

Jesus Crucified, the Living Earth, and Television

When I was a young man of seventeen, I joined a contemplative preaching order of the Roman Catholic Church called the Congregation of the Passion. The Passionists, as they were known, were founded in the north of Italy in the eighteenth century by a man named Paul Daneo. The order was dedicated to reactivating the memory of Christ on the Cross, especially among the poor. Besides the normal vows of poverty, chastity and obedience, the Passionists took a special vow to preach Christ and Him Crucified.

Paul Daneo became a saint in the Roman Calendar; his feast day is April 28. He is known as Paul of the Cross. According to the hagiography, Paul Daneo had a vision of the Blessed Virgin Mary in which she instructed him to found the order. In that vision, Mary showed him a white image of a heart with a cross above it, indicating the purity she wanted from men who preached about the sufferings of her son. To this day, black robed Passionists wear that white image over their hearts. The liturgy for the feast of Paul of the Cross quotes a line from the psalms, "Put me as a sign upon your heart and a seal upon your arm, because love is stronger than death."

In my fifth year of training with the Passionists (I was under temporary vows), the Roman Catholic Church was in the midst of upheaval occasioned by Vatican Council II. In the 1860's, the First Vatican Council had declared the Pope infallible in matters of faith and morals. In the 1960's, the Second Vatican Council of Bishops was struggling with this legacy and trying to respond to

French and German theologians who were calling for significant changes in the organization and structure of authority within the Church. In my fourth year with the order, I tried to start a student government in a monastery in West Springfield, Massachusetts.

During my fifth year, a friend of mine took me to see a visionary monk and theologian, a Passionist our immediate superiors had explicitly forbidden students to talk with. I felt privileged to be let in on the forbidden discourse. Five minutes into my first visit, the monk, my friend, and I were standing in our black robes with our white signs above our hearts, looking at a Zen painting of seven stones. The two of them were laughing a pure laugh of recognition. My laugh came out of camaraderie and uneasy learning. Suddenly, the monk said, "You know, this congregation would be a lot better off if we just forgot about the Crucifixion for a while." The laughter peeled off into a whiter shade of pure.

Shortly thereafter, I left the order and have spent the last twenty-odd years working on communications and ecology. The main fruit of that work has been the design of a television channel dedicated to monitoring the ecology of a bioregion and developing consensus about how best to live there on a long-term basis. The burden of this paper is to present that design in a way which accords with both the message of Jesus Crucified and with the scientific hypothesis that the earth is a living organism.

As for the monk/theologian, he has emerged as the earth's first 'geologist,' Thomas Berry. Fortunately, his radical laughter and love of the earth have touched many people. I don't know if he's given much thought to Jesus Crucified lately, but I've found myself coming around to meditate on the

sufferings and death of Christ in relation to ecology. For me, it is striking that the logo of the First North American Conference on Christianity and Ecology is an image of the continent surrounded by four crosses. This image bears a strong resemblance to the image of a heart with a cross over it, the Passionist image that I wore for over four years. In remembering and rethinking the crucifixion, I have been helped by Elaine Scarry's discussion of suffering in *The Body in Pain*. (Scarry: 1985). What I have to offer in this paper is as much indebted to Scarry as to the anonymous monks who taught me to meditate on the sufferings of Jesus.

Jesus Crucified

Christ Crucified has become a cliché. Once this image was a powerful archetype in the western world. Christ on the cross was *the* central referent for Christians. He was the only Begotten Son of God, God who so loved the world that He sent His Beloved Son to suffer death, death on the cross, for us. He was life's dancer savaged in mid-leap, a mother's son murdered in full bloom.

Jesus on the cross is a body in pain. Generations of people, with their bodies in pain, have gazed on Jesus Crucified and silently identified their pain with his. Sharing in the sufferings of Christ is a commonplace understanding for Christians. Identifying with the suffering of Christ is a way to cope with pain's inexpressibility.

Giving voice to physical pain is extremely difficult. Groans and cries are often all that come out. Physical pain shatters language. The seven last words of Jesus are precious, not so much because they were the last words, but because they were voiced from extreme physical agony. This agony was caused by the

premier Graeco-Roman torture instrument, two pieces of wood and three nails. In spite of his physical pain, Jesus uttered his own words. Torture is designed to shatter the language of the tortured person and use the certainty of his or her pain to verify the words voiced by the torturer. Neither the scourging and crowning with thorns, nor the crucifixion itself, forced Jesus to submit to the will of the political authorities. Jesus did not comply with the words of his torturers. He shattered the believability of their creeds.

More importantly, by speaking his own words he broke the traditional relationship between pain and power. He was The All Powerful God, the ultimate authority and power. Yet he suffered physical pain. He gave his torturers the power to torture him. He did not end suffering. He did not end the injustice that often comes with political power. *What he did eliminate was the legitimacy of power at the expense of another's pain.* And in so doing, he ended this mode of legitimating power for God Himself.

In the context of pain and power set by the Old Testament, this is very dramatic. In the Old Testament, God has a voice but no body. Man has a body, but no voice of his own. The word belongs to God. God's power is verified by the sufferings of His people.

For example, when the people attempt to embody the unseen in a molten calf they can worship, God reasserts his own power over the people by ordaining a priestly class in blood.

Thus says the Lord God of Israel, 'Put every man his sword on his side, and go to and fro from gate to gate throughout the camp, and slay every

man his brother, and every man his companion, and every man his neighbor'. And the sons of Levi did according to the word of Moses; and there fell of the people that day about three thousand men. And Moses said, "Today you have ordained yourselves for the service of the Lord, each one of you at the cost of his son and of his brother, that he may bestow a blessing on you this day. (Exodus 32: 27-29)

The all powerful voice of God does not shy from calling for the blood of his people.

I will spend my arrows upon them/they shall be wasted with hunger/and devoured with burning heat/ and poisonous pestilence...
If I whet my glittering sword...I will make my arrows drunk with blood.
(Deuteronomy 32)

God's willingness to injure does not stop at the physical bodies of his people. The land is also subject to his violence. Besides the great flood that temporarily obliterated the surface of the earth, God is willing to demonstrate his power over the land in other ways. "The uneven ground shall become level, and the rough places plane. And the glory of God shall be revealed." (Isaiah 40: 4,5). "What are you, Oh great mountain? Before Zerubbabel, you shall become a plain" (Zachariah 4: 7).

The Old Testament described a two-tiered reality. On the upper tier was the voice of God, who was unseen. On the lower tier was the physicality of the land and the people. The way from God's voice to man's body was mediated by divinely induced disasters and weapons. Any doubts about the existence of the

unseen upper tier were greeted with flood, fire, storm, whirlwind, plague, knife, rod, arrows, and sword. Bodies put in pain confirmed the power of the unseen God.

In the New Testament, Christ is the mediator. Christ substitutes himself for the weapon. As a mediator, he shatters the concept that the voice of God is verified by the physical pain of humans. That he himself replaces the weapon can be seen in how easily the torture weapon of the cross, in turn, comes to symbolize Christ in Christianity.

But how are things verified in the New Testament if not by the certainty of pain? If there is no longer any power in a disembodied voice causing pain, where is the power and authority? The disembodied voice causing pain yields to the power of verification by the senses. Rather than passive suffering, the New Testament is filled with the active use of perception as a tool of verification. The New Testament is filled with phrases like "come and see." God is suddenly eyewitness news. The senses become authoritative. No longer is there a demand for blind belief in words without flesh. Rather, Jesus is asking for more acute, responsible acts of perception. "Could you not watch for one hour" (Mark 14: 37). The doubting Thomas is not punished for his disbelief. Rather he is invited to "Put your finger here, and see my hands; and put out your hand, and place it in my side..." (John 20: 28).

What about the weapon? The torture weapon of the cross is altered into a powerful symbol against torture. All torture is torture of God. The sign of the cross means that political power should no longer be based on inflicting physical pain.

In the Christian dispensation, the cross becomes the metaphor for physical pain that cannot be co-opted. Peter was crucified upside down at his request to indicate that he was a believer in Christ but not worthy to imitate Him. The apostle Paul sought to know Christ and Him Crucified. The cross became the reference for people suffering under Roman rule who refused to accept the Roman voice of political authority. Rather, they built an authoritative community of witnesses to Christ, crucified and risen. Physical pain could not be used by the authorities to incorporate people into the imperial Roman way of life. Again and again the martyrs suffered publicly at the hands of the Romans, willingly in the name of Christ. Witnesses of a crucified God, they lived in a community of love that understood that the certainty of pain could no longer be used by the authorities to confirm the fiction of their political power. The sign of the cross was the sign of new respect for human sentience.

By its nature, pain is unsharable. Torturers use pain to isolate people and confirm their own power. Divide and conquer. The sudden authentic shareability of suffering in the sign of the cross, invulnerable to Roman co-optation, created a community of sentience suffused with love. The texts of the early church, such as the feast for the consecration of virgins and the accounts of the martyrs, indicate something of that community of sentience.

Of course, we know the sign of the cross has failed to guarantee respect for human sentience. Here, I am not addressing Christian wars. What I am addressing are instances of torture in Christian history. To this day, Amnesty International can document torture in so called Christian countries. Perhaps the

most poignant statement of this failure comes from the mouth of Dostoevsky's Grand Inquisitor.

Recall the story told in *The Brothers Karamazov*. During the Spanish Inquisition, Jesus comes unannounced to Seville, where in splendid "acts of faith," wicked heretics were being burned daily, *ad majorem gloriam Dei* (for the greater glory of God). Jesus is immediately recognized by the people. He makes a blind man see. He raises a young girl from the dead. The Grand Inquisitor, fresh from burning nearly a hundred heretics, recognizes him immediately and has him arrested. The monologue of the Inquisitor, in the cell of the silent Christ, is chilling to read. He hates Christ for having tried to free men from debased political power. He hates Christ for not having come down from the cross when the tormentors reviled him. "If thou be the Son of God, come down from the cross." He explains how the Inquisition is "correcting" Christ's work, in effect, reestablishing political authority based on torture in His Name.

While the sign of the cross has made respect for human sentience normative for Christians, it has failed to make that respect operative. This is the case despite numerous efforts, like those of the Passionists, to reactivate respect for human sentience under the sign of the cross. Why this failure? More specifically, why is the sign of the cross subject to reversal by history's Grand Inquisitors?

The Weapon Metaphor

The cross is a metaphor for physical pain. Compared to all other interior states, physical pain has no referent. Other internal states have external referents: fear of x, hatred for y, love of z. Pain is not pain of or for anything. Because it has no objective content, it is very difficult to objectify in language. Ordinarily, there is no language for physical pain. Yet "languaging" pain, uttering words about pain in a painful voice, does help to relieve it.

Whether the language for dealing with pain is religious, medical, literary, or legal, it consistently uses the weapon as a metaphor. For example, "I feel as if I've been hit on the head with a hammer." The metaphor of a weapon provides a reference, where pain itself provides none. We use such metaphors to attempt to convey the experience of pain itself. The cross is a weapon of torture. It provides Christians with a referential metaphor for their pain.

Physical pain is invisible and unsharable with others. A weapon is a perceptible fact that can "make visible" the otherwise unsharable and invisible realm of pain. Pain does not sign itself for us. We recognize pain in the weapon. "When you cut your finger, bandage the knife" is the title of a sculpture by the artist, Joseph Bueys. The sculpture itself is a knife blade bound in gauze.

The image of the weapon to express physical pain works as long as the understood referents are physical pain and its attributes. But the metaphor of the weapon also permits a break from physical pain as referent. Bueys' sculpture could easily be retitled, "When you're bored, bandage the knife."

there is no evidence of the cut finger in the sculpture. Only the words of the artist in the work's title insures the proper reference. Other words can break that reference.

The weapon metaphor can be used to transfer the attributes of pain from the physical body to something else. This is also the function of torture. The certainty of pain experienced by the tortured person is transferred to the uncertain fiction of political power associated with the torturers. Hence, the metaphoric language for pain is inherently unstable. It can express pain and thus help to relieve it. Yet these metaphors can also be used to transfer attributes of the body in pain to a regime in power. The certainty of Jesus' bodily suffering was appropriated by the Romans to stabilize their political power over the Jews. As we know, it did not work. Witnesses to the resurrected body of Jesus overturned belief in the certainty of Roman power.

Yet, as we have seen with Dostoevsky, the cross is not immune to the inherent instability of this metaphoric language. The metaphor that was meant by Christ to stop political power based on torture is meant by the Grand Inquisitor to create political power based on torture.

Circuit and Metaphor

How can we deal with this "break in the referent" that the metaphor of a weapon makes possible? Let us look again at the sculpture by Joseph Bueys. Wrapping the knife with gauze expresses the pain in the finger by making the weapon an analogy for the finger in pain. Wrapping the knife may express the pain, but it does not stop the bleeding. To stop the bleeding, the gauze must be

wrapped around the cut on the finger. To eliminate the bleeding, a circuit of reference must be set up in the mind of the one in pain that precludes metaphoric breaks. That circuit of reference would be something like the following: Differences in the knife (sharp blade) make differences in my finger (the cut) that make differences in my blood flow (I'm losing the blood I need to maintain my body). The cut in my finger is the "error" that must be identified and eliminated if my blood flow is to be restored to its proper functioning. I have properly identified the error as the cut and can eliminate it by using gauze to substitute for my skin until my skin heals. Wrapping the knife in gauze is irrelevant to this circuit.

Such a circuit of reference, or of differences that make differences, is considered an elementary unit of the mind in the understanding given us by cybernetic theory. Cybernetics seeks to understand how communications and control interact. The Greek word "cyber" means a steersman on a ship. How a steersman uses information from the wind and the water to control and correct his course is understood by cybernetics in terms of circuits of differences that make differences. These circuits of differences enable us to identify and eliminate error in our blood flow, the course of a ship, or in any other phenomena that involve self-organization and self-correction.

Circuits are figures of regulation for self-correcting processes. Take the example of a blind man walking with a cane. Cybernetically, the blind man walking with a cane is understood as a self-correcting process. Differences in the ground make differences in the cane. Differences in the cane make differences in his arm, which, in turn, make differences in his body in where he steps next and differences in where he puts the cane next. Differences in where

he puts the cane next record differences in the ground and so on round the circuit. Any break in the route of reference around the circuit jeopardizes cybernetic understanding.

Metaphor works differently. Metaphor depends on the possibility of breaking the circuit of reference in order to set up understanding by analogy. This is a critical difference. Metaphors are figures of speech that express something by analogy with something else. By analogy, the blind man can be taken to mean a person who is not living in the state of grace. The song "Amazing Grace" uses this metaphor in the line "Was blind, but now, I see." The difference between unsighted and sighted corresponds to the difference between ungraced and graced. The objective of metaphoric thinking is to understand the state of grace. The object of cybernetic thinking is to understand the blind man walking. Cybernetic thinking is best conveyed in diagrams. Metaphoric thinking is best conveyed in language. Diagrams are not suited to conveying metaphors. Language is not especially suited to convey cybernetic thinking. However, in using language to discuss circuits, it is possible, by exploiting metaphor, to invite the reader to think cybernetically.

The Living Earth

Thinking in circuits, thinking cybernetically, has given us a rather startling and rich understanding of the earth. I am referring to the Gaia hypothesis of scientist, James Lovelock. To my mind, the Gaia hypothesis is a profound cybernetic meditation on the earth. Lovelock's story is worth telling. As an atmospheric scientist and inventor, he was hired by NASA to help figure out if

there was life on Mars. Lovelock reasoned that if there was life on Mars, the life forms would use the fluid medium of the atmosphere to “make deals” that would sustain their differences. But since we know the atmosphere of Mars is uniform and without differentiation, no trading is going on. It's a boiled-down soup; there is no life on Mars.

NASA didn't like the conclusion and promptly fired Lovelock. Returning to his countryside laboratory in England, Lovelock began thinking about the differentiation of the atmosphere of the earth. The atmosphere's peculiar mix of gases could not be explained according to the laws of chemistry. Twenty-one percent oxygen in the atmosphere was an anomaly in terms of how gases would ordinarily mix. Yet twenty-one percent oxygen was critical to maintaining life on the planet. Four-percent less and many forms of life would die of oxygen starvation. Four-percent more and most woodlands would burn up with the next lightning fire. Other such anomalies struck Lovelock. Three-percent salinity in the ocean supported many life forms, which would die if that percentage were altered. A constant range of temperatures had been maintained over the history of the earth, despite a twenty-percent rise in the temperature of the sun.

Lovelock hypothesized that maintenance of all of these mechanisms could not be explained unless one posited that the earth itself is a self-regulating, self-correcting, “living” organism. Life is part of earth as feathers are part of a bird.

Stated simply, the Gaia Hypothesis argues that the Earth is a living organism. Not metaphorically, but cybernetically. As of this writing, Lovelock and others

are busy identifying other mechanisms of planetary self-correction and a scientific consensus about the validity of this hypothesis is building.

Though I do think the Gaia Hypothesis will hold up under scientific scrutiny, I am not suggesting building a religion on a scientific hypothesis. I regard the Gaia hypothesis and the excitement generated by the hypothesis in non-scientific circles as one of a number of new ethical gestures towards the earth. Because the Gaia Hypothesis is based on cybernetics, I think it has a special status. I will return to that status in considering the television Ecochannel. For now, I want to consider it as part of an ethical gesture in response to the current world situation. In doing so, I have been helped by Eric Gans' *The End of Culture* (1985).

Rising expectations around the world have brought our species to a dangerous threshold. Everybody desires the same dwindling resources. There is a collective fear that appropriation of resources by one group will lead to reprisals by others. Escalating military defenses are an index of this fear. However, in some quarters, this fear has led to a hesitation in the very gesture of appropriating the earth. Hesitation is turning itself into a gesture that designates the earth itself as worthy of the respect given life. In addition to the excitement generated by the Gaia Hypothesis, we see such a gesture in a popular movement called bioregionalism, in green politics, in the reactivation of shamanic intelligence in indigenous cultures, and in the creation tradition within Christianity. Human conflict resolution, indeed, human survival, appears dependent on an ethic of respect for the living earth.

Designation of the earth as alive can be the beginning of a new ethical understanding. In building this new understanding, what can we learn from the crucifixion? Conflict resolution in the Old Testament shifted the focus from creating a "scapegoat" to humanizing the victim. Community errors cannot be dumped on a goat cast out into the wilderness. Community errors hurt some human member of this tribe. In the New Testament, the human victim is also divine. Jesus was not just a human member of a tribe in pain. He was a human in pain who was also the God of all humans. He suffered to relieve all human sins. Any human sin hurts all humans. Universal reciprocity among humans is the message of the Gospels.

Heedless appropriation of the riches of the earth makes universal reciprocity among humans impossible. Ozone depletion, rainforest destruction, Chernobyl, acid rain, Love Canal, and urban stress on the web of planetary life are making it clear that Christians cannot sustain the norm of respect for human sentience without respect for the earth itself. To hurt the earth is to hurt others. To hurt the earth mocks the Crucified Christ.

Let us look more closely at what it means to designate the earth as alive. Is it a mere projection? Or can we look at the phenomenon of projection without using the pejorative adjective "mere"? How can we look at the projections of aliveness in the Christian tradition of respect for sentience?

Man wends his way through forests of symbols
Which look at him with their familiar glances.

–Baudelaire

The poets, who dream for us all, project their own aliveness onto the external world as a matter of course. To see objects in waking life is one thing. To see these objects in dreams, it is as if the objects see the dreamer just as much as the dreamer sees the objects. The poet or dreamer transposes a pattern common to human interaction onto the external world. A person we look at looks back at us in return. The very work of poetry involves the projection of this reciprocity of gaze, this assumption of aliveness, onto the external world.

While artists may pretend or wish in all seriousness that the inert external world respects human sentience, it is the work of culture to make this a reality. Take as an example the chair you are sitting on. Standardized, manufactured, impersonal item, agreed. But the design of the chair is based on one human's perception of another person's discomfort, seeing someone in pain and wishing the pain gone. The wish for relief from pain becomes enacted, made into an artifact. The artifact frees you from pain and frees you from the sustained good wishes of the chairmaker. We assume a certain amount of respect for sentience in our made world. If a chair collapses and someone gets hurt, the chair manufacturer can be sued. We have a complex legal structure of product liability that assumes respect for sentience in the made object.

Look at the designation of the earth as alive in these terms. Does it not involve the wish to deny the planet possibility of becoming indifferent to our sentience? To make this planet safe for humans? The naturally existing world is ignorant of the "hurtability" of humans. Sea storms, heat waves, viruses, and radon care not for human sentience. The human response to this is to "make" these phenomena in some way knowledgeable about human pain. We manufacture artifacts: boats that we can stabilize in storms, air conditioners, vaccines, and

ventilation systems for radon. These artifacts demand from the external world respect for our hurtability and our sentience.

Respect for our hurtability underlies much of the current designation of the earth as alive. The bioregional movement began with the fusion of scientific data and local knowledge from indigenous cultures and generated a vision of how not to let the planet hurt people. Originally, the bioregional vision supported the efforts of people fleeing the city to reinhabit the land intelligently, without destruction. Currently, the bioregional movement is addressing the brutality of city life directly with dreams and schemes for Green Cities all over North America. Creation theology is drawing on the mystic sensibility of Hildegard of Bingham, Mister Echart and others to avoid the painful dead end of redemption theology and reactivate our direct relation with creation. Shamanic traditions have much to do with healing hurt.

What the Gaia hypothesis suggests is that we have—or can acquire in a reasonable frame of time— operative knowledge of the planetary mechanisms of self-correction. Based on that knowledge, we can learn to identify and eliminate errors in how we behave in relation to the processes of the planet. We can preclude wrecking the only human home we have. We can share the riches of a sustainable planet. Learning to abide its mechanisms of self-correction can insure reciprocity among humans. Reciprocity with the Living Earth can become the basis of reciprocity with each other. The terms of earth life are terms, which are not man-made, and they resist political manipulation.

Cybernetics regards the Living Earth in terms of circuits, not metaphors. To take the Living Earth as a metaphor leaves us open to the problems of

metaphoric language. A fascistic environmental movement could conceivably promote itself using Gaia as a metaphoric symbol. By relating to the Living Earth in terms of self-correcting circuits, we might be able to avoid the specter of biofascism, to avoid the Grand Inquisition in the name of Gaia. Human seeing-pain-and-wishing-it-gone without political manipulation found its most articulate symbol in a Crucified God. But this symbol, as we have seen, has been politically manipulated to cause hurt. Current projections of “aliveness” onto the earth are likewise vulnerable, and this is where I look to a cybernetic use of television as a safeguard.

Television

In referring to television, I distinguish from network television. Basically, I am indicating a medium that enables us to monitor events simultaneously with other events. Whether it is the Irangate hearings, launching a spacecraft, following a lost garbage scow, or a baseball game, television monitors events. I have designed a television channel that would enable us to monitor this ensemble of events in a systematic way and develop a consensus about how to behave in a way that respects this ensemble. The Ecochannel would enable us, as a species, to maintain fidelity to the self-correcting life processes of the bioregions we live in.

The full design for the Ecochannel has been presented elsewhere. What I want to stress in completing this paper are two things. 1) The channel is grounded in sharable perception and would support cultural changes that reconnect us with the ecology. 2) The entire design is based on a circuit that is a sign of itself.

Perception

Perhaps the quintessential achievement of a Christian in the realm of perception belongs to the poet, Gerard Manley Hopkins. Hopkins believed that the patterns of nature could be “inscaped” directly. By this he meant that direct perception of a particular event in nature could yield the underlying pattern. A few examples from his journals will remind us of his perceptual acuity.

The next morning a heavy snowfall...looking at the elms from underneath you saw every wave in every twig (become by this the wire-like stem to a finger of snow) and to the hangers and flying sprays it restored, to the eye, the inscapes they had lost. They were beautifully brought out against the sky, which was on one side dead blue, on the other washed with gold. (Hopkins [1870] 1953: 119–120).

About all the turns from the scapings from the break and flooding of the wave to its run out again I have not yet satisfied myself. The shores are swimming and the eyes have before them a region of milky surf but it is hard for them to unpack the huddling and gnarls of the water and law out the shapes and sequences of the running (Hopkins [1872] 1953: pp 126–127).

Our capacity to inscape natural patterns has been enormously enhanced by film and video. Time-lapse study of desert flowers blooming and slow-motion studies of hummingbirds in flight are instances of inscape. Working from extensive video studies of the Great Falls in Paterson, I wrote the following description of the flow patterns:

The Great Falls. A full seven sub basins (of the Passaic River Watershed) dropping seventy feet. Water over rock. A pure formal rendering of the figures that regulate the life of the Passaic Watershed. Droplets abound like microorganisms in the soil. Billows like the shells of bog turtles. Back curls of water like muskrat slides. Fantails appear like the sudden flight of partridge. Small pools pulse like our wrists. Water cascades through rock formations like new trees competing for sunlight in an open field. A multitudinous song, once and for all (Ryan: 1979—1980a)

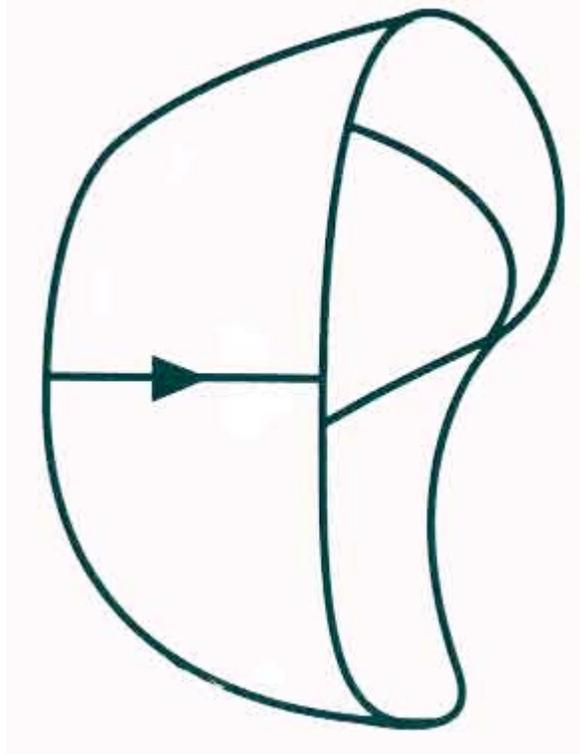
The Ecochannel is based on a systematic inscaping of the natural patterns of a bioregion, using videotape. The natural patterns can be encoded in the mathematical models developed by topologist Rene Thom. Thom's rigorous qualitative models can be used as a notational system for ecological events. This frees us from expressing inscape metaphorically, as in the waterfall passage above, and allows us to use inscaping as part of a cybernetic understanding. In the context of the Gaia hypothesis, it is assumed that out of this ensemble of inscapes, we will come to understand the syntax of self-correction proper to a bioregion or sub-bioregion. This syntax will be continually monitored on the Ecochannel, and interpreted for the whole community in various televised educational and discussion formats. The design organizes a way whereby the community can come to consensus about how best to respect the syntax of self-correction that supports its life.

The Ecochannel will not just be devoted to monitoring ecological events but will support the necessary shift to a culture more in keeping with the syntax of self-correction which has been unconcealed by the video monitoring. The

Ecochannel design itself sketches this cultural programming. In many ways the cultural aspect of the Ecochannel can be seen as a transformation of the bioregional material in *Talking Wood*, discussed above, into television formats.

A Sign of Itself

The formal organization of the Ecochannel design is based on a circuit that is a sign of itself. Because this circuit references only itself, it can organize information in such a way that any break in the reference would be immediately apparent. No meta-level of interpretation is necessary. I take this apparently paradoxical notion of a sign of itself from the philosopher Charles Peirce. Peirce argued that it is arbitrary to think that a sign must be separate from that which it signifies. A map of an island, on that island, must have a point where the map and the territory are the same. Similarly, Peirce said, there is nothing to prevent a play about the crucifixion from including a relic of the true cross. Peirce argued that we should be able to develop a sign of itself, where each significant part is explained by the other parts without recourse to explanation outside of the sign itself. Years of work with Peirce, video, and cybernetic theory have enabled me to come up with a circuit that is a sign of itself. The circuit is simple; its parts are all perceptible. Essentially, it is a development of the Möbius strip into a six part, tubular figure. I will discuss these implications under four headings: exclusion, forgiveness, certainty, and pain.



Möbius strip

Exclusion

The message of the Gospels is universal reciprocity. No one left out. Once we have allowed human conflicts and contradictions to scapegoat God-made man, the very mechanism of scapegoating is deeply suspect. Jesus died on the cross once and for all. In principle, no one need be scapegoated again. The ideal becomes a universal fellowship of love, which excludes no one and does not manipulate anyone's pain for political power. Universal reciprocity.

Exclusiveness begins when more than two are gathered together. The normal pattern is for two to combine and extrude a third, thereby reinforcing their

relationship at the expense of the third party. Trinitarian theology describes an ideal relationship among three where this extrusion does not happen. Communication does not depend on reference to an extruded outsider. The circuit is a sign of itself makes possible an operative version of the non-exclusive Trinitarian relationship for humans. What I am saying is that using the relational circuit as a figure of regulation, three people can stabilize the relationships among themselves without excluding any one party, and without creating a hierarchy. What it takes to do this is an ongoing, non-verbal relational practice that balances the relationships among three people. The reason this is important in developing a television Ecochannel is that the two-against-one dynamic tends to drive our perception of nature into categories of competition and privatization. We need to neutralize this dynamic in order to come to an authentic, sharable and trustworthy perception. The ongoing video perception of recombinant triads of people, using the relational practice to self-correct their interaction, provides a neutral scaffolding from which to perceive the syntax of self-correction operative in any bioregion of the planet.

Forgiveness

Traditional Christianity has used the mechanism of forgiveness to eliminate conflict within the community. A large tolerance for emotionally accepting the failings and errors of other community members has been one of the ways Christianity has survived. Again, the sign of the cross has been central. If God so loved sinners as to die on the cross for them, who are we to hold a grudge? Judgment is deferred.

However, we cannot extend this forgiveness indefinitely to errors against the ecology. Gregory Bateson used to insist that the most difficult scripture to live with was the saying of Saint Paul, "God is not mocked." Bateson pointed to this saying to indicate that the larger system of which we are part has its own rules and tautologies. These rules operate to identify and eliminate errors that keep the system from optimal viability. If humans continue their present path of reducing to the absurd their viability as part of the self-correcting organism we call Gaia, Gaia will not be mocked, Gaia will not be able to forgive the human species, Gaia will eliminate the human species. There will be a judgment; no longer will deferral be possible.

In the present situation, adhering to emotional patterns that provide forgiveness no matter what is a dead end of Christian sentimentality, redemptive theology at its worst. Respect for human sentience is our norm, not the indulgent sentimentality Nietzsche scorned. Our ecological sins cannot be solved by scapegoating, even by scapegoating Jesus Crucified. We can make reciprocity with the Living Earth the basis for reciprocity with each other. Using a cybernetic relational practice to correct our interaction is a way to avoid the Christian illusion that we can extend indiscriminate forgiveness to ecological transgressions.

Certainty

As we have seen, the attribute of the body in pain that political regimes most covet is its certainty. Language alone cannot generate certainty. Recent close analysis of the structure of language by the mathematician Kurt Gödel, reveals that it is impossible to have a complete and consistent set of propositions

(Gödel [1931] 1962). Either the set is inconsistent—that is, contains contradictions— or it is incomplete, unfinished. A set of propositions that is unfinished or contains contradictions cannot provide the certainty humans need. Creeds are language structures which acknowledge that their fundamental propositions are arbitrarily closed to questions. Fundamentalists all have their creeds. The certainty of the creed is a matter of belief, not of rational examination. Roy Rappaport has argued that this belief begins with the child's numinous experience of the mother and the unquestioning acceptance of what she says. Papal infallibility can be seen as an intuitive recognition of this instability of language. Inconsistency and/or incompleteness are emotionally expensive; they undercut certainty. Any creed needs an arbitrary mechanism to guarantee certainty, a religious version of the buck stops here.

The relational circuit at the core of the Ecochannel design is both complete and consistent. As a perceptible sign of itself, it avoids the instability inherent in propositional systems and is open to being used as a figure of regulation for sharing perception. All six parts of the circuit are explained by the other parts in a consistent way. It is not unfinished, nor does it contain contradictions. This means that an information system built on this circuit could generate certainty without arbitrary mechanisms. Certainty would not have to be borrowed from the body in pain.

Pain

I am not claiming, however, that using this sign of itself will eliminate pain. Its use may avoid the exploitation of pain's certainty by political authorities that

misusing the metaphor of the cross has all too often brought about. The circuit that is a perceptible sign of itself makes it possible to develop certainty based on shared perception of environmental realities. The television Ecochannel is, in effect, a design for a system of information transmission based on perception. The Ecochannel would make it possible for the public to verify information about the ecology with their senses rather than relying on metaphors such as the earth is our mother. The circuit that is a sign of itself gives a logic of self-correction other than forgiveness and is potentially free of manipulation by political authority. A logic of self-correction means that we can break whatever human conspiracy against nature lurks in the recesses of Christianity and link up to the self-correcting processes of the Living Earth. It is a way to avoid the potential travesty of allowing Christianity to conspire, in the name of the Son, against the creation of the Father. A culture that creates a perceptual code of verification for itself, in terms of a sign of itself, is more likely to respect pain without exploiting it to stabilize the latest political fiction, even if it is a biofiction. Such a culture would be likely to let pain find its own way into human sentience by way of the imaginations of the person in pain or those who care for that person.

I return to the imagination of poet Gerard Manley Hopkins. Perhaps as a community we can develop the acuity to inscape nature in the way Hopkins did. His sense of seeing-pain-and-wishing-it-gone extended directly to the "aliveness" of nature. In Goethe's phrase he had "exact imaginative sympathy" for natural phenomena. Hopkins wrote:

The ash tree growing in the corner of the garden was felled. It was lopped first: I heard the sound and looking out and seeing it maimed there came

at that moment a great pang and I wished to die and not to see the inscapes of the world destroyed anymore. (Hopkins [1873] 1953: 128).

The television Ecochannel is designed to make this perceptual capacity commonplace and to help heal the earth. Our many eyes can become one with the mind of the earth.

I thought how sadly beauty of inscape was unknown and buried away from the simple people and yet how near at hand it was if they had eyes to see it and it could be called out everywhere again. (Hopkins 1953: p 126).