

# Northrop Frye and Nature

## I.

My title is inspired, if that is the word, from the fact that the name “Northrop” apparently means “northern farm.” In fact, the name-book whence the information derives lists Northrop Frye as the most famous instance of the name. When I first learned of this, I thought it was a bit ironic. Northrop Frye’s sensibility is urban; he belongs to Moncton and Toronto, and does not have much to do with farms. He is, however, northern, and the etymology got itself linked in my mind with the lyrics to a song called “Farmhouse,” from an album of the same title by the rock group Phish. In the song, the speaker begins by saying, “Welcome, this is a farmhouse.” But he quickly goes on to apologize that “We have cluster-flies, alas / And this time of year is bad. / We are so very sorry, / There is little we can do / But swat them.” The failure of nature seems linked to the failure of human relationships, and the failure of relationships in turn to the failure of community, as the speaker drifts from alluding to a lover who walked out on him to the observation that “Each betrayal begins with trust, / Every man returns to dust.” Then, unexpectedly, an anthem-like refrain erupts with a complete reversal of the meaning of this melancholic farmhouse: “I never saw the stars so bright, / In the farmhouse things will be all right.” This reversal, or, to use Frye’s term, recreation of the vision of inhospitable nature and selfish human nature is the subject of my talk. The direction of the reversal is from a “realistic” perspective allied with both common sense and scientific materialism to what Shakespeare in *Twelfth Night* calls “A natural perspective, that is and is not.” The latter is the perspective that we call imaginative and spiritual. It both is and is not because it begins as a fiction, and yet, unlike mere wish-fulfillment fantasies, has the potential to transform what the poet Wallace Stevens called “things as they are.” The fact that Frye, like Stevens, with various qualifications, grants authority to both perspectives gives him the title of his last book, *The Double Vision*.

The subject is worth speaking of because several critics find in Frye a hostility to nature, an attitude that he supposedly contracted from Blake, one of whose aphorisms is, “There Is No Natural Religion.” Blake in turn picked it up from the Bible’s denunciation of rival pagan religions, most of which had in common the tendency to locate the sacred as a power within nature instead of in a supernatural God. The allegation, made most sharply by Daniel T. O’Hara, is that Frye’s own fear of life led him to accept a view that physical nature (and human history as well) are “fallen,” that life in nature and history is a vale of tears, Macbeth’s tale told by an idiot, signifying nothing, leading inevitably to dusty death. Consequently, humanity must be redeemed by being reborn out of nature into culture, the construct of the visionary imagination. Culture is a kind of “second nature,” comparable to the “new heaven, new earth” that, according to the Book of Revelation, will replace the original Creation at the apocalypse. But, says O’Hara, “The production of second nature always requires—in however symbolic a form—the sacrificial death of primary nature, and so one can say that being for second nature always entails being against nature” (167). One of my predecessors in these lectures, Nella Cotrupi, has devoted an entire chapter of her book *Northrop Frye and the Poetics of Process* to disagreeing with the view of Frye as a frightened intellectual retreating from experience into the second womb of culture, protected from contamination by life by an artificial bubble of symbols and myths and archetypes, and I do not need to repeat what she has said so well. The point of this talk is, rather, that most of the confusion about Frye’s view of nature stems from the fact that “nature” means different things according to context. Frye’s attitude to nature, and ours, is a matter of perspective. In the words of Blake, “For the Eye altering alters all.”<sup>[1]</sup>

## II.

Many, if not most, of Frye’s negative statements about nature come from the 1930s and 40s, when he was writing *Fearful Symmetry*, and their tone has been influenced not only by Blake but by the tenor of the times. Ecology and the environmental movement have conditioned us to think of nature as a nurturing matrix whose frail balance is threatened by pollution and global development. But that is not at all how nature was commonly regarded in the later nineteenth and early twentieth centuries, and what some critics take as the ambivalence of one writer, or of a certain type of intellectual, is in fact Frye’s analysis of a culturally pervasive attitude. In this he was preceded by Blake, who was far more prophetic about what was to come than his contemporary, the nature-praising Wordsworth. Both Blake and Wordsworth saw the cultural ascendancy of science, which had been steadily increasing since the days of Bacon and Newton. But while Wordsworth had faith that the imagination would eventually humanize the results of science, Blake was more hardheaded. He saw, correctly, that science was on its way to replacing religion as the truth-language of modern times. Science has sole authority in our society to define the true or the real. Any statement about

truth or reality made by the humanities or religion has the burden of proving it can be reconciled with the scientific perspective; otherwise it is forced into an awkward defensiveness. Much of the fanaticism of right-wing religion is based on the idea that the best defense is an offense, and it is frequently pointed out that right-wing religiosity is a backlash against “modernity,” which means against the scientific worldview and the materialist society it has done so much to create. Science has bequeathed us a vast range of knowledge and an expanded sense of wonder, along with enormous benefits, including a nearly doubled average lifespan. But, at the same time, the scientific perspective offers an unremittingly bleak view of both nature and human life; it is this that Blake was reacting against in his tirades against Bacon, Newton, and Locke.

Science begins by separating the subject from the object, the observer from the observed. Its next move, however, is a suppression of the subject altogether; it attempts to become, as far as possible, impersonal and objective. The most obvious reason is to protect against bias. But a deeper reason, first defined by Descartes, is that the subject, the observing mind or consciousness, is something of a scandal scientifically. If there are two things in the world, mind and matter, consciousness and body, how can they interact? Moreover, if mind or consciousness is not reduced to being a mere function of the matter and energy processes studied by science, we are forced to think of it as some kind of mysterious, possibly supernatural, essence. If we are not to be led into such irrationalism, we are forced to exclude from reality not only God and the soul but consciousness and even life itself. These may seem to exist, but they are in fact illusory, or, to use the impressive scientific word, epiphenomenal. Science defines nature in terms of the processes of matter and energy; its perspective is that of mechanistic materialism. The fact that some scientists have been religious, from Newton to the present day, speaks only of the human mind’s ability to compartmentalize.

From this point of view, nature is a gigantic machine. Christianity in Blake’s time was forced to adapt its theology to accommodate this notion, and the result was Deism, with its famous metaphor of nature as an intricate watchworks mechanism and God as the watchmaker. God made the watch and set it ticking, but does not otherwise intervene. The many miracles reported in the Bible, all of them disruptions of natural law, are merely the importations of popular superstition—including the central miracle of the Resurrection. Deism could not survive the coming of Darwinism, but the conception of nature as machine still prevails, as is indicated by the title of a well-known recent book, *The Blind Watchmaker*. Natural selection provides a mechanism—to use the precise word—by which nature blindly and automatically assembles and reassembles itself. The mechanical view of nature, which originated in the study of the orbits of the planets and other aspects of the inorganic world, has now been extended to the realm of the organic. The author of *The Blind Watchmaker*, Richard Dawkins, the best-known expositor of what is called neo-Darwinism, has said previously, in *The Selfish Gene*, “The argument of this book is that we, and all other animals, are machines created by our genes” (2). Later in the same book, he asks, “What on earth do you think you are, if not a robot, albeit a very complicated one?” (270-1). That he means this literally, and is not just being provocative, is indicated by his close relationship with the philosopher Daniel Dennett, whose book *Consciousness Explained* reduces consciousness to its material basis in brain functions, on the grounds that any other explanation is, to use the obvious pun, unthinkable. It is a short step from here to what is known as the “strong AI,” or artificial intelligence, position, the theory that, if intelligence is mechanistic, machines can be intelligent, in the only sense of the term that matters.

Blake rejects the mechanistic materialism of his time, and, implicitly, of ours, but he also attacks another attitude to nature that he calls Druidism. Superficially, Druidism seems the opposite of mechanistic materialism: it defines nature as a will, impulse, drive, or instinct beneath the artificial structures and mechanisms of civilization. In Darwinism, this became the “struggle for existence,” a will to survive that is inherently selfish. Dawkins, in *The Selfish Gene*, which updates Darwinism in the light of modern genetics, states quite honestly, “My own feeling is that a human society based simply on the gene’s law of universal ruthless selfishness would be a very nasty society in which to live. But unfortunately, however much we may deplore something, it does not stop it being true” (3). Neo-Darwinism, and the movement known as evolutionary psychology which has spun off from it, do not deny the possibility of altruism and cooperation, so long as such behavior has a selfish payoff. Indeed, most of the thinkers involved seem to be social liberals: they have nothing to do with Social Darwinism or Ayn Rand or any view that justifies political or economic ruthlessness as “the survival of the fittest.” Lately, they have been using computer simulations based on game theory to find out whether strategies of behavior based on trust and cooperation have a chance of winning in a contest against selfish strategies. The result is apparently that there is a small but fighting chance. The scenario greatly resembles that of a play like *King Lear*. When Edmund, the most articulate of the villains, says, “Thou, Nature, art my goddess” (1.2.1),<sup>[2]</sup> he means the kind of predatory nature ruled by the selfish gene. As another character exclaims, if such behavior predominates, “Humanity perforce must prey upon itself, / Like monsters of the deep” (4.2.49-50). That is exactly what we see happening, as the villains dominate England, persecuting the few good characters and forcing them to the margins. The latter indeed survive, mostly by enduring long enough that the selfish characters betray and undo one another, but it seems rather desperate to call the ending of *King Lear* hopeful; indeed, it is so grim that the stage refused to act it for a century and a half, substituting instead an alternative happy ending.

Not only is cooperative behavior a long shot, but, Dawkins says, “Be warned that if you wish, as I do, to build a society in which individuals cooperate generously and unselfishly towards a common good, you can expect little help from biological nature. Let us try to *teach* generosity and altruism, because we are born selfish” (*Selfish Gene*, 3). This seems to imply that there is something else in us besides our “biological nature,” a more generous impulse that can repress or rechannel our selfish drives. In an older, religious view, that would not be problematic: the point of Christianity is rebirth out of the identity of the selfish “natural man” into a compassionate and self-sacrificing spiritual self. But if we set religion aside, the only alternative is culture, and culture seems a mere collection of preferences arbitrarily opposed to our true nature. If selfishness feels good, is statistically more likely to succeed, and is more in harmony with our deep nature, it is going to be difficult to persuade more than a small, idealistic—not to say quixotic—minority to choose cooperation and altruism.

I have spent so much time with neo-Darwinism and evolutionary psychology, not because they represent the consensus of contemporary science—my impression is that they are the majority but not the universal view—but because public fascination with them suggests that they have struck a chord. They provide a scientific rationale for the disillusioned mood of what the Marxists call “late capitalist civilization,” in which depression has reached the status of an epidemic. The result of this perspective is played out on two levels. On one level, we see shameless economic exploitation and corruption, the decay of civility, and the fear of believing in any kind of idealism. On a deeper level, we see a “rage against the machine,” a desire to give oneself up to the darker impulses of the selfish will, go over to the dark side of the Force, to slip the ring of power on one’s finger, to think with one’s blood as the Nazis desired to do, to accomplish the will of God or Allah in an act of terrorist destruction of the mechanism of civilization, as terrorists find a sense of triumphant release in doing. These are all manifestations of what Blake called Druidism. While Frye was writing *Fearful Symmetry*, his friend E.J. Pratt produced what Frye came to think of as the greatest Canadian poem, “The Truant.” In it, a “truant,” a representative of rebellious humanity, is brought up for trial before the “great Panjandrum,” a figure who bears the trappings of an authoritarian God but who is really a personification of *both* mechanistic materialism and brute force. In the well-known ending, the tables are turned when the truant judges the Panjandrum instead:

“We who have learned to clench  
Our fists and raise our lightless sockets  
To morning skies after the midnight raids,  
Yet cocked our ears to bugles on the barricades,  
And in cathedral rubble found a way to quench  
A dying thirst within a Galilean valley—  
No! by the Rood, we will not join your ballet.”<sup>[3]</sup>

The truant’s reply evokes, no doubt deliberately, the defiance of the sky-tyrant Jupiter by Prometheus in Shelley’s *Prometheus Unbound*. Yet Shelley’s Prometheus has to learn that it is his curse that keeps Jupiter in business, for the sky-god is really a projection of his own alienation. If we are to dispel the great Panjandrum of false nature that we have made out of mechanistic materialism and the selfish gene, we have to ask what we are to put in its place, and how.

### III.

To answer this, we have to return to the subject-object model of perception that Blake scornfully called a “cloven fiction.” Scientific objectivism splits off the subject only to repress him, however, so, in another way of looking at it, the cloven fiction is, in Blake’s term, “single vision.” Blake goes on to call it “Newton’s sleep” and prays not to fall into it.<sup>[4]</sup> Here, finally, is where the reversal of perspective that I spoke of earlier comes into play, for we begin to awaken from such a sleep of passively reductive perception by uniting the subject and the object, fusing them into a mutually inclusive identity. This is the primary act of imagination, forming what the Romantics referred to as diversity-in-unity or identity-in-difference. As Frye says in his last book, *The Double Vision*, “the conscious subject is not really perceiving until it recognizes itself as part of what it perceives” (*CW4*, 183; *DV*, 23).<sup>[5]</sup> It follows that “whatever we perceive is a part of us and forms an identity with us” (*CW4*, 184; *DV*, 23). Imaginative perception of this sort expands into an experience of reality, including the natural world, not as a mechanism of moving parts or fields of energy but as a webwork of particulars in which each thing is fully itself and yet is identified with all other things. This is what Blake means by seeing the world in a grain of sand, and knowing eternity in an hour.

To many people, this opening of the doors of perception seems too easy. Accepting the “reality principle” that we perceive what is given, what we have to see whether we like it or not, is part of becoming a mature, responsible adult. Blake claims that “As a Man is so he Sees. As the Eye is formed such are its Powers.”<sup>[6]</sup> If he is right, it means that each person sees as he or she desires, and that each may be living in what Carlos Castenada called a separate reality. Most of us keep our private worlds carefully secret from one another, so it is not always apparent that we in fact *do* live in separate realities. Still, we realize that imaginative recreation has to be more than the power of positive thinking. Reality stubbornly persists, so much so that people fall into the error of believing that it exists unalterably, beyond our perception. A major influence on Frye at this juncture was Samuel Butler’s *Life and Habit*, first published in 1877. *Life and Habit* was an attack on Darwinism, and its opening chapters are a witty *tour de force* arguing that most of what we think is unalterable reality, including natural or physical reality, is merely habit so ingrained that we are no longer aware that it is habit. Pianists, for example, do the impossible. They play thousands of notes correctly in a few minutes, without thinking about what they are doing, perhaps even while talking to someone, in a way that commonsense “realists” would call impossible except that its occurrence is, well, habitual. They can do this because they have practiced the muscular movements in the correct sequence for so long that they have become a habitual pattern. Each of us, even if we are not artists, can do many things that are miraculously intricate in the same manner, including walking, speaking, and reading. And most of us forget the long period of laborious practice that it took us until such actions became spontaneous and, in a sense, unconscious.

Those of us who are teachers, however, do not forget, and Frye always connected Butler’s theory of practice-memory with his theory of education. Recently, attempting to teach someone how to drive a car with a manual transmission, I had to go back and discover what the hell it is that I have been doing for twenty-five years when I shift gears, because I do it so instinctively—to use a significant word—that I literally had no idea. Occasionally I startle students in class by composing a line of iambic pentameter spontaneously—not because I am an accomplished metrist; merely because I have been reading and writing in meter habitually for so many years that it is as hard for me *not* to hear the meter in a line of verse as it is for some of them to hear it. The *tour de force* element in Butler’s argument enters when he moves from skills to ways of thinking, feeling, believing, perceiving. Here he is startlingly prophetic of the movement that has dominated literary studies for the last thirty years, known as post-structuralism. Post-structuralism demonstrates almost obsessively how far not only our values but our very sense of reality is a product of social conditioning, or, as it often calls it, ideology. If someone believes certain sexist stereotypes about women, he will tend to notice only the things that he can interpret to confirm his prejudices, and will explain away any evidence to the contrary that he cannot ignore. As Steven Jay Gould showed in *The Mismeasure of Man*, when nineteenth-century society believed that black people are innately inferior to white, science duly came up with the “evidence” that this is “an obvious evolutionary fact.” But these are relatively crude and obvious instances of what Blake called “mind forg’d manacles.”<sup>[7]</sup> Anyone who teaches is aware that we all have our mental manacles, and that it takes hard work, discipline, and real faith to break through into a more mature level of thinking and perceiving. A student may be stubbornly convinced that she cannot understand what you are talking about, that she can never see or think differently from the way she does now—until the moment when, suddenly, she can. Later, when she looks back as a senior at the essays she wrote as a freshman, it might seem as if another person wrote them; now that her imagination is habitually expanded, she may marvel that she ever could have been so simpleminded.

Blake asks us, however, to take one more step. If the subject is not truly separate from the object, if “what we perceive is part of us” and we are part of it, then an increase of imaginative intensity in perception may actually transform both our senses and the natural world. Darwinian nature may be only nature as it appears to an imagination too passive to expand the senses to their full capacity. *The Marriage of Heaven and Hell* contains a number of aphorisms that announce this:

How do you know but ev’ry Bird that cuts the airy way,

Is an immense world of delight, clos’d by your senses five?

And:

The roaring of lions, the howling of wolves, the raging of the stormy sea, and

the destructive sword, are portions of eternity, too great for the eye of man.<sup>[8]</sup>

In *Visions of the Daughters of Albion*, Blake’s heroine Oothoon cries out defiantly:

“They told me that the night & day were all that I could see;

They told me that I had five senses to inclose me up,



And they inclos'd my infinite brain into a narrow circle,  
And sunk my heart into the Abyss, a red, round globe, hot burning,  
Till all from life I was obliterated and erased."<sup>[9]</sup>

A "natural" response is that this is sheer New Age flakiness; people who could believe this could believe anything. Blake might reply: But science asks us to believe in conceptions at least as strange and counterintuitive as that. Why is it that we find no problem with accepting such conceptions as black holes, a pinpoint "singularity" from which the entire universe emerged, quarks, cold dark matter, the dilation of time at near-light speeds, light as both a particle and a wave, and so on? It is not a matter of a reality principle at all, but a matter of authority. We are in the habit of finding credible anything that is offered to us with the proper scientific credentials. Blake is not anti-science. The last line of *The Four Zoas* is, "The dark Religions are departed & sweet Science reigns."<sup>[10]</sup> He does insist, though, that science will not become truly empirical until it stops excluding a large part of human experience; it will itself be a form of dark religion, or security system, so long as it rejects as unscientific any reality that cannot be reduced to the objective or lowest-common-denominator level of "single vision."

#### IV.

Abraham Maslow, in *The Psychology of Science*, called for an extension of scientific exploration into higher levels of experience, such as what he termed "peak experiences," in which the knower is united with the known. Freud and Jung are "depth" psychologists: that is, they explore levels of reality below ordinary conscious experience, where again, as in dreams, the distinction between knower and known becomes ambiguous. These peaks and depths imply a vertical perspective that appears when reality is no longer limited to the objective. The last four chapters of *Words with Power* form a *katabasis* or descent journey, as Frye explores the worlds above and worlds below ordinary perception, moving from top to bottom. Thus, there is no simple answer to the question, what is Frye's view of nature? Each of the four levels of his vertical diagram is a vision of nature according to one mode of imaginative or spiritual perception.

At the topmost level of what Frye calls his *axis mundi*, or axis of the world, is a vision of nature as a cosmic order. The phrase is redundant: the word "cosmos," which originally meant a jewelry ornament, in fact means the universe conceived as a total order. The idea of an order of nature is, as Frye explicitly says in *Anatomy of Criticism* (AC, 17), what inspired his insight into literature as a total order of words. But scientists do not seem to share the hostility to order that bedevils current philosophy and criticism and causes them to reject the notion of an order of words as "totalizing," in other words as totalitarian. Indeed, casting out that devil invites feelings of religious wonder and transcendence. Einstein rejected anthropomorphic religion in favor of what he called "cosmic religious feeling," in which "The individual feels the futility of human desires and aims and the sublimity and marvelous order which reveal themselves both in nature and the world of thought. Individual existence impresses him as a sort of prison and he wants to experience the universe as a single significant whole... In my view, it is the most important function of art and science to awaken this feeling and keep it alive in those who are receptive to it."<sup>[11]</sup> Earlier visions of cosmic order tend to be hierarchical, such as Dante's *Divine Comedy*; materialistic versions are mechanical. The hierarchical and the mechanical are both flawed by what Alfred North Whitehead calls "the fallacy of simple location," and he wrote *Science and the Modern World* as an attempt to replace mechanistic-materialist ideas of natural order with a vision of what Frye calls interpenetration. In *The Double Vision*, Frye recalls, "The first book of philosophy that I read purely on my own and purely for pleasure was Whitehead's *Science and the Modern World*, and I can still remember the exhilaration I felt when I came to the passage: 'In a certain sense, everything is everywhere at all times. For every location involves an aspect of itself in every other location. Thus every spatio-temporal standpoint mirrors the world' (114). This was my initiation into what Christianity means by spiritual vision" (CW4, 198; DV, 40-1).<sup>[12]</sup> That Frye's order of words is interpenetrating in the same way is still not widely understood in the critical world.

The vision of order is more common in physics than in biology. *Quantum Questions*, an anthology of the mystical writings of twentieth-century physicists, edited by Ken Wilber, shows that Heisenberg, Schroedinger, Einstein, De Broglie, Jeans, Planck, Pauli, and Eddington expressed various versions of it. As it progressed, modern physics found itself turning increasingly into mathematics, and thus becoming less material and more symbolic. At the end of the *Anatomy* (352), Frye alludes to the final chapter of Sir James Jean's *The Mysterious Universe*, in which he maintains that God seems less like a biologist or engineer and more like a pure mathematician: "And the concepts which now prove to be fundamental to our understanding of nature—a space which is finite; a space which is empty, so that one points differs from another solely in the properties of the space itself; four-dimensional, seven- and more dimensional spaces; a space which forever expands; a sequence of events which follows the laws of probability instead of the law of causation—or,

alternately, a sequence of events which can only be fully and consistently described by going outside space and time—all these concepts seem to my mind to be structures of pure thought, incapable of realization in any sense which would properly be described as material...The universe cannot admit of material representation, and the reason, I think, is that it has become a mere mental concept” (Wilber, 136-7). The universe as a mental concept is so far from the universe as a material mechanism that it has caused Jacques Barzun to speak, in *Science: The Glorious Entertainment*, not of the two cultures but of “the two sciences.”[\[13\]](#)

The second vision of nature in *Words with Power* is explored in the chapter appropriately titled “The Garden.” Mythology contains many versions of the earthly paradise or Golden Age; in literature, these modulate into the set of conventions known as the pastoral, which continues down through the great tradition of nature writing in the nineteenth and twentieth centuries that includes Thoreau, Darwin himself, Burroughs, Muir, Steven Jay Gould, Peter Matthiesson, Barry Lopez, Annie Dillard, and Loren Eiseley. Where the first level is a vision of *natura naturata*, nature as structure, level two is a vision of *natura naturans*, nature as an all-inclusive process, forming a webwork of life. The webwork is organic: that is, its parts are no more separable or dispensable than the parts of a body. That means it is alive, and where there is life there is always some kind of consciousness. In the vision of the Garden, every aspect of nature is animated and possesses its own kind of consciousness: Greek and Celtic mythology are populated with elemental spirits, such as fairies; Renaissance magic was based on the idea of the *anima mundi*, the living soul of the world; and modern paganism has revived the idea of a Goddess who is the spirit of all life. Native American Indian mythologies, like all mythologies, were no doubt a mixture of superstition and genuine spirituality. That the Indians who tortured Jesuits in E.J. Pratt’s *Brébeuf and His Brethren* were caught up in Druidism, that tribal life may not have been as ecological as it is sometimes idealistically painted, does not mean that Native Americans lacked the reverence for a spiritualized nature that their white conquerors and exploiters have come at times to envy. In the white world, the webwork of human and natural relationships is the theme of George Eliot’s *Middlemarch*, itself influenced by the debate over Darwinism.[\[14\]](#)

The Garden also has a dynamic aspect: instead of the struggle for existence, the comedies and romances of Shakespeare give us “great creating nature” (*The Winter’s Tale*, 4.4.86-8). In plays such as *A Midsummer Night’s Dream* and *The Winter’s Tale*, the unseen power that renovates the world and brings about the happy ending is associated with imagery of the recreating power of art, the renewing power of nature, and the redemptive power of religion, for it includes all of the above, being what Coleridge in “The Eolian Harp” called “the one Life within us and abroad.”[\[15\]](#) It is also associated with the power of love: in *The Double Vision*, Frye writes, “The growth of nature from a manifestation of order and intellectual coherence into an object of love would bring about the harmony of spirit and nature that has been a central theme of this work” (*CW4*, 234; *DV*, 84). In the same vein, he states, “Such love readily extends from the human to the natural world, and the feeling that nature should be cherished and fostered rather than simply exploited is one of the few welcome developments of the last generation or so” (*CW4*, 193; *DV*, 34).

In modern biology, Lynn Margulis has established that parts of the nucleated cell were once independent bacteria that at some point united into a symbiotic relationship. If the unit of most organic life originated out of cooperation rather than competition, or at least out of an interplay of cooperation and competition, larger implications loom that are a challenge to neo-Darwinism. Margulis has been associated in some ways with James Lovelock, whose Gaia hypothesis maintains that the entire Earth behaves as if it were a single gigantic living organism. In the same vicinity reside social movements such as ecofeminism and more scientific theories discussed under the inclusive name of “systems theories” by Fritjof Capra in his book *The Web of Life*.

Biology thus seems riven with a conflict between what William James called toughminded and tenderminded theories. George C. Williams, a prominent neo-Darwinist, says, “I’m probably being unfair, but I would say that Lynn Margulis is very much afflicted with a kind of ‘God-is-good’ syndrome, in that she wants to look out there at nature and see something benign and benevolent and ultimately wholesome and worth having. Whereas I look out there with Tennyson and see things red in tooth and claw. In other words, it’s a bloody mess out there” (Brockman, 140). The vision of the Garden risks becoming sentimental if it evades a confrontation with the third level of Frye’s *axis mundi* scheme. In the chapter called “The Cave,” we get all the imagery of Druidism, of the Darwinian struggle for existence, focused upon the recurrent imagery in mythology and literature of the dying god, the deity who represents the cyclical fertility of nature by being put to death and then reviving. Frye learned about the mythological versions of the dying god from Frazer’s *The Golden Bough*, but in Greece the festival of the dying god Dionysus gave us the literary form of tragedy. Tragedy is a mimesis of sacrifice. Joseph Campbell has said that one of the primary functions of mythology is to enable us to come to terms with the dark realization that all life lives upon all other life. In demonic form, this gives us all the horrors of Druidism, which from the worship of Moloch to Nazism always looks for human sacrifices. Sacrifice is central to religion, however, as tragedy is to literature, because in its genuine form it transvalues the killing of life from something selfish into something unselfish. As other life dies for us, we die

for other life, in love and reverence, recognizing that we are members of one body. Greater love hath no man or woman, and traditional cultures have felt a similar gratitude for the animal and vegetable forms of life they had to sacrifice in order to live.

The fourth level of Frye's scheme touches bedrock—in terms of imagery, it would be the dead matter out of which natural life somehow arises. But matter is a manifestation of energy, and the fourth chapter is titled "The Furnace." The descent to this final depth is also, though, a descent to the deepest and darkest level of the human mind. At some mysterious point, mind and matter meet and are identified: this is the theme of Jung's late book *Mysterium Coniunctionis*, whose theme is *unus mundus*, one world, not a cloven fiction of mind and matter. We have already seen that the creative dynamism of mind, nature, and God may all be forms of the same power. But power it is, and the question is what use we are going to make of it. Samuel Butler was a "creative evolutionist" because he believed that evolution was driven not by the blind spasms of matter but by a creative power working to shape forms of desire. Whatever merits such a theory may have as an explanation of the past, it is highly suggestive as a prophecy of the future. We do not have to be cogs in the wheel of any machine, natural or bureaucratic; we do not have to be puppets of the selfish gene. Frye was interested in the physicist David Bohm's theory that the physical world is an "unfolded" manifestation of an "enfolding" or "implicate" order.<sup>[16]</sup> When the spark leaps the gap between mind and matter in the nothingness at the bottom of the world, its energy fountains upward, causing the four vertical levels of vision to awaken like the chakras of Kundalini yoga. None of these is the "real" nature; reality is plural. The titanic figure whose organs of perception they are is what Homer calls a *polytropos*, a protean figure whose nature is metamorphosis, and who lives in many worlds. What should we call ourselves? He, she, or it? Natural, human, or spiritual? Real, or such stuff as dreams are made on? What are we going to make of ourselves and of nature, playing both with and against the models of the four levels of vision? The view from the northern farm is open-ended, which is the source of both its terror and its wonder.<sup>[17]</sup>

### Works Consulted

Barzun, Jacques. *Darwin, Marx, Wagner: Critique of a Heritage*. Rev. 2nd ed. Garden City, New York: Doubleday, 1958. 1st ed. publ. 1941.

—. *Science: The Glorious Entertainment*. New York: Harper & Row, 1964.

Beer, Gillian. *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction*. London: Routledge & Kegan Paul, 1983.

Bohm, David. *Wholeness and the Implicate Order*. New York: Routledge, 1983.

Brockman, John, ed. *The Third Culture*. New York: Simon & Schuster, 1995.

Capra, Fritjof. *The Web of Life: A New Scientific Understanding of Living Systems*. New York: Doubleday, 1996.

Cotrupi, Nella Caterina. *Northrop Frye and the Poetics of Process*. Toronto: University of Toronto Press, 2000.

Dawkins, Richard. *The Selfish Gene*. New ed. London: Oxford University Press, 1989. Orig. publ. 1976.

—. *The Blind Watchmaker: Why the Evidence of Evolution Reveals a Universe without Design*. New York: Norton, 1996. Orig. publ. 1987.

Dennett, Daniel C. *Consciousness Explained*. Boston: Little, Brown, 1991.

Eiseley, Loren. *The Night Country*. Lincoln: University of Nebraska Press, 1971.

Erdman, David, ed. *The Complete Poems and Prose of William Blake*. Rev. ed. Berkeley: University of California Press, 1982.

Frye, Northrop. *Anatomy of Criticism*. Princeton: Princeton University Press, 1957.

—. *The Double Vision*. Toronto: University of Toronto Press, 1991.

—. *Northrop Frye on Religion*. Ed. Alvin A. Lee and Jean O'Grady. Vol. 4 of *The Collected Works of Northrop Frye* (Toronto: University of Toronto Press, 2000).

—. *Words with Power: Being a Second Study of "The Bible and Literature."* New York: Harcourt Brace Jovanovich, 1990.

Gould, Steven Jay. *The Mismeasure of Man*. New York: Norton, 1981.

Jung, C.G. *Mysterium Coniunctionis: An Inquiry into the Separation and Synthesis of Psychic Opposites in Alchemy*. 2nd ed. Vol. 14 of *The Collected Works of C.G. Jung*. Princeton: Princeton University Press, 1970.

Maslow, Abraham. *The Psychology of Science: A Reconnaissance*. New York: Harper & Row, 1966.

O'Hara, Daniel T. *The Romance of Interpretation: Visionary Criticism from Pater to de Man*. New York: Columbia University Press, 1985.

Pratt, E. J. *The Collected Poems of E.J. Pratt*. 2nd ed. Northrop Frye, ed. Toronto: Macmillan of Canada, 1962.

Ridley, Matt. *The Origins of Virtue: Human Instincts and the Evolution of Cooperation*. New York: Penguin, 1996.

Shakespeare, William. *The Riverside Shakespeare*. Boston: Houghton Mifflin, 1974.

Wilber, Ken, ed. *Quantum Questions: Mystical Writings of the World's Great Physicists*. Boston: Shambhala, 1985.

Whitehead, Alfred North. *Science and the Modern World*. New York: The Free Press, 1925, 1953.