

Reconstructing the Conditions for Cultural Coherence

by

Loyal D. Rue
Luther College

A world ends when its metaphor has died.
An age becomes an age, all else beside,
When sensuous poets in their pride invent
Emblems for the soul's consent
That speak the meanings men will never know
But man-imagined images can show:
It perishes when those images, though seen,
No longer mean.

—Archibald MacLeish

These are degenerate times; incoherent, katzenjammer times. Almost everyone agrees about that. There is just too much evidence not to. What we do not agree about is the nature and source of our cultural malaise, a fact which exacerbates already desultory conditions. Our failure to achieve a common perception of our problems is serious because it obstructs effective and concerted action.

What we believe about the nature and severity of our problems will affect our strategies for solution and our willingness to exert ourselves toward their execution. If we believe, for example, that our problems result from disobedience to God, we might be disposed to become diligent in reading the scriptures, attending church, and promoting piety among those within our sphere of influence. Or if we believe that our degeneration is an inevitable turn of the cycle of history — the entropic decline — we may tend to become fatalistic and cynical about the possibility of restoring cultural coherence. And so on. What we believe about our problems will take us a long way toward what we will do about them.

I intend to argue here for a way of seeing our cultural problems that has been inspired by Michael Polanyi. And since this view is inspired by Polanyi, rather than extracted from his writings, the paper should be

considered exploratory rather than expository.

It will be my purpose to enucleate the thesis that western culture is at a critical point in its intellectual history. What we are witnessing is the fundamental breakdown of order which results from the failure of a mythos to create the conditions for cultural coherence. We are experiencing a crisis of plausibility. The intellectual foundation of western culture is crumbling, leaving its members with no ground for shared commitments. There is nothing new in this thesis. It has been a common suspicion since Nietzsche's Zarathustra proclaimed the death of God. Yet there is value in developing the thesis once again if it promises to advance our understanding of the epistemology of mythos and disclose to us the possibility of reconstructing the conditions for mythopoesis. It is my view that Polanyi's theory of meaning and its insinuated ontology hold this promise.

I. Mythos and Tacit Knowledge

By *mythos* I mean a nexus of signs, symbols, stories, metaphors and paradigms which presents to us an integration of cosmos, ethos, and pathos. To put it differently, mythos is a symbolic world in which the full range of human experience (intellectual, moral, aesthetic) is synthesized and interpreted. It is only recently that we have become fully aware of the power and necessity of myth. Mythos, we now recognize, is a necessary condition for cultural coherence. To suppose that culture can long survive without mythos is unthinkable. It matters far less *what* mythos is shared than it does *that* a culture has a shared mythos.

Mythos is essential to the coherence and survival of culture because of the various fundamental ways in which it patterns the intellectual life of a culture. A shared mythos provides members of a society with a complex set of intellectual, moral, and aesthetic dispositions of character. That is, it provides us with the basis for making intuitive judgments and reactions. Mythos defines possibilities, informs actions, orients individuals, generates root meanings and enriches language, determines attitudes, orders experience, structures expectations, shapes values, and facilitates communication. More concisely, mythos shapes the mechanisms by which we carry out most of our unreflective behavior. It also provides us with the ability to interpret and predict the behavior of others. Without the intuitive structures created by mythos and without the nimble responses they make possible, members of a society become excessively deliberate, indecisive, and unable to act. And if these structures are not shared, members of a society will continuously surprise, offend, and misunderstand one another.

The shared mythos of western culture has been the Judaeo-Christian mythos. Despite the many variations on this mythos that have been generated over the centuries, there remains a mythic core which has provided the basis for cultural coherence. The biblical mythos achieved for western culture what must be achieved by any persuasive mythos: a compelling integration of cosmos, ethos, and pathos. This integration gives us an ordered cosmos infused with moral imperatives and a sense of the sacred. In the biblical mythos we are told that the world was formed out of chaos by a creator God, and that this world is structured in a certain way

(firmament above, waters of the deep below, etc.). These are cosmological elements. At the same time, we are told that the creator God expects man to obey his will (as expressed in the Law). This is ethos. Finally, we are informed of the proper attitudes of man vis-a-vis creator and creation (fear and dominion). Here is pathos.

The uniqueness of mythos is that these elements are undifferentiated; they are interdependent. If man's attitude toward the creator is not appropriate he will begin to act in ways displeasing to the creator. This will in turn jeopardize cosmic order. Here we encounter the splendor of synthetic vision. Facts, values, and attitudes are all of a piece. Mythos is apprehended as a symphony. Cosmos-ethos-pathos, playing together, enable us to behold reality in a manner that cannot be achieved by a discrete reading of cosmology, ethics and aesthetics. There is a reality disclosed in the integration of cosmos, ethos, and pathos that cannot be reduced to any of its constituents. Without this essential integration of our experience, there is a loss of cultural coherence and of a sense of personal wholeness. Without a shared mythos science, politics and the arts become autonomous and isolated regions of experience ruled over by experts who are unable to communicate effectively with one another.

Michael Polanyi's theory of knowledge provides the resources to enable us to construct an epistemology of mythos. It can inform our understanding of how myths acquire meaning and how we rely upon them to interpret our experience.

All meaning, Polanyi says, arises out of tacit knowledge. What this means is that in every act of knowing there is a *tacit* awareness of particular clues which we rely upon to achieve knowledge of something of which we are *focally* aware. The skillful use of any instrument is a feat of knowledge which illustrates this principle. Consider the use of a hammer to drive a nail (one of Polanyi's favorite illustrations). When driving a nail I am tacitly aware of the hammer in my hand as I focus upon the nail. The nail is the *object* of my attention (the *distal* term of knowledge), while my bodily sensations and their extension into the hammer are the *instrument* of my attention (the *proximal* term of knowledge).

Polanyi claims that all acts of human knowledge exhibit this same fundamental structure of relying upon some proximal term (e.g., body and hammer), of which we are tacitly aware, for attending to some distal term (e.g., the nail) of which we are focally aware. Polanyi also speaks of *dwelling within* the proximal term for the purpose of *dwelling upon* the distal term. We obviously dwell within our own bodies as we attend to things beyond them. But we often extend our bodies as well by the use of instruments. The hammer is an example of such bodily extension. Another example would be a blind man who extends his body by using a white cane to guide himself. The blind man can be said to be *indwelling* the cane, much as he indwells his own body.

Intuition is the process by which we learn to perform such acts. Thus, intuition can be viewed either in terms of the "skill" of indwelling or the "vision" of comprehending some focal object: as integration (of proximal clues), or as illumination (of focal object). The intuitive process can be described from either pole of tacit knowledge. The etymological

ambiguity of the word – it could mean *intus-ire* (to enter into), or *in-tueri* (to see into) – appears to encourage such descriptions. When we intuit something we “enter into” a proximal term to become tacitly aware of particulars from which we “see into” the distal term of which we are focally aware.

These principles illustrate the structure of meaning. All meaning, Polanyi argues, has a *vectorial* structure. That is, the proximal term of knowledge acquires meaning as we attend *from* it *to* a distal object. This is the case when the body alone is the proximal term and also when the body is extended by the use of some instrument (a hammer, a cane, a map, a graph, words, symbols, myths).

Interpretative frameworks are the most complex instruments of meaning we employ. An interpretative framework is a set of symbols and concepts upon which we rely to articulate knowledge. Biology, for example, is an interpretative framework which articulates knowledge about living things. Engineering is an interpretative framework which articulates knowledge of operational principles. A mythos is an interpretative framework which articulates an integration of all human experience: intellectual, moral, and aesthetic. As such, mythos is the most comprehensive framework employed by members of a culture. It, more than anything else, *defines* culture.

Mythos, too, acquires meaning by the process of indwelling. We attend from the particulars of a mythos to behold its vision of a cosmos infused with moral imperatives and a sense of the sacred. A culture can maintain an identity only if its mythic vision is collectively indwelt. In fact, the extent to which a cultural mythos is shared is an index of the coherence of culture.

All cultures develop ritual procedures by which the indwelling of a cultural mythos is assured. Where these procedures are effective the members of a culture will have a common and secure world view. The primary vehicle for enforcing the indwelling of the Judaeo-Christian mythos for western culture has been the worship service. Repetitive participation in the Christian liturgy enables initiates to achieve the mythic vision as it allows seasoned devotees to reaffirm the vision. Liturgy means “work of the people” (from *laos* + *ergon*). It represents the work involved in achieving an indwelling. This continuous indwelling activity keeps the meaning of the mythos alive in the same way that practice keeps a skill alive. A living mythos creates the conditions for cultural coherence by succoring a society of individuals in the maintenance of shared commitments.

II. The Mechanics of Disillusion

Nothing is forever. There was a time, not long ago, when humankind did not exist. And there will be a time, perhaps not far off, when we will have ceased to exist. The same is true of myths. They come and they go. Myths are born, they burgeon, they become implausible, and they die. But for all that, they are no less necessary for the maintenance of cultural coherence. So if there is reason to suspect that a culture is becoming disillusioned with its myths it is a matter of deep concern.

We are witnessing such a disillusionment in western culture in our own times. It is perhaps the most acute intellectual problem in the history of western culture since antiquity. I am aware that to advance an understanding of a problem is not to accomplish a solution. But I proceed with the assumption that such understanding may help to clear the way for solutions. What I hope to show in this section is how Polanyi's theory of meaning helps us to understand how it happens that myths sometimes lose their grip on the imagination of a culture; how they suddenly become implausible and no longer function effectively as the proximal term of knowledge. The meaning of interpretative frameworks is acquired and maintained by the process of indwelling. By the same principle, they may lose their meaning when there arise obstacles to this process. Obstacles to indwelling disrupt the structure of meaning by shifting our attention from the object to the instrument of knowledge. When this shift occurs we come to dwell *upon* the proximal term rather than dwell *within* it. Consider how this shift of awareness takes place in a simple example. When I play a game of cards I am dwelling within the deck of cards and the rules of the game. The cards and the rules constitute an interpretative framework within which I strive to achieve the objective of the game. Suppose that during a game the dealer hands me a card displaying thirteen green stars. Instantly my indwelling is obstructed as I am compelled to turn away from the game's objective to focus on this strange green thirteen of stars. I lose my place in the game and become preoccupied with the interpretative framework itself. I am now focally aware of the cards and rules of which I was previously tacitly aware. To resume play is out of the question because the game has lost its plausibility.

This is roughly the manner in which myths lose their plausibility. When members of a culture begin to have experiences for which they are unprepared by the intellectual structures of their mythos there occurs a shift of awareness. All of a sudden the mythological framework becomes an object of attention rather than an instrument of meaning. Myths have meaning when they function as the proximal term of knowledge; and they cease to have meaning when they become the distal term.

This shift has taken place in the minds of many in western culture. Fewer and fewer of us find it possible to indwell the Judaeo-Christian mythos. There are glaring obstacles to indwelling which preclude an apprehension of the mythic vision. The fundamental obstacle is that the root metaphor of the mythos — the "person" of God — is no longer plausible at the literal level of understanding. Plausibility at the literal level is what differentiates mythos from fantasy. Many have become disillusioned with the mythos because they no longer feel it is true.

Of course, it must be said that truth is not entirely relevant for mythos. The most important feature of mythos is that it is shared; that it is effective in grasping the imagination of an entire culture, and thus in shaping the consciousness of its members. Yet matters of truth do have an indirect and unspecifiable bearing on this effectiveness. The cosmological elements integrated into mythos, for example, may be set out in propositional form and tested for truth value. The same holds for the moral and aesthetic elements in mythos. One does not judge mythos right or wrong, beautiful

or banal. But it is appropriate to raise these questions against the moral and aesthetic particulars of a mythos.

The effectiveness of mythos itself, however, transcends these subsidiary critiques. It is conceivable (though unlikely) that each of the cosmological, moral and aesthetic elements in a mythos be judged independently untenable while the mythos remains effective. In fact, any combination of tenable and untenable constituent elements is compatible with the total effectiveness or ineffectiveness of a mythos. This is why, for example, the completely falsified cosmology of the biblical narrative has not resulted in the total discreditation of the Christian mythos as a whole. While the falsification of biblical cosmology has for many left the mythos implausible, it has not had the same effect on everyone. For some, the Christian mythos is validated on the strength of its moral vision alone. This strange relation between the mythos as an integrated whole and its constituent cosmological, ethical and aesthetic elements has made the whole discussion of the verifiability of religious beliefs a particularly muddled one.

The ideal situation prevails when each of the constituent elements integrated into mythos is tenable. That is, when mythos integrates the best we know cosmologically with the best we know ethically and the best we know aesthetically. A mythos that can do this will be a powerful manifestation of what culture holds to be true, good, and beautiful. These were the conditions which prevailed when the great myths of the world were first generated.

But they are no longer the conditions of our culture. Many have become disillusioned with the western mythos because of a loss of literal plausibility. The idea that there is a personal God who created the cosmos and whose will defines right and wrong and whose power elicits awe strikes the modern mind as an absurdity. Personality is simply not an apt metaphor for integrating cosmos, ethos, and pathos. We know too much about personality. We know the self to be finite and largely determined by social and genetic structures. And we know that without these structures there is no self. Such knowledge does not allow the personal metaphor to generate an integration of truth, goodness, and beauty. We are more inclined to understand personality within a larger context than to understand everything within the context of personality. It is the inappropriateness of this root metaphor that has led to the implausibility of the Judaeo-Christian mythos. The metaphor no longer has the power to compel the imagination of the modern mind.

Disillusionment with the particular mythos of western culture has led to a widespread depreciation of mythos as a cultural form. For some time now it has been fashionable to speak in terms of a progression from mythos to metaphysics to science. There is a development here, but for the purpose of cultural coherence it has to be seen as a process of degeneration – a process of narrowing our vision, emasculating our experience and obstructing our possibilities for genuine wholeness. The systematic expunction of mythos as a cultural form has produced a cultural character which is narrowly objective in its understanding and individualistic in its commitments. In such a culture the personal wholeness and cultural

coherence that are a function of synthetic vision are impossible to achieve. Instead of wholeness and coherence we find a fractured existence in which there is no dialectic between our knowing, our doing, and our feeling. Our capacity for synthetic vision has atrophied to the point where the conditions for mythopoesis are lost.

III. Reconstructing the Conditions for Mythopoesis

From what has been said we may suppose that a restoration of personal wholeness and cultural coherence requires a restoration of our capacity for synthetic vision. That is, the kind of vision that allows us to see systemic relations between what we know, what we do, and what we feel. The major obstacle to this capacity is our conviction that knowledge is objective and scientific, while moral values and aesthetic dispositions are subjective. As long as this epistemological dualism prevails in our culture, we will be unable to behold a cosmos infused with moral imperatives and a sense of the sacred. Old myths will die under these conditions and new ones will not emerge. A restoration of personal wholeness and cultural coherence, therefore, calls for a critique of these views along with a reconstruction of the conditions for mythopoesis.

It is precisely in this dual critical/constructive enterprise that Polanyi has made a major contribution to contemporary philosophy. On the critical side, Polanyi has argued consistently and effectively that the demand for total objectivity in knowledge claims is without support. He has done this by working out a rigorous phenomenology of science in which he shows that even the most "objective" scientific knowledge claims rely, in critical ways, upon unspecifiable acts of intuition. We are unable to understand, discover or uphold scientific knowledge without this decisive role played by the intuition.

Polanyi's constructive work has focused on articulating the features of a post-critical epistemology which affirms the continuity of all knowledge. This view (which is called "Personal Knowledge") holds that human knowledge, for all of its variations in form, is essentially monogenic. The salient features of Personal Knowledge may be summarized in the following manner:

- a) Personal Knowledge exemplifies the logic of *problem solving*. All our knowledge comes to us as a result of solving particular problems. The acquisition of knowledge falls into two stages. In the first we perceive and become bothered by a problem. In the second stage we gather data and grope toward a solution, assisted ultimately by an intuitive feel for what might be an acceptable solution.
- b) Personal Knowledge *satisfies intellectual passions*. Knowing is never unmotivated. We are driven by a primordial urge to understand and control our environment. The movement from problem to solution is at the same time a movement from dis-ease to gratification and joy.
- c) Personal Knowledge is a *theory of meaning*. All meaning is

- instrumental. Something is imbued with meaning by dwelling within it, as we do our own body, for the purpose of attending from it to something else from which its meaning is derived. Meaning is always displaced away from the body – subject (proximal) toward the object – world (distal).
- d) Personal Knowledge is based on the *model of perception*. Perception is both fundamental and essential in acts of knowing. Perception is the paradigm of all knowledge and all knowledge presupposes perception.
 - e) Personal Knowledge makes *contact with reality*. The distal term of knowledge is always some aspect of the real world which is felt to be discovered or disclosed by our solutions to problems, not *created* by them. This realistic feature of Polanyi's theory provides the theory of truth with its universal pole. Our knowledge is held with *universal intent*.
 - f) Personal Knowledge is an *aesthetic theory*. The source of our joy in solving a problem is our sensitivity to rationality in nature. Our personal appraisal of beauty in terms of clarity and coherence is registered as a mark of truth; and since no formal criteria can ever be objectively justified, we ultimately accept the authority of our own judgment. This feature provides the theory of truth with an individual pole. Our knowledge is held by *self-set standards*.
 - g) Personal Knowledge has a *paradoxical quality*. Knowledge is always grounded on personal beliefs which are at the same time backed with universal intent. This replaces the traditional distinction between knowledge and opinion with the ambiguous notion of *commitment*. Knowledge as commitment avoids radical objectivism on the one hand and radical pluralism on the other.
 - h) Personal Knowledge has a *transforming quality*. The achievement of knowledge grants us a new mode of being in the world. We are thus driven by our intellectual passions to ever new levels of existence. The intellectual and practical life of man appears as a continuous project of self-transcendence.

Personal Knowledge is also a theory of cultural continuity. The features of Personal Knowledge are exemplified throughout the entire range of knowing, from purely tacit acts of perception right through to articulate feats of knowledge expressed in the interpretative frameworks of mathematics, natural and social science, technology, the arts and religion. Polanyi wants to show that the various theoretical disciplines of culture are formally continuous. But at the same time he wants to present an understanding of culture which obviates the tendency to reduce knowledge to a single interpretative framework. That is, he wants to affirm the formal continuity of intellectual disciplines while perserving the material integrity of each.

This places Polanyi in opposition to reductionism. The extreme reductionist position claims that all authentic problems are problems of physics and chemistry, which means of course that all solutions

(knowledge claims) are to be cast in the language of physics and chemistry. Polanyi argues that such a view simplifies and distorts the meaning of much of human experience. Articulate interpretative frameworks represent the significance we attribute to our experience of reality. They function, as it were, as *maps* of our experience. But it is ridiculous to suppose that the only framework adequate for interpreting our experience is that of physics and chemistry. For example, physics and chemistry can never provide a satisfactory interpretation of our experience in observing a properly operating machine. The principles of telenomic operation that are necessary for such an interpretation are simply not known to physics and chemistry.

The discipline in which such principles are known, i.e., technology, represents a *level of experience* that is logically distinct from that interpreted by physics and chemistry. Polanyi thinks it is possible to identify a hierarchy of experiential levels such that the interpretations of each level cannot be reduced to the terms appropriate to neighboring levels. For example, knowing a machine cannot be reduced to knowledge of its atomic configurations, a factory is not explicable in terms of its machines, a corporation is not reducible to its factories, an industry is not reducible to its corporations, an economy is not reducible to its industries, a nation is not reducible to its economic system, and so on. To have knowledge of something means to grasp its most comprehensive features. At each higher level there are comprehensive features of our experience which cannot be interpreted in terms of the next lower level. Each successive level requires additional powers of understanding to grasp its comprehensive features. In Polanyi's terms, the knowledge at each successive level requires a greater measure of participation (a greater depth of indwelling) on the part of the knower.

Experience, Polanyi maintains, can be compared in expanse. Some problems of interpretation require that we take into account larger regions of human experience. As we interpret wider regions of experience our interpretative frameworks must necessarily become less precise, and this calls into play a greater personal contribution on the part of the knower. Consider the greater precision in the interpretative frameworks of the exact sciences as compared with the frameworks of sociology or history. But we must also recognize that the region of experience accounted for in the exact sciences is proportionately less.

To illustrate, suppose I wanted to interpret my experience of a landscape by constructing a map of it. This map would serve as an interpretative framework on which I may rely for additional future interpretations of experience. Let us say further that the largest map I can conveniently handle is a square paper of twenty-inch sides. Were I disposed to map out the topology of my office on this twenty-inch square sheet of paper I could easily do so. And if I had confidence in my map, I would not expect to get lost when relying upon it to keep my bearings. Now let us suppose that I want to construct a map of this city, again on a square of twenty-inch sides. This map would represent a larger landscape and would be necessarily less precise than a map of my office. The city map would require a greater personal contribution to use than would a map of my office, but it would

also apply to a larger region of my experience. Likewise, maps of this nation, continent, and hemisphere would be successively less precise and would require greater degrees of imagination in order to resolve indeterminacies. But at the same time they would be successively more comprehensive of my experience.

We have said that knowledge is acquired by solving the problems of interpreting our experience. And now we see that these problems come to us at different logical levels, which requires the construction of a hierarchy of interpretative frameworks. Each framework serves to map out a certain level of experience and is limited by, but not reducible to, its neighboring frame of discourse. We thus have the cultural forms of the exact sciences transcended by the forms of technology and the biological sciences, then by the social sciences, and so on, right up to the most comprehensive interpretative framework: mythos.

Polanyi talks about an "ontological equation" which assumes there are structural gradations in the real world corresponding to the logical levels in our knowing. It follows from the ontological equation that reality is a complex of successive levels of organization, each level characterized by different manifest comprehensive features. Reality "manifests" in different ways. At one level we have reality manifested in ways that can be interpreted by physics and chemistry. But it is also clear that we experience reality manifesting comprehensive features that can be grasped only in terms of operational principles. Here we meet with the assertion that animals and machines exist at ontological levels distinct from those of atoms and molecules. In other words, the reality of a machine is *more than* the reality of its atomic and molecular composition. Its *organization* is real.

The realities of physics determine the specific *boundary conditions* beyond which machines cannot operate, that is, beyond which they cannot exist as machines. We might even say that all realities are *limited by* the realities of physics. But this is not to say that all realities are *limited to* those of physics. At the higher levels of this hierarchy we must admit to realities that are intangible. Nations, economies, industries, corporations, etc. are intangible realities, even though they are rooted in and necessarily limited by tangible realities.

All of this is brought to bear upon my argument with the assertion that in Polanyi's work we find an epistemological legitimation of the synthetic imagination which is essential for mythopoesis. We also find expression of an ontology which defines the plausibility limits that must be observed in order for a new mythos to be effective.

I have argued that the metaphor of the personality of God fails to engage the imagination of the modern mind because it is patently implausible at the literal level. This implausibility has created obstacles to the indwelling of the Christian mythos among many members of western culture. So many, in fact, that we are led to conclude that the mythological foundations of personal wholeness and cultural coherence are in a state of rapid degeneration. This development has created a cultural identity crisis of considerable magnitude and has disrupted the maintenance of shared

commitments. We are suffering from lack of an adequate mythos.

I have further argued that the likelihood of generating a new mythos is obstructed by a pervasive epistemological prejudice against the synthetic imagination that is necessary for mythopoesis to occur. Mythos is generally suspect in our culture because it lacks the precision and objectivity of scientific knowledge claims. The epistemological conditions for mythopoesis do not exist for us.

I am now suggesting that the theory of Personal Knowledge provides us with the resources for reconstructing the epistemological conditions for mythopoesis. Polanyi's analysis exposes the flaws in the claims of objectivism and presents us with a view of human knowledge which legitimates and encourages wholistic vision. In the context of Personal Knowledge mythos emerges as the articulate framework which attempts to interpret the totality of human experience: intellectual, moral, and aesthetic. To refuse the mythopoetic task because of epistemological prejudice would be to frustrate our innate intellectual passion for understanding.

Polanyi's vision of a hierarchy of interpretative frameworks insinuates a hierarchy of being which recognizes the ontological integrity of intangible as well as tangible realities. There are clues here for an ontological legitimation of mythopoesis. We can now speak of the reality of values and beauty together with the reality of cosmos. A cosmos infused with moral and aesthetic meanings is, by this view, plausible. But this view also places limits on the range of plausible realities. What we recognize as plausible at the more comprehensive levels of being must conform to what we know about less comprehensive levels. This means that the natural sciences place plausibility limits on the social sciences. It also means that both the natural sciences and social sciences place limits on what may be regarded as mythologically plausible. Any attempt at mythopoesis which hopes to appeal to the imagination of western culture must at the very least avoid rooting itself in a metaphor that is offensive to what is known by the natural and social sciences.

IV. The Restoration of Commitment

Once the epistemological conditions for mythopoesis are reconstructed, and once the plausibility limits of a new mythos are recognized, what remains is to restore the sociological conditions for mythopoesis. This is a practical concern that has to do with creating the structures for conviviality in which a dialectic of cosmos, ethos, and pathos can take place. This requires opportunities for specialists in science, policy making and the arts to open and explore alien regions of experience. The cross-fertilization of interpretative frameworks has obvious benefits for individual disciplines. But we can also expect the interplay of cosmos, ethos, and pathos to generate the capacity for wholistic viewing of reality. Those active in the exchange will strive for comprehensive maps to interpret broader ranges of experience. Their experience will disclose to them that they live in a moral and sacred cosmos.

A number of specific suggestions can be made toward the conversation

of cosmos, ethos, and pathos. Educational institutions have the kind of influence that is critical in this regard. To begin with, schools would do well to resist pressures to introduce early specialization into their curricula. At the university level science students should be required to study the history of science. Without historical perspective scientists tend to credit their disciplines with more objectivity than they deserve. Science students should also be expected to grapple with the moral issues disclosed by science. Professional publications might provide considerable leadership by publishing cross-disciplinary articles. More pressure ought to be brought to bear upon our politicians to allocate funds for interdisciplinary projects. More money should be available to support community adventures in the arts. Structures should be established to assure that politicians increase their knowledge of science and the arts. Artists, too, should learn to take inspiration from science. The arts might even in some cases be taught through a treatment of scientific material, and science through art. Scientists and artists should be encouraged to enter into politics. Perhaps the most fruitful contribution toward the facilitation of communication could be made by television. The present state of television programming in America is degenerate. Television should be rescued from the control of commercial interests and set upon a more constructive course.

These suggestions are less than half-baked and not very imaginative. I include them only to indicate the types of things that must be done to construct the social conditions for mythopoesis. It is a matter of constructing possibilities for social and intellectual interaction that would encourage synthetic viewing of human experience.

When the epistemological, ontological and sociological conditions for synthetic vision are achieved we can expect a new tradition of mythopoesis to emerge. The character of a new mythos is difficult to predict but there are enough clues at hand to make conjecture irresistible. We might expect that mythopoesis will first emerge in the ranks of the disaffected members of western culture: those who no longer respond to the established mythos, whether for reasons of its implausible cosmology or its archaic morality. It is here that we find a tenuous sense of community and a groping for coherence. When we begin to see occasions for solidarity among the disaffected we shall feel the tremors of a new mythos.

Of one thing I am fairly certain: that the new mythos will make a fresh plea for justice. And it will very likely do so with a somewhat larger perspective than we have known. The appearance of monotheism in ancient Israel represented a larger perspective than that of provincial dieties, and the Christian mythos represented a larger perspective than that of legalistic Judaism. We await a perspective that will reduce ethnic, nationalistic, and religious differences to insignificance.

We await the genesis of a new metaphor that will function as the personality of God once did: to integrate our knowing, our doing, and our feeling. Carl Sagan, in his spectacular series, *COSMOS*, has developed the metaphor of "universe" in such a way that it comes very close to this mythic function. I make this reference not to anoint Carl Sagan as a

prophet of some new religion, but only to affirm the promise of mythopoesis for our troubled times. Sagan gives us a vision of human life precariously lodged in this time and place in the universe. He tells us of our origins as sons and daughters of the universe. He says we are unique: we are the universe coming to know itself. He warns us of actions that will disturb the delicate balance of life. He gives us a cosmic perspective which seems to imply a morality. We begin to see a New Law in his description of the conditions for survival. We see instantly the idiocy of war. We are humbled by the astonishing beauty of the universe. We begin to lose sight of the boundaries between science, morality, and art. The confusion of our intellectual, moral and aesthetic sensitivities results in a clarification of our commitment to newly disclosed ideals. It is a compelling vision.

Sagan's vision of the structure of the universe, its splendor, and our responsibilities in it is compelling because it integrates the best we know to be true with our passions for goodness and beauty. Nothing less will effectively evoke commitment in us, for nothing less will excite our imagination to behold ideals that transcend our immediate concerns.