly, The Earthscore Notational System. This he defines as a way of composing the information transmission system based on shared perception of environmental realities rather than language. Language, Ryan believes, is inadequate to deal with meeting the ecological crisis. "Our species won't ever talk itself out of the trouble we're in", he argues. However the dysfunctionality of a language-driven species can, Ryan argues, be corrected by systems which transmit shared perceptions of environmental realities, without the interference of language.

These systems grew out of his efforts to use video to interpret nature. Ryan soon came to the view that naturalistic landscape video, however good in sensitizing people to landscapes, did not sensitize people's behaviour

towards their local ecology. What was needed, Ryan believed, were individual or groups of video-graphers to produce interpretations of nature which presented a shared and shareable perception of the web of ecosystems within a bioregion.

This is the function of the Earthscore Notation System. It is comprised of five elements, which require a somewhat extended examination, much of which is best stated in Ryan's own words. I explore with the aid of Ryan's examples the five point notational system in greater depth below in the encased section. It is quite technical and I found it difficult grasping Ryan's Peircian semiotics so whether you involve yourself in it or leave it be, is up to you.

The Earthscore Notation System is set out in something like this form in the last chapter of his book. Ryan believes systematic environmental monitoring is crucial in the current ecological context. It must be "constant and coherent" so as to manifestly understand the ensemble of events, tides, seasons, bird migrations, fish migrations, the falling leaves of forests, leaks from sewage plants, and all the other semi-noticeable features of the cycles of the natural world that make up complex ecosystems. Both in cities and in more rural regions electronic technology can be fused together to comprise a separate TV channel to alert people not only to how such ecologies work but how to avoid destroying them. This is the message Ecochannel brings with it and throughout the book Ryan returns to how video technology linked up to this separate eco-TVstation could enable people to share perceptions of the natural world and be made aware of the ongoing changes occurring at the same time. Parts of it appear in different manifestations throughout the work

in the guise of smaller educational projects and imagineering proposals. These proposals, although for the most part not existing in the real world, expand Ryan's envisioning of them to form parallel possible futures, and add to the diversity of how to imagine the uses of technology. Video is therefore perceived as a remarkable tool for viewing ourselves, and entering into relationships beyond the dyadic, binary realm which is so much the norm as to be unconscious. There are other careful essays which diverge from this, most notably, "Jesus Crucified", "The Living Earth", "Television" and "Video, Computers and Memory".

The latter discusses video as an agent of the relationship between memory and contiguity, and computers as agents of complexity. Ryan makes the important point that video, like any other recording technology, is a technology of memory. It enables people to record and preserve moments of the past so that they can be included in the present. The facility of replay confuses past and present. The contiguous order of time from past into present into future is collapsed, Ryan believes, enabling people to record/video problematic situations from which we can learn. For instance I could watch and video my grandparents rehearsing similar psychological territory and dynamics that I am beginning to see my children play out. This could be passed on to my children and on through the generations as an aid to enabling the potential resolution of repeating psychological dramas. Similarly in the Earthscore Notational System the replay mode of video could be used to repeatedly record a particular local ecology until the "underlying figures of regulation", the "notes" by which nature, is constructed guiding the "performance" of the ecology were easily recognizable. If one year the videoing of the particular ecology resulted in a "score" of notes which was

out of kilter, then it would be quickly possible to identify the divergence from the Notational System and set in motion actions to halt the divergence.

Ryan notes the different characters of computers and video; where the one extends our capacity to deal with contiguity the other works likewise in the arena of complexity. He is concerned that complexity will be developed at the expense of deepening our understanding of contiguity. Already he notes the “odorless electronic memory” of the computer is being used to digitally reinvent the image of the photograph and the video. Such memory systems “will create powerful information banks in arbitrary digital storage devices with no grounding in the world familiar to our senses”. When people are no longer able to believe the truth of their video (or photo) image then the potential of video in relation to memory and appreciating contiguity will be in jeopardy. Ryan is not against the development of the simulation possibilities of computers, but it makes clearer sense if balanced with an appreciation of contiguity video could deliver, if the future of memory is not to be colonized by the computer. Indeed at the essay’s close Ryan ends with the intriguing question of whether a culture is able to be developed to appreciate both contiguity and complexity.

Television, in fact, becomes increasingly visible towards the later stages of the book as the medium of communication to sensitize peoples to local ecosystems. A number of versions of his basic ecochannel are proposed. An ecochannel for the Hudson River, NEST, an acronym for “New York City Ecochannel for a Sustainable Tomorrow”; and a proposal for ecochannels across the breadth of Europe, bioregion by bioregion. Finally Ryan ambitiously elaborates the logical extension of his Earthscore system as a

“global network of regional television stations, each responsible for monitoring local ecologies”, grounding this planetary system with “the perceptions of ecosystems”. He believes his system could be part of the Earth Observation System, part of NASA’s development of its mission to Planet Earth.

In an earlier version of an ecochannel, called Channel W as a channel for the local bioregional Watershed (“your wire to the Watershed”, he calls it) he attempted to initiate a video “Watershed Watch”. Here again the contiguous character of video is employed mixed with combining cybernetic theory to the goals of bioregionalism. Developing out of a large sheath of video material the “Watershed Watch” would work out how the ecology of the watershed is operating. As a “child learns language by collecting a vocabulary of words and then discovering the syntax of their relationships”, Ryan writes, so the syntax of the watershed ecology could be worked out constituting “an agreed upon system of restraints that would regulate the way people live in this watershed”. Such a use of TV is a counter-measure to the momentum of mass television to destroy any sense of place. Rather it cultivates local culture. It is not for everywhere and anywhere but a way to enrich specific communities’ lives.

Ryan’s proposals for varieties of ecochannel designs are essentially proposals for information transmission structures based around the aforementioned shared perceptions of patterns of ecologies. The Earthscore is seen as a public work in the monastic sense. Any potential ecochannel isn’t there necessarily to compete with other TV stations. Instead it could be formed to make up a second “background” television set in the corner of the

room to be attended to, monitored as and when the watcher feels the need. The rest of the time it could act much like ambient music, providing images of the watershed at all hours but attended to as one looks at a painting.

In relation to this Ryan distinguishes between television and cinema. Television audiences watch television as an instrument for the simultaneous “monitoring” of what is happening in the world, and for the informational content, its aesthetic achievement being the format in which it arrives on the screen. By contrast an audience views a movie as an individual entity, similar to a painting or a piece of drama. He suggests that much of the monitoring of the world that is undertaken through watching TV is the witnessing of the progressive ecological collapse of the planet. He wonders if this may be why some parents refuse the television option for themselves and their children.

So this reinhabitory television of local place which Ryan has argued for would be an ecochannel centred on specific bioregional watersheds and would enable a bioregional community to simultaneously monitor its ecosystem. Aside from such environmental monitoring as tides, sunrises, sunsets, etc; which the eco-channel would carry, Ryan proposes it would also have a much wider constituency. In the case of NEST this would include “support for an informed consensus about proper responses to environmental concerns” and weaving “the cultural traditions of the peoples of New York into practices that are in accord with a sustainable city”. He foresees such channels forming important links between people and ecology.

Such a cybernetic use of television would be a “safeguard” against what he describes as biofascism, a fascistic environmental movement which could be accompanied by the possible return of a politics of inquisition in the name of a Living Earth, Gaia. Such a possible biofascist movement would use the Earth as a symbol and metaphor. A cybernetic use would view Gaia in terms of circuit. Metaphoric thinking, Ryan believes, is best conveyed in languages whilst cybernetic thinking is conveyed in diagrams. It’s an irony of cybernetic thinking that it has produced a rich understanding of the Earth which is so susceptible to a metaphoric interpretation, the Living Earth, Gaia, the Earth as Mother.

The global Earthscore system is the most ambitious proposal emerging from Ryan’s work essentially with video for a perceptual and non-linguistic sensitizing of populations to their humankind neighbouring ecosystems. It is also an instrument of reinhabitation and of place.

It is, of course, in the realm of proposition. Even so, it remains enriching in its radical all-encompassing system and in the way it is apparently well-worked out. Much of the practical offering Ryan makes has come into being without the security of academic tenure. Ryan in fact repeatedly appeals to readers to treat his Peircian reconciliations as completely open to challenge. No one has yet built a persuasive argument against his topological continuum, although when a philosophical heavyweight has meted out his professional judgement it could be a different matter. It may sound as if Ryan’s work is in itself landlocked in an especially arid atmosphere of abstraction. This isn’t so. As he says, for any reader with a bit of patience it is possible to follow most of his non-technical writings. There is in these

essays a good deal that smells as though it makes sense. It also provides an exemplary instance of how media technology can be utilized with intelligence in a forward looking way.