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Merritt Bailey  
Business Manager

**Iowa State Humanities Symposium\***

**MYTHS and MINDS:  
Games People Think**

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**November 6-7, 1975  
Iowa State University  
Ames, Iowa 50011**

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***Edited by James K. Folsom***

**Moderators:**

James K. Folsom, Department of English, University of Colorado, Boulder, Colorado 80309; Robert Georges, Folklore and Mythology Group, University of California at Los Angeles, Los Angeles, California 90024.

**Keynote speaker:**

Dell Hymes, Dean of the Graduate College of Education, University of Pennsylvania, Philadelphia, Pennsylvania 19174.

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\*Sponsored by the College of Sciences and Humanities, Wallace A. Russell, Dean, Iowa State University.

## FOREWORD

This issue of the *Iowa State Journal of Research* consists of papers presented at the second Iowa State Humanities Symposium, "Myths and Minds: Games People Think," convened in Ames, Iowa on November 6-7, 1975. The Symposium was sponsored by the College of Sciences and Humanities, Wallace Russell, Dean. The committee responsible for organizing the Symposium consisted of the following faculty members of Iowa State University:

Robert Bataille	English
Carl Bleybe	Music
Scott Consigny	English
James Dow	Foreign Languages
Burt Drexler	Speech
Robert Hollinger	Philosophy
Buford Norman (Chairman)	Foreign Languages
Ted Solomon	Philosophy
Jane Vallier	English
William Zimmerman	Applied Art

Professor James K. Folsom, Department of English, University of Colorado, Boulder, and Professor Robert Georges, Department of English, and Folklore and Mythology Program, University of California at Los Angeles, moderated the Symposium, along with Professor Dell Hymes, Dean of the Graduate College of Education, University of Pennsylvania, who delivered the keynote address. The Symposium could not have taken place without the generous support of Dr. W. Robert Parks, President of Iowa State University.

This publication is made possible by a generous grant from the Graduate College of Iowa State University, Daniel J. Zaffarano, Dean. It would not have been possible without the cooperation of Ellis Hicks, Editor of the *Iowa State Journal of Research*.

The theme of the Symposium was set forth as follows:

Much, if not all, thought seems to be carried out through certain mental structures, which, much like the rules of certain games, direct and, therefore, limit it. This is true of all societies and all levels, from preliterate man to the most objective of modern scientists and philosophers. These structures may take many forms—beliefs, customs, taboos, prejudices, rites, conventions, rules, theories, hypotheses, *Weltanschauung*, etc., and may influence our behavior whether or not we are cognizant of them.

These mental structures are often grouped under the term "myths," and include both similarities and differences—similar types of mental organization that permit many different sorts of people to think in the same way and to come to the same conclusions independently, as well as different types which keep people from understanding one another. These differences—and similarities—do not necessarily correspond to established cultural, linguistic, national, or professional groups; speakers of the same language, members of the same culture or the same academic discipline often experience communication problems—sometimes without realizing it—because of these different modes of thought, *i.e.*, of different myths.

Nineteen papers (grouped approximately as they are in this issue) were read and discussed at the Symposium. Those papers printed in their entirety were judged to possess sufficiently wide interdisciplinary interest to warrant publication as they were presented at the Symposium, with revisions. Others, equally worthy but more specialized in scope, have been included here as abstracts.

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## INTRODUCTORY REMARKS

The title selected for the second Iowa State Humanities Symposium is, indeed, a timely one. All the key words in that title "Myths and Minds, or Games People Think" are currently under scrutiny by many contemporary thinkers, and conceptions of what they identify are in a state of reassessment and flux. *Myth*, for example, was for long characterized as a phenomenon that constituted a manifestation of prelogical or unscientific thinking; and *mind* was often distinguished from body and regarded as an autonomous entity that could be contemplated and comprehended in isolation from other phenomena. *Games*, it was felt, were distinctive because of their nonutilitarian nature and their entertainment function. But all that has changed or is in the process of changing. For with an increasing concern with social and cognitive processes and an accompanying shift in focus from the outputs or products of behavior to the dynamics of behaving, the human species and the individual human being have become the sources of wonder and the subjects of inquiry. This has raised new questions and has given old questions new meanings.

Are the acts of creating and symbolically characterizing Edens different from the acts of constructing and communicating the essence of scientific models, or are the two more similar than has long been assumed? Are the orders that we discern in our natural and social environments inherent, or do we conceptualize those orders because they are the ones we wish to find? Do the scientist and artist operate cognitively in decidedly different ways, or are the seeming differences more apparent than real? Is mythmaking supplanted by other modes of thinking as man evolves up the proverbial evolutionary ladder, or is it fundamental to our existence as human beings? Are games frivolous diversions that enable us to escape reality, or is life itself a game or series of games whose rules and restrictions we are just beginning to comprehend? These are some of the many complex, yet intriguing questions that are either suggested or addressed by the participants in this symposium.

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## INTRODUCTION: OF MYTH AND MAN

*James K. Folsom\**

In his incisive way T. S. Eliot's redneck-cum-philosopher Sweeney once observed "I've gotta use words when I talk to you." Like all oracular remarks—mythic remarks, if you will—this apparently straightforward comment conceals a deeper ambiguity. On the surface, it appears to be a proposition to which any reasonable man will immediately give assent; and yet, the more one looks at it, the less straightforward it appears. Sweeney does not say that everything can be put into words; nor does he imply either that communication can only be verbal or that, if it could, this would necessarily be a good thing. His statement, for all its apparently platitudinous optimism, speaks finally not so much of hope as of that sadness which comes to the thoughtful observer upon his realization that life is in many ways inadequate to the potential of the human spirit. Sweeney's remark is much closer in its thrust to that bitter wisdom of the biblical proverb that "hope deferred maketh the heart sick" than it is to the bumper sticker which cheerfully exhorts us to "honk if you love Jesus."

To Eliot, who of all the poets that have formed contemporary taste is probably the most concerned with the ambiguous nature of language, words are always "worn-out tools," and the imperfection of man's earthly estate is aptly emblemized by the inadequacy of the words that must be used when we speak together. In their very nature words, the building blocks of language, must always be out of date, for they represent an attempt to make sense of a burgeoning unknown reality in terms of an outdated perception. St. Augustine speaks to the approaching Middle Ages in the language of Virgil; Martin Luther throws a sixteenth-century inkwell at an existential devil; Cotton Mather confesses his Freudian anxieties to his diary in the mannered prose of John Calvin; and Freud himself speaks most cogently to the twentieth century in the language of Sophocles.

For all these, and the list could be indefinitely extended, language represents more or less straightforwardly the tragic dimension of human nature. Man is always trapped between an outworn past and an unknown future. He is truly a wayfaring stranger, to pick up a modern version of a very ancient metaphor, travelling through a world of woe. Language, then, which sets man apart from the animals and which gives him dominion over them in most mythologies, as it does in the Judaeo-Christian one, sets him equally as far away from God. The legend of the tower of Babel is instructive here, for in this story man's ability to communicate is destroyed lest his presumption lead him to mount into heaven (It is not beside the point to remark that man does not speak in heaven: he sleeps in Abraham's bosom and during his waking moments joins from time to time in song. Contrariwise, at least if we may believe Milton, upon their banishment to Pandemonium the devils lost no time in establishing a literary and debating society).

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Words, in sum, are ambiguous signs, pointing in many not always consistent directions. A sign of man's superiority to brute creation, they are equally a sign of his separation from what, in traditional mythologies, is called God. They express not being itself but rather man's apprehension of that being which, in its very nature, cannot ultimately be known. When all of us say, in praise of a friend or associate, "We speak the same language," we are really politely commenting on Sweeney's statement. For we mean in fact something precisely opposite to what we say. We affirm not that we speak the same language, but that our perceptions of things are held so nearly in common that speech itself is unnecessary. We do not have to use words because we need not talk. If we speak the same language we need not verbalize it.

This notion that reality cannot finally be known, let alone spoken of even though it can be assumed in common, has a long and not totally fortunate history in Western thought. One of the less happy legacies of Greece to subsequent Western culture has been the creation of a posited (*not*, it should be noted, a *demonstrated*) "real" world which is, to ordinary apprehension at least, less "real" than the "apparent" world which allegedly depends upon it. Plato nicely had it both ways in his famous proofs of the existence of God. God exists, according to the ontological proof, because I can conceive of him; and, according to the argument from common consent, God exists because everybody else conceives of him too.

Perhaps more interesting in terms of the attitude of mind it betrays is the fascination with names, which purports to offer us at least partial dominion not only over the animal world, as it did Adam and Eve, but over the spiritual world as well. Central to Western magic is a long tradition of "naming the demon," which gives one control over him. The rite of exorcism, to take a clear example, consists ultimately of a long catalogue of all the known demons, which the exorcist reads to the unfortunate victim. Sooner or later the exorcist will inevitably come upon the name of that specific demon by which the subject of the rite is possessed. At this point the demon will *answer* the exorcist. He then can be drawn from the possessed person simply by calling his name: *Come forth, Asmodeus! . . . or Azazel, or Belial, or whatever.*

It is significant here that the ability to name is directly related to the power to control, or, put more strongly, that the power to control is a direct function of naming itself. With the exception of his name, the exorcist knows no more of the nature of the demon at the end of the rite than he had at the beginning; but this knowledge alone gives the exorcist power over the demon. The point is made in many a folk tale as well, most familiarly, perhaps, in the story of Rumpelstiltskin, who exacts the terrible price of a princess's first-born son unless she can guess his name, which she fortunately does. In our modern folklore as well the demon of psychic illness is driven out when the exorcist-analyst enables the patient-victim to discover the demon's name.

The basic assumption in all these cases is that our imperfect linguistic tools somehow point toward a common reality. To adapt Shelley's vivid metaphor in *Adonäis*:

The One remains, the many change and pass;  
Heaven's light forever shines, Earth's shadows fly;  
Life, like a dome of many-colored glass,  
Stains the white radiance of Eternity.

Yet it is certainly possible to argue that this itself is a debatable assumption, and that the reasoning here is circular. Perhaps, for instance, the radiance of eternity is not white at all, but a combination of primary colors. Like Plato's forms, as Aristotle was the first to point out, the colors of eternity may be more varied and ambiguous than the colors of the phenomenal world itself. In other words, when we have no common social or cultural assumption toward the reality behind the many-colored glass, the dome collapses and we are left only with shards.

It is significant that our myths today are primarily those of myth in decline, or of a society without myth. One thinks of Eliot's waste land, his most trenchant representation of our modern world as one lacking a coherent set of values because the assumed mythic structure behind these values has vanished. One remembers Yeats's apocalyptic description of the second coming in which things fall apart and in which a prostrate world awaits the approach of some rough beast too horrible to apprehend. Against these powerful images of fragmentation the attempts to refurbish old mythologies or to construct new ones seem little more than candles in the wind. However personally satisfying the furniture of traditional Anglican Christianity may have seemed to Eliot, to most of us it appears to be only a quaint and irrelevant relic; Yeats's

search for existential meaning in the resurrected mythology of a Celtic past proved unsatisfying even to him; Hart Crane's ambitious symbolic bridge has seemed to most commentators little more than a *pons asinorum*; and the creaky symbolism of the cult of Aphrodite, which fills John Fowles' *The Magus*, appears only to make the point that this goddess, at least, is truly dead.

A story which originated very early in the Middle Ages was extensively told and widely believed until comparatively recent times. According to this tale, at the time of the birth of Christ a group of travelers, becalmed at sea, heard the tolling of a bell from the shore and a mournful voice crying "Pan is dead. The Great God Pan is dead." It is not capricious to point out that the theological school reporting the death of God (although this report, like some earlier ones, may turn out to have been greatly exaggerated) performs the same function for modern society. The difference of course is that in the earlier story it was the birth of Christ which caused the death of Pan; the present report makes no mention of God's successor. It is noteworthy that at least part of the phenomenal popularity of J. R. R. Tolkien's *The Lord of the Rings* must be attributed to its powerful evocation through the metaphor of the passing of Middle Earth of this most deeply felt myth of our time: that myth itself is dead.

And, from one point of view at least, perhaps it is. Our attempts to verify the validity of myth by searching for concrete examples of it in some past historical reality must, I think, inevitably be doomed to failure. Solomon's admonition (Ecclesiastes 7. 10) "Say not thou, what is the cause that the former days were better than these? for thou dost not enquire wisely concerning this" should be deeply pondered; for it is perhaps more relevant today than it has ever been. Various ramifications of the present "nostalgia cult," with its wishful misrepresentation of the past, obviously give Solomon his point. It is certainly easy to be unsympathetic, and to dismiss this nostalgia as regressive and escapist, which in some of its more bizarre and sentimental forms it surely is. Yet, when one stops to think of it, Plato may have a point as well: for does not our pervasive cultural search for some mythical meaning in the past itself carry an almost mystical significance? Any one collector of Tiffany lampshades or old coins may well be only an amiable eccentric; but the spectacle of a society which can support innumerable service industries engaged both in rediscovery and reconstruction of a past which very possibly never existed at all is itself worthy of thoughtful consideration.

There is, I think, a profound and often unacknowledged ambiguity in our own attitudes toward the past that can perhaps best be exposed through our own attitude toward what until recently at least has been the pervasive myth of Western society: the myth of the life and teachings of Jesus. It has long been felt—although both frivolous and sincere skeptics have never been lacking—that the validity of these teachings themselves is in some way bound up with the question of whether Jesus existed. Yet what is not always sufficiently recognized is the fact that this question may be asked and answered in two quite distinct ways. One may, as many fundamentalist Christians do, ask and answer the question within what is finally a historical context. One says, then, that Christ was a *historic* personage, an expression of the divine will miraculously made flesh at that temporal point in history, which we conveniently call the beginning of the Christian era and from which, both backward (B. C.) and forward (A. D.) in time, we date our calendars. One may also, with many other Christians, answer the question in an *ontological* way, saying that the significance of Christ's life is not primarily historical. From this point of view Christ represents not so much a historical figure as a principle of existence whose significance is primarily ahistorical. Christ is "born" in each person who accepts Him, and the Christmas story becomes a "myth." Whatever truth it may contain is beyond documentary proof. The two points of view are of course not necessarily opposed. Nonetheless, one feels that if the historical nonexistence of Christ could ever be conclusively demonstrated, the faith of the historically oriented Christian would be much more completely shattered than would the faith of his ontologically inclined brother.

The point may well be applied to other specific myths than the Christian one, and more basically toward our own attitude toward the past, and toward myth in general. For while the attempt to discover, somewhere within history, a usable myth is an attempt that may be doomed to failure in the very nature of things, the understanding that the past is metaphorical as well as actual may well give promise for some future synthesis. If we assume that the historicity of myth is only a metaphorical statement for a basically ahistorical concept, our search

for a usable past may paradoxically turn out to be the most viable hope for our collective cultural future. Further, we as Americans have a unique social predisposition for the re-discovery and redefinition of the myths we live by.

As long ago as 1835 Alexis de Tocqueville remarked in *Democracy in America*—still one of the most perceptive albeit ultimately unsympathetic discussions of the American character—that the typical American was a “venturesome conservative.” He was, Tocqueville saw, not temperamentally a radical who—as the name suggests—wishes to tear society up by the roots. The past, Tocqueville observed, is too valuable to throw away. What Tocqueville did not consider sufficiently thoughtfully is that although the past is always with the American, it does not exist primarily as the dead hand of tradition, or the outworn trappings of moribund feudalism or an established church. Rather it exists as a constantly redefined set of assumptions that can ideally be related to present and future realities. The past is not primarily significant as dogma, then, although it may be dogmatically interpreted; rather it is mythical, at least in the sense of being profoundly ahistorical in nature, a past which is interpreted primarily in terms of value rather than in terms of historical precedent.

A homely example may serve to illustrate the point. When the young republic began to define the heroes of its revolution, it turned preeminently to George Washington, the “Father of his Country,” as he was known even then. The task of ennobling—mythicizing, if you will—this historical figure fell in great measure on one “Parson” Mason Locke Weems (1759-1825), an Anglican priest turned author and itinerant bookseller. Weems’s most famous contribution to the mythology of the Father of the young nation is probably his story of George Washington and the cherry tree. (It should be added parenthetically that this widely known and beloved tale has absolutely no verifiable historical authenticity whatsoever. Indeed, it was not until 1806, six years and numerous editions after the publication of the original *Life and Memorable Actions of George Washington* that this particular memorable action was included at all.) The young Washington, it will be remembered, having chopped down a favorite cherry tree of his father’s, confesses to the crime by crying “I can’t tell a lie, Pa; you know I can’t tell a lie. I did it with my hatchet.” His father, whose actions are again true to a mythical pattern if somewhat at variance with our expectations of normal human behavior, forgives the boy because of his truthfulness.

I do not think this example is totally frivolous. For all his didactic moralism, Weems is attempting here an assessment of the worth of the young Washington’s character. The moral to the story is “Tell the truth and shame the devil,” not “Don’t cut down cherry trees.” To the youth of the new nation Weems gives a serious, if unartistically expressed, lesson, one which depends upon Washington as an ahistorical symbol of moral integrity rather than as a historical figure of primarily ecological significance. Weems has used a historical metaphor to make an ontological point.

If we keep in mind the very real distinction between myth as history and myth as ontological statement, many puzzling aspects of American life become, if not clear, at least clearer. They may be at least partially viewed not as attempts to re-create the past, but to re-define it.

Let one rather elaborate example stand for all. At the high point of the youth revolution of the late 1960’s, Boulder, Colorado—a town with which I have more than a slight acquaintance—was, depending upon one’s point of view, ravaged by hordes of young barbarians; or, contrariwise, liberated from the sterile complacency of redneck, middle-American life. It is true that little love was lost between the hostile camps of the youth culture on the one side and the solid citizenry of Boulder on the other. Yet as I look back on these often tumultuous years I am struck not so much by the superficial differences between the two parties as I am by an underlying similarity.

The physical appearance of the horde of young barbarians, first of all, was not—rightminded critics to the contrary—an especially new phenomenon on the Boulder scene. Even a cursory glance through one of the many photographic collections of “historic” Boulder will convincingly demonstrate the fact that Boulder of the late 1960’s looked rather more like Boulder of the 1860’s than did the Boulder of any intervening historic period. From the photographs of both periods seedy-looking ruffians with long hair, dressed in shabby buckskins and wearing outlandish hats, sporting Bowie knives and accompanied by packs of purportedly vicious dogs and slovenly women of low repute glare at us with not very convincingly assumed hostility. It is not the people who have changed but their surroundings, and yet precisely those

features in the photographs that enable us to date the pictures with some accuracy—the sleek policeman's motorcycle or the shabby, two-horse diligence that has seen better days—seem precisely those features that are most ephemeral. What has changed, I submit, is not life itself but our attitudes toward it.

From what I have previously termed a historical point of view, the ruffians of the 1860's seem worlds apart from the ruffians of the 1960's. The former are "colorful characters," as my father would have put it, while the latter are delinquents or ne'er-do-wells. The former are safely distanced from us by their remoteness in time. Their colorfulness is that of the lifeless replicas in a wax museum, or of the passionless images hung reverentially behind an altar. Safely dead, they pose no unexpected threat.

From an ontological perspective, however, the distinctions between the two groups appear less straightforward. It is a mistake, first of all, to assume as a verifiable fact much profound difference in terms of some kind of fuzzily defined "existential wholeness" between one time and the other. As the photographs make clear, superficial distinctions are less striking than basic similarities. A significant amount of sham and of more or less self-conscious game playing permeates both periods. Take the prominently displayed Bowie knives, for instance, common to both and as worthless in 1868 as they were in 1968. Had Jim Bowie not had the misfortune to die heroically at the Alamo, and had his brother Rezin not had the sense to capitalize on the occasion, these knives would have been superseded in the American west by a truly useful tool. But the tool itself is nothing; it is the magic of the Bowie name that is important: no quarter, cold steel, remember the Alamo (or Goliad, or Pearl Harbor, or the *Maine*), a dead whale or a stove boat, Lafayette we are here, all muddled together in a totally ahistoric but richly satisfying jumble. It is always easy to laugh, but a serious point may be made as well. In the late 1960's, as one hundred years before, the physical appearance of our Boulder riff-raff showed what was perhaps the most unsettling thing of all to its goodly adversaries, however unconscious they might have been at the time of its symbolic message: that this citizen was making a serious attempt not to deny but to redefine his own cultural past, so that his present life and future prospects might prove more satisfying.

To its often unsympathetic opponents, perhaps the most alarming development in the "youth culture" was the strangeness and somewhat ominous novelty of its members' life styles. There was, apparently, at long last a distressing new thing under the sun, a novel social structure in which people lived together without benefit of clergy, and—worst of all—without due regard to the proper separation of the sexes. This last complaint seemed the most heinous crime of any, especially to several fundamentalist religious groups, to whose moral codes the excrescences of the youth culture often seemed not only a direct but a calculated affront. Even the Mormon church, which—at least in Boulder—was relatively sympathetic to the youthful newcomers, did not choose to comment upon the striking parallel between the present and the past. For the specific criticism of polygamy and the darkly hinted-at allegations of sexual practices of the most reprehensible kinds were precisely the allegations that had been leveled against the Latter-Day Saints of a century before.

Attempts to develop this general comparison further in specific ways are not germane to my purpose here. I only wish to point out again that the Mormon church had fallen into a common human error: together with other religious groups it interpreted the rebellious youths of 1968 as representatives of an unsettling (and at least potentially very dangerous) ontological principle. Its own rebellious youths of one hundred years before, however, were viewed from a comfortable historic perspective. They were colorful characters, not social revolutionaries. The perhaps still unanswered questions they had raised about the nature of American society were not remarked at all, for to do so would have led to the consideration of some unwelcome and unsettling analogies between the heroes of the past and the villains of the present.

Precisely here, I think, we can discover, at least in a limited fashion, the present limits of our own cultural thinking about myth. Possibly it is our concern for "relevance" that has caused us to assume that all questions must be asked and answered in what I have called "historic" terms. Or perhaps it is that the scientific (ontological) questions that have characterized European thought at least since the scientific revolution of the Renaissance have come to be answered more and more consistently in technological (historic) ways.

Some time during the third century A. D. (or possibly earlier), Heron of Alexandria invented a steam engine that is vastly more efficient than anything produced for another fifteen hundred years. It was, he saw, a wonderfully practical invention: it could be used to blow on a

fire, to make a toy Triton toot a horn, or to enable a mechanical bird to sing. To the best of our knowledge these applications escaped James Watt, whose own steam engine is, from a scientific perspective, inferior to Heron's. Watt's engine has a compensating virtue, however: it will pull a railroad train.

It is foolish to ask whether Heron's or Watt's engine is the better. The point is rather that each emblemizes a very different attitude toward the world on the part of its inventor. Our own attitude is much closer to James Watt than it is to Heron. Indeed, it is only fairly recently that as a culture we have become uneasily aware that Heron poses some questions to which James Watt does not provide totally satisfactory answers. The questions Heron raises are ones of understanding; the answers Watt provides are those of control. Watt, as it were, has attempted to name the demon Heron called forth; the adequacy of his nomenclature is now being questioned.

My point is that the decline of myth or, more pretentiously, the death of God in contemporary life represents more than anything else a failure on our part as a society to ask certain kinds of questions. Our genius as a culture, Tocqueville saw, has always been the genius for practical organization. Conversely, our basic cultural failing has been to assume that all questions are practical ones, and that satisfactory answers must therefore be pragmatic.

Without doubt Tocqueville is right, as far as he goes. But with his eyes fixed on our social failings he does not always see our cultural strengths. He did not know, nor would he have understood, the evocative power over the American imagination of the image of a young boy and a cut-down cherry tree.

Later in his life T. S. Eliot was to propose, in *Four Quartets*, a mythology contrary to that of his earlier wasteland. The controlling metaphor in *Four Quartets* is not, as in the earlier *The Waste Land*, that of the sterile king awaiting deliverance. Rather it is the metaphor of the wheel, an image at once of the world of flux and of eternity. To our immediate apprehension the wheel is a powerful image of inchoate and sometimes terrifying motion. Our eyes are fixed upon the rim or upon the spokes, all moving too swiftly for the mind to grasp. And yet, Eliot reminds us, at the center of all this frenzied activity is a point that does not move, in his phrase "the still point of the turning world." Any viable mythology, be it new or old, must come to terms with both aspects of this wheel. It cannot ignore the frantically revolving spokes which move too fast to be clearly distinguished and, when seen, often seem—as they do on the stagecoaches of many a Western film—to be turning in precisely the wrong direction. At the same time myth must direct our attention toward that paradoxical nothing, which is everything that lies at the center of existence.

**I. MYTH  
and  
COMMUNITY**



## MYTHOLOGY: OLD AND NEW\*

Patrick Gerster †

The scholarly frontiers of mythology have been expanding for decades. Many observers have been forced to the conclusion that "modern man still creates his own myths, and his life is still influenced by mythical prototypes and images."<sup>1</sup> A consensus, representative of numerous disciplines and a cross section of predispositions in areas other than myth, has arisen in academic circles sympathetic to the idea that man's mythmaking spans the ages. According to the depth psychologists, it potently shapes our unconscious lives, lodged at some level of the individual or collective unconscious. According to certain literary theorists, it furnishes the archetypal themes of literature, if indeed it is not a mode of language in its own right. According to functional anthropologists, it provides simpler societies their "characters of belief," providing the social structure a coherence it might otherwise lack. One is led to understand as well that for more complex societies myths may well be the infrastructure of national ideologies. Each of us, it seems, carries around in our head a fragment of a collective national fantasy that assures us of our society's destiny and makes us accept our social obligations willingly.<sup>2</sup>

Despite all of this, however, modern man continues to believe himself mythless. He has attempted to luxuriate in the comforting illusion that he is above and beyond myth—thoroughly demythologized. Indeed, the persistent notion that modern man has escaped to the rarified atmosphere of some mythless state may be one of the dominant myths of our society. For not only does it fail to heed the conclusions of scholarly advances in depth psychology, literary theory, functional anthropology, and the study of ideology, but it runs counter to much that philosophers have been suggesting for some time. The little-known German philosopher Hans Vaihinger (1852-1933), for example, has spoken with authority on the grand dimensions of modern man's mythical universe. A sampling of his views suggests conclusively that we the mythless may in fact be in proud possession of one of history's richest mythologies. As a means, then, both of expanding the realm of myth theory and documenting the survival of myth in the allegedly coldly rational world of the twentieth century it is useful to visit Vaihinger's philosophical world of "fictionalism." Contained in his prophetic work *The Philosophy of "As If"* (*Die Philosophie des Als Ob*, 1912), it not only challenges the modern notion of mythlessness but details the many ways in which fictions are an indispensable supplement, if not an essential ingredient, of logical thought.<sup>3</sup>

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Man's day-to-day control of reality, Vaihinger says, proceeds by means of what he calls "useful fictions" or "legitimized errors." He sees that modern man, as with his so-called "primitive" brethren, stands closer to mythical modes of thinking than he may have imagined. His philosophy of fictionalism honestly reflects the word's Latin root (*figere, fictum*), meaning to shape, form, invent, pretend. As Vaihinger argues the case, man shapes and forms his world through his creative ability to invent and pretend. Indeed he goes on to suggest that it is precisely on this creative ability that the progress of civilization hinges. With Vaihinger, one can see that if man expends much of his "normal" psychological-intellectual energy in the construction of fictitious realities his predispositions for the mythical emerge not as an aberration but as typical of the species.

The practical application of Vaihinger's theories and his philosophy of "as if" is demonstrated particularly well in the area of religion. Without moralizing, he sees that the concepts of God, heaven, hell, free will, the devil, and the soul are basically names assigned to ideas which come to be taken as "believed reality." They are institutionally and socially ordained with the status of fact and thereby accepted *as if* they actually existed in the intelligible world of appearances. To say that such religious-mental fictions have had practical results, that men live by them, and that they have directly affected the course of human action and history is patent.

In a similar way, says Vaihinger, man's use of the concept of time displays a mental facsimile. "Time" is a useful fiction or mental construct to organize human existence, though it does not demonstrably or objectively exist in and of itself in the physical world. In obvious ways the contemporary system of time zones and the manipulation of "standard" and "daylight" time demonstrate the strength of Vaihinger's contention that time is scarcely the immutable commodity usually imagined. Time is, philosophically, the manipulation of eternity. It remains one of the more overt manifestations of man's proclivity for the creation of fictions.

Words, language, and speech of course are in similar ways a network of symbols reflecting the fictitious capacities of the human mind. Indeed it is largely through language that man is able to condition, shape, and construct reality in intelligible forms. "A philosophical mythology," says Vaihinger, "lies hidden in language," the major reality which language has being that which we impose or ascribe to it.<sup>4</sup> In this area, Vaihinger reflects the views of the Prague school of linguistics and the useful observation of Carl Jung that "speech is a storehouse of images found in experience..."<sup>5</sup> Language obviously is a system of arbitrary signs. Though there is of course much debate among linguists on the point, it seems clear that individuals do not willy-nilly associate sounds and concepts to fashion words. Rather, through language man attempts either an approximation of reality or an approximation of his perception of reality. There is, if you will, never a one-to-one relationship between a word and the object it signifies. In sympathy with these views, Vaihinger would have us see that mythical modes of thought, as organized in language systems, are essential to life's most critical forms of belief and action. In the creation of words, speech, and language man's creative capacity for fictions is persistently evident.

Even in such "rational" quarters of human activity as economics, mathematics, science, and law, for Vaihinger the same mental processes prevail. In man's economic activities, for example, the modern believer in mythlessness proceeds only in relation to well-known and accepted assumptions and "useful fictions." Historically, economics became an ordered system of human action only to the degree that men have been willing to accept as "real" at given times the idea of an "invisible hand" controlling the "market place," or the "law" of supply and demand.<sup>6</sup> Clearly, money itself, and more particularly the value one ascribes to it, is purely fictitious—a product of the human mind. But here again, such a fiction is useful if not indispensable in that, historically speaking, only after paper money and credit were "invented" did trade expand on a truly vast scale. Today's intricate system of monetary exchange, to say nothing of the economic growth which it supplies the fictional personality of the corporation, are possible only by means of this fictitious yet expedient instrument of thought. And in obviously related ways, the recent waves of "devaluation" and the American stock market (based as they are on psychology, "confidence," and the business "atmosphere") speak directly to the manner in which economic systems are as much products of fictitious thought as are any of the imagined worlds of the literary artist.

Beyond this, even in such "hard" disciplines as science and mathematics the concepts and mental processes are basically fictitious. Noting that "it is a pardonable weakness in science to believe that its ideas are concerned with reality itself," and that because of this the sciences have gained the character of exactness, Vaihinger goes on to argue that the supposedly real concerns in this area are of necessity but stylized and symbolized in the form of a world of accepted ideas, ideals, and fictitious mental constructs. "The entire phenomenal world, says Vaihinger, "is a conception spun out of intellectual errors."<sup>7</sup> The progress of scientific knowledge thus hinges on certain absolute presuppositions and intellectual arrangements which the scientist utilizes *as if* they were true and real—what the recent convert from science to humanism, Michael Polanyi, has called "The Tacit Dimension."<sup>8</sup> Relevant examples of such mental constructs include the concepts of the atom, absolute space, absolute time, infinity, center of gravity (Newton himself, it is said, realized that gravity was a fiction), and the so-called Alpha body (the immovable central point of absolute space). In a similar fashion, such geometric notions as straight line, circle, surface, point, equal angles, and so on, are mere notions to which nothing discoverable in experience can be said to correspond. Together, science and mathematics provide a set of rules to which one can give assent. At the same time, however, they become so much part and parcel of our habitual view of things that their fictional basis becomes obscured.

Finally, Vaihinger contends that "the term fiction is nowhere better known than in jurisprudence."<sup>9</sup> In man's legal structures and procedures the behavior of the psyche is identical to that which prevails in other areas of human activity—there is a deviation from "reality" so as to facilitate man's interrelationships and actions. "Jurisprudence is not really a science of objective reality," says Vaihinger, "but a science of arbitrary human regulations."<sup>10</sup> The examples here are legion, many provided by Vaihinger himself: certain German commercial codes declare that goods not returned to the sender within a specified period of time are to be regarded *as if* the recipient has "really" authorized and accepted them; in eighteenth-century England every crime was treated *as if* it were directed against the king, as today in most countries the state or nation is regarded *as if* it were a juristic person; almost everywhere an adopted son is regarded *as if* he were a real son; an heir who is deemed unfit to inherit is almost universally regarded *as if* he had died before the testator; until most recent times women were legally treated—if at all—*as if* they were minors, and blacks under *de jure* segregation are viewed as something less than human. Indeed, it is most often from the dominant myths of a society that the legal code draws its principles.

Despite the propensity of modern man for claiming himself mythless, in nearly all provinces of human activity—economics, science and mathematics, and law (and others to be sure)—we can see that certain presumed "facts" are simply raised by the human intellect to the rank of "real entities." We proceed through life *as if* they were real. As Vaihinger himself concludes: "We speak of them as if they are always in fact connected. In themselves they are no more real than the square root of minus one."<sup>11</sup> Indeed, it would seem that what we call our rationality is but our attempt to comprehend our own fictions. The spectrum of human activity from poetry to science, one must conclude, is at base symbolic. Ironically, the world becomes intelligible only in terms of fictions, for it is by them that we gain control of that most useful fiction of all—reality.

As suggested, however, even though the study of myth and related symbolic modes has inspired many imaginative inquiries in the academic world of both the theoretical and practical sort, the world-at-large appears nearly oblivious to these intellectual goings on. At best, modern man has felt content to side with the idea that myth is a delightfully useful term which can be used interchangeably with distortion, inaccuracy, and fallacy. Social awareness of modern myth, in short, has been tentative at best. Most in fact have not come to the point of accepting the fairly sophisticated notion that myth is a reality of life. Instead, they have accepted it as a synonym for untruth or self-deception and thereby only part of the games that *other* people think. What, one must ask, has allowed the reality of myth to pass unacknowledged if not unnoticed in America? What are the forces both contemporary and historical which have so alienated man from the idea of myth's relevance to the modern world?

The cause of myth's impoverished status in the thinking of modern men eludes simple explanation. One might argue, however, that as literature has traditionally functioned as the custodian of cultural myths, and modern society—if one is to find the views of some critics

credible—has become alienated from the written word, it is possible that society has gradually lost touch with the very thing that houses and transcribes its mythology.<sup>12</sup> Also, with today's attitudes and values sharply reflecting the impact of media on human consciousness, media's consistent message of late has been that myth is a form of falsehood which of right ought to be banished by all "right thinking men." Newspapers, television, and journalism in general have become enamored of myth so as to expose the factual deficiencies of one's assumed ideas on everything from suicide to social security, from sex to the C. I. A. In such hands myth emerges less as a reality of human existence than a rhetorical flourish. It is, if you will, more what one calls things than an entity worthy of serious consideration in its own right. Bemused by myth's obvious captive qualities, some have displayed a much too cavalier attitude toward its use and have thus been conditioned to ignore the reality which myth contains.

For Americans, of course, the consensus of the media against an understanding of the ways in which myth mandates behavior is particularly crucial in that numerous forces built into the nation's heritage have also allowed the "myth-equals-error" formula to go unchallenged. In line with the thinking of the historian Richard Hofstadter, it might be claimed that such attitudes are due to America's solid tradition of anti-intellectualism and its accompanying mind set which has led the citizenry to believe that the thoughts of academics are inherently suspicious. A "national distaste for intellect," he claims, is a wide-spread social attitude which manifests itself rather consistently in a public dislike for intellectual pretensions and a tentativeness toward new trends of thought. Practically speaking, America's love affair with the cult of the common man and the practical business orientation of its entire civilization have served to reinforce anti-intellectualism's luxuriant growth in the garden of democracy. The tyranny of the nation's mythical ideology, in short, has prejudiced the views of some toward seeing myth as a viable entity for one of modern sensibilities. As Hofstadter has concluded: "It was business, finally, that isolated and feminized culture by establishing the masculine legend that men are not concerned with the events of the intellectual and cultural world... At an early date, literature and learning were stigmatized as the prerogative of useless aristocracies...."<sup>13</sup> Indeed, myth has been somewhat the victim of guilt by association. Given the imprimatur of academia, it appears unsavory and suspiciously "foreign."

All of this of course fits favorably with other major themes in the American experience. In establishing their claim to the *New World*, for example, expatriate Europeans consistently voiced a belief in American innocence and Old World corruption. In contemplating the "fresh, green breast of the new world" (as F. Scott Fitzgerald phrased it in *The Great Gatsby*), Europeans could easily believe that they were escaping a legacy of corruption, dissipation, and superstition. Generations later their descendants, even those of cosmopolitan outlook such as Benjamin Franklin and Thomas Jefferson, denounced the dangers of intellectual contamination from abroad. With the minds of the Founding Fathers thus inclined, it is not surprising that even today to the public mind the term myth carries with it pejorative images associated with the ancient and medieval past. Because of their historical experience Americans have been inclined to believe that they have become not only geographically but culturally immunized from Europe—myths included. Articulated in literature ranging from Henry James's *Portrait of a Lady* to Mark Twain's *Innocents Abroad* and Ernest Hemingway's *The Sun Also Rises*, Americans have persistently insisted that their great migration from the Old World to the New somehow cleansed them of European fantasies, as they saw themselves in the vanguard of a new departure in human affairs.<sup>14</sup> Unwilling to accept the European past as "usable," Americans traditionally have seen myth as an alien concept. Viewing myth as false, and failing to see its effect on their lives as important and pervasive, the American prejudice persists that myth lacks utility and relevance. These mistaken associations are at least one of the reasons why the idea of myth in America harbors its own mythology. America, ostensibly the most pragmatic of nations, has spoken and behaved as much as others in accordance with myth.

In seeking to explain society's rejection of myth as compatible with the thinking of "modern" men, one might believe also that it reflects the mystique of science which, at least in America since the latter portion of the nineteenth century, has counseled Americans that science, and the technology it breeds, is their intellectual and practical salvation. Myth, supposedly more imaginary than "scientific," has stood little chance against this onslaught of assumed objectivity. Similarly, science's near equivalent in the philosophical realm—pragmatism—has also worked its magic, implying that America as a civilization displays a

hard-headedness incompatible with the vain imaginings of those who might see myth as a creative capacity of man. Being a historian by both predisposition and vocation, however, I persist with the idea that the roots of the problem run even deeper.

One can see upon looking further into history that in myth's distinguished lineage the Greeks were in a similar sense a "schizophrenic" society, being at once committed to the eminent rationalism of Aristotelian thought yet simultaneously offering Western man a golden age of mythology. But the creative potential that the Greeks clearly proved that myth contains, one fears, will be lost to America unless it can be informed, and then convinced, that it also can relate to the realities of myth in the same creative way. As a means of introducing America to myth, and of explaining the origin of myth's fundamental duality as both the essence of reality and a pernicious source of illusion, one can then return to the usable past. A brief retelling of the history of myth, according to the Greeks, will clearly show the ultimate source of the rather well-developed Western mythical tradition that America shares.

It is well known that myth was central to Greek civilization—the word itself is of Greek origin, its etymon being the Greek work *mythos* meaning "the thing spoken," a word, speech, or story. But even with the Greeks the word came to be invested with additional and supplemental meanings. The term appears in Aristotle's *Poetics*, for example, as the word for plot, narrative structure, or "fable."<sup>15</sup> At approximately the same time, however, other Greeks were already developing the opinion that myth conveyed much that was real, claiming it to be a harbinger of truth. Around the year 300 B. C. certain Greek Stoic philosophers such as Chrysippus saw myths as ingeniously symbolizing concepts of the nature of the universe, viewing them as "beautiful veils concealing profound moral principles."<sup>16</sup> Accordingly, emanating from the Greek experience, the use and understanding of myth has been equivocal if not ambivalent—implying both an extreme form of falsehood, and profound truth.<sup>17</sup>

In perhaps the earliest coherent discussion as to the origin, nature, and function of myth it was proposed collectively by the Greeks that myth held a double meaning. And it has been since the Greeks that two reasonably distinct views of myth have prevailed. The first has since come to be called Euhemerism—from the Greek writer who in the fourth century B. C. first proposed the theory that myths have their genesis in the history of real people and events that subsequently were falsely deified. This Euhemerist view, that myth is a mutation of historical fact and thus more false than true, has enjoyed continued vitality with but slight modification through the ages. The second "school" or view on myth is the "allegorical," which views myth as more true than false. This allegorical mode of myth interpretation sees myth as containing eternal moral and philosophical truths, and has also found favor with learned opinion on a continuing basis. Thus, as with so many other features of Western civilization, the shaping of opinion and attitude on myth bears a distinct Hellenic imprint. With these countervailing approaches begun by the Greeks, the West has sat Janus-faced, viewing myth as at once positive and negative, as both sacred and profane.

It would seem, then, that the dialectical use of myth in contemporary America mirrors an ambivalence with which Western man has long sought to contend. The "games" people think today—not only about themselves and their society, but about myth itself—are much the same as those played since antiquity by the family of man. Myth, being diseased imagination somehow in league with hidden philosophy, would appear to be an enigma. Paradoxically, it is at once the source of man's grandest illusions and the hidden spring which feeds his creative spirit. Despite, or perhaps because of, the theories of the past, however, it still seems possible to argue that the seemingly disparate attitudes toward the mythical are compatible if not indispensable to one another. "Facts" are often bent and adjusted, via the human elements of mind and emotion, into the image one has or wishes to believe. It would seem in addition that a given set of phenomena can at once be taken as psychologically true yet factually false. In the end the informed humanist can accept both notions of myth as germane to his studies. He would do well to consider the advice the mathematician-turned-philosopher Alfred North Whitehead imparted to a Virginia audience almost fifty years ago:

The art of free society (Whitehead counseled) consists first in the maintenance of the symbolic code; and secondly in fearlessness of revision, to secure that the code serves those purposes which satisfy an enlightened reason. Those societies which cannot combine reverence to their symbols with freedom of revision, must ultimately decay either from anarchy, or from the slow atrophy of a life stifled by useless shadows.<sup>18</sup>

Americans thus need not feel themselves alone in their disagreements as to the true nature of myth, just as they need not drift chaotically between the two extremes of myth theory. One can utilize the concept of "myth-as-error" to rid one's life of its "useless shadows," yet much is also to be gained from understanding the myths we live by to be an oblique commentary on the nation's value-laden symbolic code. Indeed, history suggests that only by creatively combining both myths of mythology can some semblance of truth be found. Only through such a creative effort can the new mythology become as meaningful as has been the old.

## NOTES

<sup>1</sup>Raphael Patai, *Myth and Modern Man* (Englewood Cliffs, New Jersey, 1972), p. 321.

<sup>2</sup>Carl Jung, *Archetypes and the Collective Unconscious*, Collected Works (Princeton, New Jersey, 1959); Northrop Frye, *Anatomy of Criticism: Four Essays* (Princeton, New Jersey, 1957); Claude Lévi-Strauss, *An Introduction to the Science of Mythology*, Vol. I: *The Raw and the Cooked* (New York, 1969); Henry Nash Smith, *Virgin Land: The American West as Symbol and Myth* (Cambridge, Massachusetts, 1970).

<sup>3</sup>Hans Vaihinger, *The Philosophy of "As If": A System of the Theoretical, Practical and Religious Fictions of Mankind*, C. K. Ogden trans., (London, 1935).

<sup>4</sup>*Ibid.*, p. 100.

<sup>5</sup>Quoted in Henry A. Murray (ed.), *Myth and Mythmaking* (Boston, 1960), p. 356.

<sup>6</sup>Here Vaihinger reflects the thinking of the historian Thomas Buckle who has noted that Adam Smith's entire notion of "economic man" was, most accurately speaking, a "valid artifice." For a fuller discussion of both Vaihinger and Buckle on this point see Havelock Ellis, *The Dance of Life* (Boston, 1929), p. 94.

<sup>7</sup>*The Philosophy of "As If,"* p. 351.

<sup>8</sup>Michael Polanyi, *The Tacit Dimension* (New York, 1967). See also Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago, 1962) and Northrop Frye, *Anatomy of Criticism*, pp. 350-354.

<sup>9</sup>Quoted in Alburey Castell, "The Role of Fictions in Knowledge—From Hans Vaihinger," in *An Introduction to Modern Philosophy in Seven Philosophical Problems* (New York, 1963), p. 237.

<sup>10</sup>*The Philosophy of "As If,"* p. 147

<sup>11</sup>Castell, *An Introduction to Modern Philosophy*, p. 240.

<sup>12</sup>Richard Slotkin, *Regeneration Through Violence: The Mythology of the American Frontier, 1600-1860* (Middletown, Connecticut, 1973), *passim*.

<sup>13</sup>Richard Hofstadter, *Anti-intellectualism in American Life* (New York, 1962), pp. 50-51.

<sup>14</sup>Henry Steele Commager, *The Search for a Usable Past and Other Essays in Historiography* (New York, 1967), pp. 10-13.

<sup>15</sup>Rene Wellek and Austin Warren, *Theory of Literature* (New York, 1956), p. 179.

<sup>16</sup>Patai, *Myth and Modern Man*, p. 11.

<sup>17</sup>For a fuller discussion of the equivocal use and understanding of myth see David Bidney, "Myth, Symbolism, and Truth," in Thomas A. Sebok, ed., *Myth: A Symposium* (Bloomington, Indiana, 1955), pp. 3-4.

<sup>18</sup>Alfred North Whitehead, *Symbolism: Its Meaning and Effect* (New York, 1959), p. 88.

## THE PERSISTENCE OF AMERICAN MANICHEANISM\*

John Shelton Lawrence†

Manicheanism accounts for the evils experienced by human beings: conflict is moralised warfare; disappointments and harms are the product of malicious conspiracies. Evil is never understood as good-intentioned failure or the result of inescapable limits. A recurrent theme in the myths of heroic action occurring in virtually all cultures, the Manichean moral fantasy is probably older than any datable history.<sup>1</sup>

The Manichean vision has been espoused by some of our best known contemporaries—politicians,<sup>2</sup> philosophers,<sup>3</sup> and above all by the creators of dramatic material in the realm of popular culture. The American public consumes daily thousands of narratives sharing a common Manichean structure. The superhero tradition in the comics and the Saturday morning kiddie cartoons, the crime programs on television, the cowboy Western and other pop genres portray melodramatic struggle between representatives of pure Good and those of irredeemable Evil. One may generalize that popular narratives are written as variants of the following formula, which will here be called *The American Monomyth*.<sup>4</sup> A COMMUNITY IN A HARMONIOUS PARADISE IS THREATENED BY EVIL: NORMAL INSTITUTIONS FAIL TO CONTEND WITH THIS THREAT: A SELFLESS SUPERHERO EMERGES TO RENOUNCE TEMPTATIONS AND CARRY OUT THE REDEMPTIVE TASK: HIS DECISIVE VICTORY RESTORES THE COMMUNITY TO ITS PARADISIACAL CONDITION: THE SUPERHERO RECEDES INTO OBSCURITY. The character of this formula satisfies several meaningful criteria for myth. In content, the American monomyth overlaps with the classical myths in its description of relationships between men and the powers of destiny or gods.<sup>5</sup> Epistemologically, the Monomyth seems to exercise an unconscious attraction<sup>6</sup> for its audiences, which exempts the mythic conventions from criticism.<sup>7</sup>

What is the significance of this recurrent mythic formula? John Cawelti has marked an interesting distinction between *invention* and *convention*. Invented cultural material aims at transmitting individual insights; conventional, formula-bound material, characteristic for popular culture as a whole,<sup>8</sup> probably attains its significance through the vicarious resolution of widely shared psychic tensions.<sup>9</sup> This standpoint echoes Freud's theory of art as neurotic escape from the pressure of reality. "In phantasy...man can continue to enjoy a freedom from the grip of the external world, one which he has long relinquished in actuality."<sup>10</sup> When one examines the implicit responsibility patterns of the American monomyth, the theme of escaping personal responsibility emerges unmistakably. (1) *Evil* is denied within oneself or one's group and is projected outward via conspiratorial categories. (2) The task of *coping with evil* is assigned to a redeemer figure, a hero possessing powers and perfections unattainable by any human. (3) The superheroes themselves exhibit only an *atrophied form of responsibility*; their actions are always presented as *responses to external provocation*; *fate-directed* or *assisted violence* usually works on behalf of masculine heroes—so that evil ones are *really destroyed* by

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*their own deeds*; in the workings of non-violent, stereotypically feminine redeemers, *miracles* and psychological manipulation are responsible for the successful endings. (4) Finally, *redeeming heroes lack community with the groups that they save*. Mary Poppins must fly away just like Superman, and the cowboy hero must ride down the trail to find another distressed and impotent community. Daily realities such as permanent sexual or family responsibility are wholly incompatible with the redeemer roles portrayed in the American monomyth. The extremity of these heroes perhaps blocks the identification process for audience members and reinforces the impression that effective coping always requires a nonexistent superhero.

In contemplating these mythic themes, it would seem that the widely shared psychic tensions are a sense of dread about living in contemporary society<sup>11</sup> and a feeling of exhaustion or impatience with democratic institutions and practice. The consistent, conspiratorial projection of evil outward constitutes a denial of the possibility of evil within average persons or institutions, a possibility emphasized by the democratic theoreticians of checks and balances. The consistent depiction of institutions as impotent (but not as the sources of evil) and the assignment of responsibility to superheroes implies an unwillingness to act personally and the wish for single, powerful figures who will dominate without submitting to democratic restraints. We know that many of the tragedies in the 20th Century have been abetted by this surrender of personal responsibility to external, willful authority. Ernest Becker has called this tendency "The Demonic" of our age.<sup>12</sup> It is plausible to interpret the American monomythic formulas as ritual celebration of "The Demonic," formula-bound fantasies that with minor variations depict the desirability of throwing off democratic constraints. Because the premises of the mythic redemption scheme are never explicitly articulated, and because of the powerful unconscious attractions aroused by film, television, and comics, these mythic celebrations may be the most effective and persistent sources of antidemocratic propaganda in the world today. Attacks by Communists seem sporadic, stupid, and ineffective by comparison.

But why should these Manichean celebrations capture the American psyche? Numerous philosophers and social theorists have attempted to comprehend the appeal of Manichean visions, independently of their having any specifically American character. These theories have a common "Freudian" character in their emphasis upon latent psychological and social functions, all of which have a neurotic, maladaptive character.<sup>13</sup> Without challenging their conclusions, it is also illuminating to look at Manichean mythic fantasies from the complementary standpoint of social phenomenology, as Becker puts it, "to look at what the world means to the experiencing subject in the total context of his action."<sup>14</sup> I would suggest here an analogy with the concept of fallacy as employed in logic: a fallacy is an argument form that has a deceptive appearance of validity. The task of analysing a fallacy lies in identifying the convincing basis for its deceptive inference. A *social* fallacy would be an interpretation of social reality rooted in experiences that provide at least the deceptive appearance of plausibility. Social fallacies cannot be dismissed as false or neurotic until we have encountered the same deceptive datum from which they spring. The obligation is thereby created to provide an alternative account of the same datum.

Manicheanism has several component premises, the most important being the bipolar moral stereotype and the conspiratorial premise—the belief that evil is a deliberately willed product of malevolence. The bipolar conflicts, which Manicheanism generates in a self-fulfilling way, confirm the plausibility of the moral stereotype.<sup>15</sup> But more worthy of attention is the conspiratorial premise. I propose that the qualities of modern experience and social institutions have shifted in ways that are congruent with the conspiratorial predilections of Manicheanism. These trends constitute a "conspiratorial social gestalt" that feeds the Manichean predispositions so widespread among human beings. In a form of "figure-completion" process that works in social comprehension, the elements of the conspiratorial social gestalt are seized as the relevant clues to meaning in the search for an understanding of evil.

*The personalization of evil.* Human experience is becoming increasingly bureaucratic. Direct relations with nature are replaced by intensified relations with persons. Work increasingly demands that workers deal with other people in the framework of administered routines. We interact with the artifacts of other persons—machines, memoranda, parts on the conveyor belt, and administrative regulations about the proper way to perform work. Out of the total array of problems that human beings encounter, the portion that originates in persons is growing. The Manichean bias toward finding the origin of problems in human will is confirmed experientially.

*The "humanisation" of evil.* At the same time that experience becomes personalized, western culture has increasingly abandoned explanations of evil that externalize their causes in the acts of gods, devils, or objective limits posed by impersonal destiny or fate. Since the time of Rousseau, miseries and injustices have been optimistically interpreted as springing from failures of social justice and political structure. Rather than reflecting objective and externally imposed limits on the nature of political achievement, these evils are remediable—not least through revolutions arising from the revelation of "self-evident truth." Whoever rejects those truths, which "we hold to be self-evident," must do so out of a spirit of malevolence. How can we otherwise explain their failure to agree with us?

*The decline of social intelligence.* John McDermott has subtly demonstrated how the evolution of technology with its accompanying managerial elites has contributed to incomprehension and the feeling of helplessness on the part of workers.<sup>16</sup> They participate in highly segmented work processes, whose rationalization is formulated in languages that become increasingly remote from the idiom of everyday experience. The "social rationality of the lower orders" declines as Americans are "cut off from those experiences in which near social means and distant social ends are balanced and rebalanced, adjusted and readjusted." Such experiences provide the basis for social rationality, and to the extent that they are lacking, "social irrationality becomes the norm, and social paranoia is a recurring phenomenon."<sup>17</sup>

*The depersonalization of responsibility through bureaucratic diffusion.* Hannah Arendt has described the bureaucratic "rule by nobody," which allows everyone to feel that he is acting at someone else's directive. This foils the attempt to localize responsibility. Her controversial study of Eichmann spoke of the "banality of evil," the fact that monstrous deeds could be perpetrated by ordinary people without psychopathic motivations. Each of them, like Eichmann, could deny their personal responsibility. This evasiveness, so characteristic of our bureaucratic institutions, enhances the feeling of victimization and conspiracy on the part of those who attempt to redress the injustices they experience. Kafka's *Castle* has become an effective mythic parable which mirrors this quality of contemporary social experience.

*The creation of institutions of counterknowledge.* The lie is not a novel invention of the twentieth century. But contemporary resources for disseminating untruths and halftruths have multiplied enormously in our time. Mass communication has allowed centralized governments the opportunity to disseminate their messages simultaneously to entire populations. They communicate partly through their institutions of counterknowledge, institutions that adopt the citizens as their "target populations" for campaigns of image manipulation. The workings of one such institution, the Pentagon, were revealed in the *Pentagon Papers*.<sup>18</sup> But there are many other institutions whose attempts at conveying half-truths are central to the business of our society. The institution of advertising, with its truths formulated according to the values of "pecuniary logic," is but one example.<sup>19</sup> Citizens are aware that these skillful, heavily capitalized assaults upon their sense of credibility are taking place. Their attempts to find or disclose truth independently are often frustrated.

These structural conditions of society, which foster "social paranoia," are basically congruent with the sense of helplessness and conspiracy which lie at the center of the American monomyth. These conditions (as well as the more obvious sources of fear like crime) could be called the *truth* about our society that is being expressed by mythic fantasy, though that truth is *reflective* rather than explicitly assertive. The American monomyth functions here as a *symptom* of the state of society rather than a conscious diagnosis of its condition. The irony here is that the monomyth presents antidemocratic superheroes as cures for the alleged failures of democracy.

The persistence and attractiveness of these antidemocratic mythic fantasies should demonstrate how tenuous a hold we have on the democratic spirit and how deeply rooted are the experiences that foster its subversion. The alarming monomyth is, however, too powerful to suppress, even if it were compatible with the ideals of democracy to do so. A more constructive path lies in educating our population to recognize the unconscious messages they receive from the mythic fantasies they enjoy and bringing those messages into critical dialogue with our best mythic heritage—the myths of democracy. Could it be that social philosophers and political scientists are overlooking some of the most powerful political philosophies of our time?

Is it possible that, as Americans, they themselves enjoy these popular mythic fantasies and unconsciously ignore the explosive social message being transmitted? I suggest that responsible interdisciplinary work will be required to deal with the mythic material of our time—however painful it may be to analyze material that has come to be regarded as mere entertainment.

## NOTES

<sup>1</sup>See, for example, Joseph Campbell, *The Hero With a Thousand Faces*, Meridian Books (N. Y., 1956), esp. the chapter, "Transformations of the Hero." Manicheanism derives historically from Zoroastrianism, a Persian dualism of Good and Evil. See Paul Carus, *The History of the Devil and the Idea of Evil: From the Earliest Times to the Present Day*, Land's End Press (N. Y., 1969).

<sup>2</sup>Robert McNamara, military spokesman for the New Frontier, stated, "There is no true historical parallel to the drive of Soviet Communist imperialism to colonize the world. This is not the first time that ambitious dictators have sought to dominate the globe. But none has ever been so well organized, has possessed so many instruments of destruction, or has been so adept at disguising ignoble motives and objectives with noble phrases and words. . . if the free world should lose to Communism, the loss would be total, final, irrevocable." Cited by Marcus Raskin in *The Pentagon Watchers*, L. Rodberg and D. Sheaver (eds.), Doubleday (N. Y., 1970), pp. 66-68.

<sup>3</sup>Herbert Marcuse boldly called for "liberating intolerance" which "would mean intolerance of movements from the Right, and toleration of movements from the Left." "The answer to Plato's educational dictatorship is the dictatorship of free men." "Repressive Tolerance, with a Postscript, 1968," in *A Critique of Pure Tolerance*, Beacon Press (Boston, 1969), pp. 106-109. Richard Popkin, another philosopher, remarks in an essay written for a Marcuse *Festschrift*, "Perhaps, after the catastrophes of the 20th Century have shaken our Pelagian confidence to the roots, a new Bayle will appear to show how really plausible Manicheanism is in the context of recent human history." "Manicheanism in the Enlightenment," in *The Critical Spirit: Essays in Honor of Herbert Marcuse*, Kurt Wolff and Barrington Moore, Jr. (eds.), Beacon Press (Boston, 1967), p. 54.

<sup>4</sup>The statement of the monomyth truncates the argument of several chapters in a book I am writing with Robert Jewett. Tentatively called *The American Monomyth: From Star Trek to Bunny Land*, this book analyzes the plot formulas in a great diversity of popular material. The summary statement omits, of course, subtleties and variations. The term 'monomyth' was first employed in mythological study by Joseph Campbell, who used the term to designate the common pattern of heroic actions in the classical myths. "A hero ventures forth from the world of common day into a region of supernatural wonder: fabulous forces are there encountered and a decisive victory is won: the hero comes back from this mysterious adventure with the power to bestow boons on his fellow man." *Op. Cit.*, p. 30. The classical monomyth was modeled upon pagan rites of initiation; the American monomyth derives its features from Judeo-Christian tales of redemption.

<sup>5</sup>See Richard Slotkin, *Regeneration Through Violence: The Mythology of the American Frontier, 1600-1860*, Wesleyan University Press (Middletown, 1973), p. 6.

<sup>6</sup>Ernest Becker defines the unconscious in the sense intended here. He says that "our Unconscious is our basic emotional identification with the kinds of feelings and acts which make us comfortable. . ." *Angel in Armor: a Post-Freudian Perspective on the Nature of Man*, George Braziller (New York, 1969), p. 184.

<sup>7</sup>Karl Popper has argued that scientific and mythic material bear no distinctions that differentiate them intrinsically from one another and that much science has its roots in myth. Science or scientific attitude is present only when myths are stated for the purpose of discussing them critically. See *Conjectures and Refutations*, Harper Torchbooks (N. Y., 1968), p. 50, 126-7.

<sup>8</sup>Abraham Kaplan in "The Aesthetics of the Popular Arts" and Clement Greenberg in "Avant Garde and Kitsch" both provide accounts of the formal redundancy in the popular arts. *Modern Culture and the Arts*, 4th edition, James Hall and Barry Ulanov (editors), McGraw-Hill (N. Y., 1972).

<sup>9</sup>John Cawelti, *The Six Gun Mystique*, Bowling Green University Popular Press (Bowling Green, Ohio, 1971), p. 12, 24.

<sup>10</sup>"Wish Fulfillment and the Unconscious" in *A Modern Book of Aesthetics* (4th ed.), Melvin Rader (ed.), Holt-Rinehart (N. Y., 1973).

<sup>11</sup>This seems particularly evident in the current wave of catastrophe films and in movies about urban crime.

<sup>12</sup>*Op. Cit.* pp. 110ff.

<sup>13</sup>Some theorists emphasize the wish-fulfilling character of Manicheanism. Walter Kaufmann discusses the *comfort* which Manichean *simplicity* affords in "Black and White," *Survey. A Journal of Soviet and Eastern Studies*, 73 (1969). Lewis Coser discusses the *socially integrative function* of morally stereotyped enemies in *The Functions of Social Conflict*, Free Press (N. Y., 1964), pp. 104ff. Hans Albert has discussed the criticism-immunising function ('Immunisierungstrategie') in *Traktat über Kritische Vernunft* (Tübingen: JBC. Mohr, 1968). Historians have discussed some of the specific historical links that have provided continuing life for the Manichean style of thinking. See Richard Hofstadter, *The Paranoid Style in American Politics*, Alfred Knopf (N. Y., 1965) and Robert Jewett, *The Captain America Complex*, Westminster (Philadelphia, 1973), esp. the chapters "The Good Guys and the Bad Guys" and "The Grand Conspiracy." There are so many plausible hypotheses about the durability of Manicheanism, that Manicheanism would almost seem to be an overdetermined phenomenon.

<sup>14</sup>*Op. Cit.*, p. 5.

<sup>15</sup>The perverse dynamics have been described by Robert Merton, *Social Theory and Social Structure*, Free Press (N. Y., 1957), p. 423. As he nicely states (p. 128), "...confident error generates its own spurious confirmation."

<sup>16</sup>"Technology: The Opiate of the Intellectuals," in *New York Review of Books*, 13 (July 31, 1969), p. 32.

<sup>17</sup>*Ibid.*

<sup>18</sup>For a systematic study, see Dale Minor, *The Information War*, Hawthorne Books (N. Y., 1970).

<sup>19</sup>See Jules Henry, "Advertising As a Philosophical System," *Culture Against Man*, Vintage Books (N. Y., 1963), pp. 45 ff.



## THE GRAND MYTH OF THE ONE AND THE MANY \*

Ted J. Solomon †

Joseph Campbell in *The Masks of God* states that one of the major functions of myth is the presentation of a cosmological image, a total picture of the universe that is consistent with known consciousness or with the science of the day.<sup>1</sup> The term "myth" as related to cosmology may be defined as a model (or paradigm) consisting of imagery in terms of which sense or intelligibility is made of life (or the world). Joseph Kockelmans remarks that "man appeals to [myth as a] typical model of understanding or conceiving anytime he is in need of a totality of meaning or world in order to be able to act theoretically, practically, or otherwise, and he finds himself in a position of having no other means available for opening up such a world."<sup>2</sup>

Although there is a plethora of diverse cosmological myths throughout the world, higher cultures seem to have fashioned an all-encompassing or holistic cosmological myth that could be termed "the myth of the One and the many" (or unity and diversity). The myth of the One and the many is the "great or grand myth" par excellence. It is the most inclusive myth conceived by man, for it purports to include all physical objects and every mental state in a quest for total understanding.

The myth of the One and the many probably arose from man's double vision or twofold experience of unity and diversity. In other words, unity and diversity are perspectives from two seemingly different frames of reference. J. Robert Oppenheimer, a twentieth-century physicist, discusses these two perspectives as follows: "These two ways of thinking, the way of time and history and the way of eternity, timelessness, are both parts of man's efforts to comprehend the world in which he lives. Neither is comprehended in the other nor reducible to it. They are, as we have learned to say in physics, complementary views, each supplementing the other, neither telling the whole story."<sup>3</sup>

The ordinary frame of reference, that of empirical experience, discloses the multitudinous diversity of the phenomenal world. Knowledge of the empirical world, which is gained primarily through the senses, presents a realm in which change, duality, and opposition are present. In contradistinction to the world of empirical experience, the "transcendental" frame of reference discloses that reality is unitary. The affirmation of a unitary reality is usually based on direct insight or intuition, which claims to transcend ordinary sense perception in that there is neither the dualism of subject and object, nor thoughts about something. The differences between thinker, the act of thinking, and the object of thought have been dissolved in an undifferentiated state of consciousness or being. Intuitive insight unveils an invisible plenitude in which the dichotomies of subject and object, light and dark, good and evil are not

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yet separated. As the transcendental frame of reference is characterized by ineffability in many instances, the myth of the One serves as a verbal envelope of an apprehension of basic reality felt and lived before conceptually formulated. Rational attempts to reconcile the two seemingly different frames of reference resulted in the grand myth of the One and the many. Despite the differences in weight accorded to one frame of reference over the other in various cultures, the common element in these grand myths is that the universe is both unity and diversity. The many independent and conflicting things in the world are fundamentally "one," and on the other hand, the "one" is also "many."

Three illustrative examples of the myth of the One and the many will be drawn from ancient China, India, and Greece. These myths arose in the first millennium before Christ, a period which "witnessed the emergence within the orbit of the 'higher civilizations' of certain major spiritual, moral, and intellectual breakthroughs."<sup>4</sup> Karl Jaspers terms this period of momentous developments the "axial age," while Benjamin Schwartz's designation is "The Age of Transcendence." "The strain toward transcendence," according to Schwartz, "is the common underlying impulse in all these 'axial movements.'"<sup>5</sup> Schwartz defines "transcendence" in terms of "something close to the etymological meaning of the word—a kind of standing back and looking beyond—a kind of critical, reflective questioning of the actual and a new vision of what lies beyond. It is symbolized in the Hebrew tradition by Abraham's departure from Ur and all it represents...by Lao Tse book's strain toward the nameless Tao, and by the Greek strain toward an order beyond the Homeric gods, by the Socratic search..."<sup>6</sup>

The world of multiplicity in ancient Chinese thought is understood in terms of a dynamic, bipolar model; the universe is composed of the polar principles of *yin* and *yang*. Everything in the phenomenal world is composed of *yin* and *yang*, but in each item one of the archetypal poles of nature is more predominant than the other. *Yin*, the female principle, is present in everything that is passive, yielding, negative, dark, cold, and evil; it is predominant in the winter season and in females. *Yang*, the male principle, is present in everything that is active, aggressive, positive, light, hot, and good; it is predominant in the summer season and in males. *Yin* and *yang* are represented symbolically by a circle composed of what resembles two stylized fishes, one black and one white, each with an eye of the opposite color. This circular symbol indicates that *yin* and *yang* are constantly in dynamic process or movement as they complement and counterbalance each other. Each invades the opposite's sphere and establishes itself in the opposite's domain.

*Yin* and *yang* generate the world of multiplicity by playful interaction. Huai-nan tzu states: "the activity of *yin* and *yang* produces the four seasons, and the dispersion of the essence of the four seasons produces the ten thousand things. From the hot *yang* fluid comes fire, and the essence of fire becomes the sun. From the cold *yin* fluid comes water, and the essence of water forms the moon. The sexual intercourse between the sun and the moon gives birth to the stars. Heaven harbors the sun, the moon, and the stars; earth comprises waters, the rivers, the soil and dust." Thus the dynamic pattern of nature is constituted by the perpetual interplay of *yin* and *yang* in varying degrees of force and direction.

However, the ancient Chinese also had a mythical vision of the fundamental oneness of reality, which was termed the Tao. The Tao was said to be "One" (one without number, non-dual).<sup>7</sup> The Tao or Supreme Ultimate is the foundation of the polar principles of *yin* and *yang*. As the successive movements of *yin* and *yang* constitute the Tao, the Tao is a mythical symbol for the implicit unity of opposites. The basic identity of the opposites *yin* and *yang* can be glimpsed in Chuang-tzu: "Viewed from the standpoint of Tao, a beam (horizontal) and a pillar (vertical) are identical. So are ugliness and beauty, greatness, wickedness, perverseness, and strangeness. Separation is the same as construction; construction is the same as destruction. Nothing is subject either to construction or destruction, for these conditions are brought together into one. . . . Life follows upon death. Death is the beginning of life. . . . If then life and death are but consecutive states, what need have I to complain? Therefore all things are one."<sup>8</sup> The grand myth of the One and the many in China placed the emphasis on the world as a system of unceasing transformation.

The counterpart of the Chinese Tao in ancient India is the myth of Brahman. The grand myth of Brahman takes shape primarily in the poetic visions and intuitions of enlightened seers recorded in the Upanishads. Although predicates (or attributes) cannot be ascribed to the unconditioned Brahman, Brahman in the Upanishads is spoken of as the "limitless One," or the "One without a second": "Verily, in the beginning this world was Brahman, the limitless

One—limitless to the east, limitless to the north...limitless in every direction...He whose soul is *space*.<sup>10</sup> A basic formula of Brahman equates Brahman with *Being* (*sat*), consciousness (*chit*), and bliss (*ananda*).

The different perspectives of reality are expressed in the myth of the two forms of Brahman, the lower (*apara*) and the higher (*para*), or the manifest and the unmanifest. The *Brihadaranyaka Upanishad* contrasts the two forms of Brahman: "Verily, there are two forms of Brahman, gross and subtle, mortal and immortal, limited and unlimited, definite and indefinite."<sup>11</sup> The higher Brahman is the ground of being, the impersonal matrix of the world of multiplicity. The lower Brahman is the constitutive reality as well as the pervasive presence in the objective world. Brahman is "He who, dwelling in the earth...in the waters...in the fire...the atmosphere...the wind...the sky...the sun...the quarters of heaven...the moon and stars...*space*...darkness...light...He who, dwelling in all things, yet is other than all things...whose body all things are, who controls all things from within...he is...the inner controller..."<sup>12</sup> "Stretched forth below and above, Brahman, indeed, is the whole world, this widest extent."<sup>13</sup> In the manner of the Chinese Tao, which is the source of "The Ten Thousand Things," the world of multiplicity represents varying phases of Brahman.

Furthermore, Brahman is equated with the subjective realm of existence, the inner realm of reason, feeling, will, and self-consciousness: "He who, dwelling in breath...in speech...the eye...the ear...the mind...the skin...the understanding, yet is other than understanding. He is the unseen Seer, the unheard Hearer, the unthought Thinker, the un-understood Understander."<sup>14</sup> Brahman, when associated with bodies, is called "Sutratma," the "Thread Soul" or subtle substance that joins together all different individuals, such as men, animals, and inorganic beings. Nihilananda speaks of It as being "like the protoplasmic substance, which, by its minute threads, passing through the cell-walls, unites the cells in a living organism."<sup>15</sup> The identity of the true self (*Atman*) of man and the ultimate reality (*Brahman*) is expressed by the *Chandogya Upanishad* in the formula: "Tat tvam asi" (That thou art).<sup>16</sup> In other words, the objective and subjective are one! Since most physical objects in the phenomenal world and every physical state are equated with Brahman, they can serve as symbolic vehicles for expressing the grand myth of the One and the many.<sup>17</sup>

The myth of Brahman has its main parallels with the western or early Greek philosophy of Parmenides. Founder of the Eleatic school in the fifth century B. C., Parmenides wrote a poem "On Truth" in which the two realms of human experience were described. In the first part of the poem, "the way of Truth," Parmenides described eternal *Being*, and in the second part, "the way of opinion," Parmenides described the world of changing sensible objects. The prologue of the poem describes the journey of a young man in a chariot, whose "axe, blazing in the socket, was making the holes in the naves sing," drawn by "exceedingly intelligent mares" along the "knowledge bestowing way of the goddess," which lies "far from the beaten track of men," to the "gates of the paths of Night and Day." Parmenides is probably describing his journey from the empirical realm of multiplicity to the "transcendental realm." In his "Notes on Parmenides," David J. Furley remarks that "the essential point about the goal of Parmenides' journey is that it is the meeting place, where opposites are undivided. Here there is no meaning in the familiar oppositions between Earth and Sky, Earth and Tartarus, Earth and Sea, because this is their common origin...Night and Day are both at home here; it is here that they meet."<sup>18</sup>

The basic irreducible statement concerning the "transcendent" reality for Parmenides is that *Being is*, and is entire, immovable, complete, one, continuous, indivisible, homogeneous, full, and rational.<sup>19</sup> Obviously, Parmenides thinks of being pictorially as well as in terms of concrete images. For example, being is "full," meaning that being is that which fills space; being is spatially extended.<sup>20</sup>

Regarding the empirical realm of multiplicity treated in the section "the way of opinion," Parmenides states that the phenomenal world is compounded of two principles: (1) the active or the light, which is fiery and rarefied; (2) the passive or dark (night), which is heavy, dense, and cold. Aristotle comments that the reason Parmenides posited two principles is that he is "forced to comply with sensible things and supposes the existence of that which is one in formula (or, one according to reason—*kata ton logon*) but more than one according to our sensations."<sup>21</sup> Although the general interpretation has been that Parmenides dismissed the changing world of multiplicity as being irrational or illusory, I contend that Parmenides viewed the world of

sensory appearances as a manifestation of being or ultimate reality. Parmenides' basic point is that nothing other than *that which is* can exist. If the multiplicity of objects were absolutely nothing, Parmenides would have dismissed them as absolutely inconceivable. Since the world of multiplicity cannot derive from what is not, it must rest upon the reality of that which is (being). The empirical world of multiplicity is thus a relative manifestation of absolute being. As being manifests itself within boundaries to the senses, change, duality, and opposition become apparent. Awareness through the senses involves awareness of difference. Intuition, on the other hand, transcends the senses. In the intuitive experience the duality present in empirical experience drops away, and the underlying reality or being surges forth.

Despite the differences in these grand myths of the One and the many, certain salient similarities should not go unnoticed. The common symbols or images of ultimate reality present in these myths from ancient China, India, and Greece are "the one," being, and "space" (at least in the cosmological myths of Brahman and the being of Parmenides). It is remarkable that some of these same images also appear in twentieth-century scientific theories (or models) of prominent theoretical physicists in their attempt to provide a model for understanding the nature of physical reality.<sup>22</sup> These similar features would suggest that the grand myth of the One and the many is not merely an ancient phenomenon but also a contemporary one.

A theoretical model proposed by Dr. John Wheeler, Joseph Henry Professor of Physics at Princeton University, will serve as a modern form of the myth of the One and the many (with the proviso that a contemporary theoretical model in physics does not aim to be as ambitious or as all-inclusive as ancient ones). Wheeler holds that "the central problem is to take the two over-arching principles of twentieth-century physics, the quantum principle and Einstein's general relativity, and incorporate them into one large principle, with the ultimate aim of understanding the nature of space and time, and matter and energy."<sup>23</sup> Consequently, Wheeler devised a model in the late 1950's that incorporated the two principles into one large principle known as "superspace." Wheeler affirms that "the stage on which the space of the universe moves is certainly not space itself" but superspace. "Nobody can be a stage for himself; he has to have a larger arena in which to move. The arena in which space does its changing is not even the space-time of Einstein, for the space-time is the history of space changing with time. The arena must be a larger object: superspace. Superspace is not endowed with three or four dimensions—it is endowed with an infinite number of dimensions. Any single point in superspace represents an entire, three-dimensional world; nearby points represent slightly different three-dimensional worlds."<sup>24</sup> Superspace qualifies as a "transcendent principle," for Wheeler states that is beyond the universe and not a part of it. For support, Wheeler refers to William James: "Actualities seem to float in a wider set of possibilities out of which they were chosen and somewhere, indeterminism says, such possibilities exist, and form part of truth." "Somewhere" for Wheeler is superspace.

Two cardinal images, space as substantive and a cyclic view of the universe, are features of the Hindu cosmological myth and Wheeler's theoretical model. The Hindu myth of the One and the many equates Brahman with akasa or space (and, as we have noted, the Being of Parmenides is spatially extended). Some contemporary astrophysicists conceive space to have "properties" such as curvature and expansion. The concept of space in Einstein's theory of general relativity is conceived as "a dynamic entity, changing with time, influencing and being influenced by mass, in the same way that particles and electromagnetic waves are dynamic entities."<sup>25</sup> Wheeler posits "a world that makes subatomic particles look positively immense by comparison: an incredibly energetic world of 'things', each smaller than an electron by twenty powers of 10, each 'thing' composed of nothing but—space itself, pure fluctuating space."<sup>26</sup> He predicts that space is "foamlike" at the scale of distances 20 powers of ten smaller than the scale of nuclear structure.

A cyclic image of the universe is present in the Hindu cosmological myth and in Wheeler's theoretical model. The Hindu myth of cosmic cycles (*yugas*) depicts the constant process by which universes are formed and destroyed one after another. The formation and destruction of the cosmos is symbolized by the breathing of Brahman: exhalation is equivalent to the creative thrust that scatters the galaxies into space; retention of breath represents the duration of the universe, and inhalation refers to destruction of the universe, the withdrawal of the cosmos into the being of Brahman from which it later re-emerges. Wheeler's model predicts that after the annihilation of the entire physical universe by gravitational collapse, another universe will

reappear. "To my mind," states Wheeler, "the dramatic new feature about superspace is this: the shape of our universe changes with time as the universe expands, reaches a maximum dimension and contracts—and this history appears as a track in superspace. When the universe finally collapses, it comes to a region of superspace that represents an extreme condition. . . . But according to the quantum principle, the dynamics should continue. We can well expect that when the universe collapses, there is a certain probability that it will start a new cycle. . . . Another universe will leave its own track in superspace, one quite different from our own universe."<sup>27</sup> In the Hindu and Wheeler models there is an "infinite substratum" on which the cosmic cycles occur; for Wheeler it is superspace; for the philosophical Hindu it is Brahman.

Perennial functions of the ancient and contemporary forms of the grand myth of the One and the many cluster around the theoretical, predictive, and convictional. The theoretical function of the grand cosmological myth is to serve as an explanatory model for understanding the totality of the world. The mythical mode of thought still has value for a scientific age, for this mode of thought is utilized in the construction of theoretical models. What Mark Schorer says about myth in general is applicable to scientific models: "Myths are the instruments by which we continually struggle to make our experience intelligible to ourselves. A myth is a large controlling image that gives philosophical meaning to the facts of ordinary life; that is, which has organizing value for experience."<sup>28</sup> John Hayward states that modern science was founded on a "comprehensive transcendence model" drawn from the blending of Hellenic and Judeo-Christian cultures. Although making a sharp cleavage (but not final) between mythical transcendence models found in Greek religions and the abstract transcendence models utilized by science, Hayward defines "transcendence model" as "models in the sense of being selections of certain loci and forms out of the whole arsenal of human awareness and symbolism. They are transcendent in that they are not justified in terms of any prior reasons or realities, but are affirmed, in their own right, as the ultimate ground and reach of human understanding." A transcendence model connotes "a certain sense of reality serving as both the container and the contrasting foil against which all the relativities and partial realizations of human perception and knowledge are projected."<sup>29</sup>

Mary Hesse, a distinguished philosopher of science, mentions that the theoretical model in modern science uses "some other system (such as a mechanism or a familiar mathematical or empirical theory from another domain) that is already well known and understood in order to explain the less well-established system under investigation."<sup>30</sup> Examples of recent theoretical models that attempt to explain relatively obscure phenomena in terms of familiar mechanisms or picturable nonmechanical systems include Bohr's theory of the atom and geometrical models of the expanding universe. One of the merits of a theoretical model in science is its "surplus meaning" (or "open texture" derived from the familiar system) that allows it to be richer in meaning than the empirical data to be explained ("the explanandum"). Thus a theoretical model, by importing concepts and conceptual relations not present in the empirical data, "conveys associations and implications that are not completely specifiable and that may be transferred by analogy to the explanandum."<sup>31</sup>

Related to the theoretical function is the predictive function of the grand cosmological myth. The predictive potential of ancient cosmological myths is problematic; undoubtedly, the Chinese myth of yin and yang, which served as the theoretical basis for ancient Chinese medicine (acupuncture), chemistry, and astronomy, proved useful within limits. One of the more amazing cross-cultural discoveries occurred when the Western philosopher Leibnitz (1646-1716) read the Chinese *Book of Changes (I-Ching)*, which is based on the myth of the polarities of *yin* (negative) and *yang* (positive). As a result of reading a Latin translation of this ancient work, Leibnitz formulated the theory that all numbers could be represented by the figures 0 and 1, so that for the series 1, 2, 3, 4, 5 there is 001, 010, 100, 101, 110, which is now the arithmetic used by digital computers.

The convictional function of the grand myth confers upon man an awareness of his harmony with the universe. Ancient forms of the myth of the One and the many supplied man with a lucid vision of a mode of being in which he could live in serenity and harmony within a relative world. Modern forms of the cosmological myth may not furnish the same comforting degree of serenity, but harmony still remains a key feature. The Einsteinian cosmology suggests an ultimate order or harmony toward which scientific and humanistic probabilities approach. Hans Reichenback remarks that "when I, on a certain occasion, asked Professor Einstein how he found his theory of relativity, he answered that he found it because he was so

strongly convinced of the harmony of the universe."<sup>32</sup> Wheeler's model of the universe implies a universe peculiarly 'tuned to man.' Wheeler declares that it "suggests that there exists a degree of harmony between us and our surroundings that we never realized before. In the past we looked at our surroundings as if there could be no other, something with which we just had to get along. If this new view is correct, our surroundings are very special and tuned to us, like the plant to its flower. . . I can't think of anything more important than people's views of how man fits into the scheme of the universe."<sup>33</sup>

One may speculate that men of gifted insight will continue to formulate variants of the grand myth as long as the theoretical, predictive, and convictional functions are needed. However, this is a superficial observation, at least as far as the theoretical function is concerned. Global man will probably never outgrow a need for an all-inclusive or totalistic cosmological myth, for the only recourse man has to account for the basic facets of his experience, unity and diversity, is through a mythical model that incorporates both simultaneously.

## NOTES

<sup>1</sup> Joseph Campbell, *The Masks of God: Creative Mythology* (Viking Press, New York, 1970), pp. 4, 611.

<sup>2</sup> Joseph J. Kockelmans, "On Myth and its Relationship to Hermeneutics," *Cultural Hermeneutics* I (1973), p. 67.

<sup>3</sup> J. Robert Oppenheimer, *Science and the Common Understanding* (Simon & Schuster, New York, 1954), p. 69.

<sup>4</sup> Benjamin I. Schwartz, "The Age of Transcendence," *Daedalus* 104, No. 2 (Spring, 1975), 1.

<sup>5</sup> Schwartz, *Op. Cit.*, 3.

<sup>6</sup> *Ibid.*

<sup>7</sup> Alfred Forke, *World Conception of the Chinese* (Probsthain, London, 1925), p. 37.

<sup>8</sup> *Tao Te Ching*, 10.

<sup>9</sup> *Chuang-tzu*, 22.

<sup>10</sup> *Maitreya Upanishad*, 6.17.

<sup>11</sup> *Brihadaranyaka Upanishad*, 2.3.1.

<sup>12</sup> *Op. Cit.*, 3.7.3-15.

<sup>13</sup> *Mundaka Upanishad*, 2.2.11.

<sup>14</sup> *Brihadaranyaka Upanishad*, 3.7.16-23.

<sup>15</sup> Swami Nikhilananda, *The Upanishads*, Vol. I (Harper, New York, 1949), pp. 77-78.

<sup>16</sup> *Chandogya Upanishad*, 6.8.6

<sup>17</sup> The phenomenal processes of creation, preservation, and destruction have also been mythically represented by the *Trimurti*, the Hindu triad of great gods, such as *Brahma* the creator, *Vishnu* the preserver, and *Shiva* the destroyer. In the *Trimurti*, *Brahma* the creator, *Vishnu* the preserver, and *Shiva* the destroyer are symbols for phenomenal forces in the world of multiplicity.

*Brahma* the creator may be viewed as the personal form of Brahman, the impersonal Absolute. The *Kalika Purana* mentions that the Creator, *Brahma*, the demiurgic, world-producing aspect of the Godhead, sat in serene meditation, bringing forth from the enlivened depths of his own divine, and all-containing substance, the universe and its multitudes of beings.

*Vishnu* the preserver is essentially benevolent, the conservator of values and the active agent in their realization. On the other hand, *Shiva* the destroyer represents negative forces at work in the phenomenal world. Yet there is a positive side to destruction, for destruction is the

prelude to new creation. "The Creator is also the Destroyer, not in anger but by the very nature of his activity. . ." (Charles Eliot, *Hinduism and Buddhism* Vol. II, p. 144). The symbol of the *Trimurti* is an attempt at a synthesis of different phenomenal forces that have a common source in the one reality, Brahman.

<sup>16</sup>David J. Furley, "Notes on Parmenides," in *Exegesis and Argument: Studies in Greek Philosophy Presented to Gregory Vlastos*, ed. Edward Lee (London, Van Gorcum, 1974), p. 4.

<sup>19</sup>Parmenides, *Fragments* 67-71.

<sup>20</sup>Eduard Zeller, *Greek Philosophy* (Meridian Books, Cleveland, 1962), p. 65.

<sup>21</sup>Aristotle, *Metaphysics* A5.

<sup>22</sup>The monistic nature of ancient forms of the grand myth of the One and the many persists in contemporary scientific theories. Lincoln Barnett writes that from the perspective of Einstein's Unified Field Theory "the entire universe appears as one elemental field in which each star, each atom, each wandering comet and slow-wheeling galaxy and flying electron is seen to be a ripple or tumescence in the underlying space-time unity. And so a profound simplicity would supplant the surface complexity of nature. The distinctions between gravitational force and electro-magnetic force, matter and energy, electric charge and field, space and time, all fade in the light of their revealed relationships and resolve into configurations of the four-dimensional continuum which Einstein revealed the universe to be. Thus all man's perceptions of the world and all his abstract intuitions of reality would merge finally into one, and the deep underlying unity of the universe." (*The Universe and Dr. Einstein*, p. 111f.) David Bohm states that the quantum theory implies that "...the world cannot be analyzed correctly into distinct parts; instead it must be regarded as an indivisible unit in which separate parts appear as valid approximations only in the classical (Newtonian) limit." (*Quantum Theory*, pp. 161-162).

<sup>23</sup>L. B. Chase, "John A. Wheeler: The Black Hole of the Universe," *Intellectual Digest* 3, No. 4 (December, 1972), 84.

<sup>24</sup>Chase, *Op. Cit.*, p. 86.

<sup>25</sup>*Ibid.*, p. 84.

<sup>26</sup>*Ibid.*

<sup>27</sup>*Ibid.*, p. 86.

<sup>28</sup>Mark Schorer, *William Blake* (Vintage, New York, 1959), p. 25.

<sup>29</sup>John F. Hayward, "The Uses of Myth in Science," *Zygon* 3, No. 2 (June, 1968), 204-205.

<sup>30</sup>Mary Hesse, "Models and Analogy in Science," *The Encyclopedia of Philosophy* (Macmillan, New York, 1967) Vol. 5, p. 356.

<sup>31</sup>*Ibid.*

<sup>32</sup>Paul Schilpp, *Albert Einstein* (Library of Living Philosophers, Evanston, Ill., 1949), p. 61.

<sup>33</sup>Chase, *Op. Cit.*, p. 86.



## MYTH: A SEMIOLOGICAL AND IDEOLOGICAL DEFINITION\*

Betty McGraw†

"Pour un savoir qui se loge dans la représentation, ce qui borde et définit, vers l'extérieur, la possibilité même de la représentation ne peut être que mythologie." Michel Foucault, *Les Mots et les Choses*.

\* \* \* \*

Our society is the perpetrator of mythical and collective beliefs. But while the field of mythical studies has been invaded by numerous laborers tilling the soil with essentially traditional tools, their methods have uncovered problems, which, nevertheless, cannot be solved with them. Other approaches must be sought if we are to extricate ourselves from the pervading sense of crisis which seems to dominate various academic disciplines. This paper will examine one alternative to the study of myth as a social, hence an ideological, object and is based on the structuro-semiological method developed by Roland Barthes in his well-known book, *Mythologies*. His analytic approach, which reveals the usage that Western culture makes of the linguistic sign, will then be subjected to a brief but essential delineation of its limits pointing to the fact that knowledge itself is born within an ideological framework.

\* \* \* \*

Myth, according to Barthes, is "a type of speech," a mode of signification that is not defined by its substance but by the way it utters its message. Now, to postulate a signification is to have recourse to semiology, which at the beginning of the century was vaguely defined by the linguist Ferdinand de Saussure as "the science of signs." Semiological research aims at "reconstituting the functioning of the systems of significations other than that of language. . ."<sup>1</sup> The proliferation of signifying systems in our modern society makes it imperative to pursue the development of a semiological science: publicity, fashion, literature, the national press, etc., are so many signs that carry within their structures a signifying function serving as support to a type of mythological speech. Of course, semiology does not claim to account equally well for all aspects of research. Anthropology, psychoanalysis, some contemporary types of literary criticism, all have different contents. But these disciplines have a common status: "They are all sciences dealing with values. They are not content with meeting the facts: they define and explore them *as tokens for something else*."<sup>2</sup> Semiology discloses their significations apart from their content. It is a science of form which studies "ideas-in-forms."<sup>3</sup>

When he sought to designate a signifying relationship, Saussure selected the word *sign* as the arbitrary union between a concept (hereafter referred to as *signified*) and the acoustic image (for which we will use the accepted term: *signifier*). Now, there is no natural bond, no intrinsic

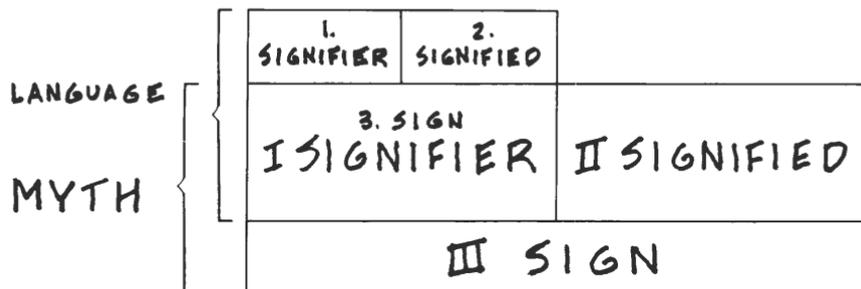
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rapport between the *signified* and the *signifier*. For example, the signified *ox* is not linked by inner relationships to the succession of psychic sounds /ɔks/ (which is the signifier); in fact, in French, the signifier for the concept *ox* is /boef/ (boeuf).<sup>4</sup> Languages and other means of expression used in our society are based on collective and conventional behavior. Polite formulas—sometimes given under the guise of “natural” expressiveness—are fixed by rules that oblige one to use them, not by the intrinsic value of the expression. For example, in France again, it is only “natural” to shake hands when you meet a friend—even twice a day. The notion of naturalness is not without its importance, as we shall see during the course of this presentation. What we must remember for our purpose now is that the order of discontinuity introduced by the Saussurian distinction between *signifier* and *signified* was, at that time, radical enough to function as an epistemological break. Some seventeen years ago, when Barthes<sup>5</sup> was feeling the pressure exerted by structuralism, the Saussurian articulation of the sign  $\frac{S_1}{S_2}$  became the construct of his semiological inquiry.<sup>5</sup>

In the early stage of his research, Barthes observed that mythology finds language in its path not only as a model but as a relay—a component. We find in myth, says Barthes, the tridimensional linguistic pattern: the signifier, the signified, and the sign. “But myth is a peculiar system, in that it is constructed from a semiological chain which existed before it. It is a *second-order semiological system*.”<sup>6</sup>



We have before us a now famous schemata indicating, in effect, that myth is “a *meta-language*, because it is a second language, in which one speaks about the first.”<sup>7</sup> What the mythologist retains of the various objects of our civilization—journalism, fashion, etc., is that they are *all signs* and, inasmuch as they lend themselves to myth, he need not concern himself with their substance, for *semiology deals with the form of their utterance*. Although Barthes has used his model in a French social context to explain the formal pattern of myth of such deceptively simple things as a grammatical example or a newsrelease, I believe that it can be worked *mutatis mutandis* in a U. S. context. I have, therefore, chosen an example with which a television-watching, North American audience can surely identify.<sup>8</sup>

I am sitting in my living room watching television. Suddenly, the love story fades away and Joe Garagiola bursts forth onto the screen. His appearance in the commercial *denotes* a simple meaning. With the most convincing argument, Joe is trying to lure me into buying either a Dodge pickup or a car. However, before the TV spot has ended, I am forced to realize that there is something ambiguous about Joe's act. His jovial expression, the rolled-up sleeves, the loosened necktie, his very casualness *connote* something else, which can only be called, as we will see in a moment, the American Dream.

When we attempt to articulate our example according to Barthes's diagram, we find that when Garagiola first appeared on our screen, his presence denoted the simple meaning of the linguistic system based on the relationship between the *signifier* and the *signified*. As a meaning, Garagiola's presence could very well be sufficient: he has his own vita, hence his own contingencies. But the connotation of this TV act, which is part of our second system, proposes an altogether different signification. As our eyes remain riveted to the screen, we note that the simple meaning of our linguistic system is degraded during the mythologizing process and turned into a pure form: not Joe's history, his vital statistics, nor even his surname is mentioned during the 30-second spot. Indeed, the fact that, as a former NBC anchorman and baseball player, his income must be substantial has been carefully kept at a distance. Drained of his history, Garagiola has become the empty signifier of the second level of discourse, which is our system of myth. And as pure form, the signifier can now be absorbed by the mythical concept. It is as if Garagiola's presence had been tamed to become "the accomplice of a concept which comes to [us] fully armed"<sup>9</sup> and which produced the mythical signification of the American Dream.

There is obviously a great deal of duplicity in the mythical signifier whose function Barthes has compared to a turnstile alternating between *meaning* and *form*. Endowed with this double function, myth can be used as a "perpetual alibi" that is, it always has an "elsewhere" at its disposal: "the meaning is always there to *present* the form, the form is always there to *outdistance* the meaning."<sup>10</sup>

The moral and methodological consequences of the double articulation of myth are as numerous as they are far reaching. Although this is not the place to elaborate at length upon them, from my modest example I would like to make two essential observations.

One of the very principles of mythical discourse is that "it transforms history into nature."<sup>11</sup> As we have just observed, when myth takes hold of the language-object, it distorts the meaning but *it does not suppress* it altogether for there must always be enough analogy between the meaning and the form to make the concept appear *natural*. It is as if the appearance of Garagiola on our screen had *naturally* conjured up the concept of the American Dream. Here, the analogy lies in Garagiola's image as one-of-us-red-blooded-American-Boys and the concept of the American Dream.<sup>12</sup> But Garagiola is *not* one of us. The fact that he makes a considerable amount of money, ironically, has its own value but this determinant factor, which is part of the history of Joe's successes, has been frozen (vitrified) and set aside so that what is left is the empty image, the signifier of our second system, used as an instrument meant to establish the American Dream.

Because myths are naturalized, most people consume them innocently. In their eyes, myth is not read as a motivated speech but as a causal process: the reason why we should be buying a Dodge, they'll tell you, is because owning one is part of the American Dream. Why, it's only "natural!" The receiver of myths takes this system to be a factual one, whereas myth is a semiological system and, as such, it is a system of value.

Summarizing our demonstration at this point we can define myth as a metalanguage, the function of which is to deform facts by turning them into values, thereby giving value a kind of necessity that negates its contingent character. This value system, in turn, *pretends* to be a system of facts, of things as they must be.

The second problem—the importance and complexity of which deserve more than the fragmentary perception I am about to give—concerns the dilemma of the unknowability of the thing-in-itself, once Kant's obsession and now, our own.

To explain this problem, let us go back to Barthes's diagram for a moment. We observe that, while passing from the meaning of the linguistic system to the form of the metasystem, what is lost in the process is our knowledge of the reality of the sign so that we may better receive the knowledge of the mythical concept: "To tell the truth, what is invested in the concept is less reality than a certain knowledge of reality."<sup>13</sup> True reality never manifests itself on the surface of things and "the nature of truth may very well be measured by the degree to which it tries to elude you. . . ."<sup>14</sup> And if reality is not an objective fact but a sort of tacit agreement between individuals

and the societal group to which they belong, then that "certain knowledge of reality" is nothing more than myth—a system that operates upon our fictitious concepts of the real world and re-creates what we assume to be reality so that it may tell us how to act in consequence of "how things are." In short, we do not live life, but a fiction that we call life.

The awareness of the elusive nature of reality only reaffirms our skepticism of the Hegelian vision of a science that "presents itself as a circle turned back upon and into itself, incapable of radical self-interrogation, subordinated to a teleological outlook which imposes an established system upon the sciences that it subtends and which removes the validation of scientific inquiry from the conduct of the inquiry itself."<sup>15</sup> Today, scientific philosophers can no longer ignore the fact that all scientific theories are based upon an intersubjective agreement about the status of the real world and about the language appropriate to it. Our scientific world is one of models and their logical manipulation (something in the order of the logical manipulation of irrationality). For years we have constructed theories about the real, and for years we have ideologically enforced these accidental constructs. In that sense, the semiological explanation of myth is the conscious unveiling of an ideological act. However, Barthes himself was never deceived by his own demonstration, which gives to the explanation of myth the serenity of science. The Barthesian model, while giving us the conditions for the elaboration of myth, failed in its attempt to uncover the rules and forms of its reality. Here, the difficulty lies in the nature of mythic structures that are veto-proof for they pertain not to facts but, as we have seen, to values and consist really of tautologies. The mythologist could presumably invalidate these self-verifying structures with the reintrusion of a factual system into the mythic (this operation has been referred to as the "demythification of myth"), but recent studies indicate that such an attempt is futile and ineffective since the structure of metalanguage functions as an infinite regression, an endless throwback from sign to sign. The lack of any nuclear component in the sign causes the true center of myth to be constantly shifting, thus protecting myth from a conceptual terminology which might be used to denounce its ideological appropriation while, at the same time, allowing it to be constantly produced.

And so it was not too long before Barthes came to the conclusion that the Saussurian sign as model was unpalatable. Saussure's teaching was merely a single province, part of the structuralist myth, now drawing to a close, leaving in its aftermath indebted theoreticians, many of whom are now bent in subverting the inherited forms of scientific reflection on man.<sup>16</sup>

With Derrida, who has begun a "deconstruction" of the linguistic sign, and Deleuze, a proponent of schizo-analysis, Barthes is henceforth advocating a semiology untainted by formalism, which does not reduce everything into Law, and, consequently, into an instrument of norm and repression. What is needed, so it seems, is a type of research that does not need any type of formal model *ad fine*, for it provides no place for autocriticism.

In the spirit of the research that is now occurring as to the status of the sign and the consequences of these theoretical reflections on many areas of investigation—anthropology, history, linguistics, poetics, psychoanalysis, etc.—I must defer the conclusion of my essay. Suffice it to say that, from within the closure of the sign, which now stands denounced, a different signifying practice (a *semanalysis*, as it is termed by J. Kristeva<sup>17</sup>) suspicious of the logocentricism inherent in the Saussurian sign can now be born. But it remains to be seen whether this type of research can help in "deconstructing" myths or fictions that dominant ideology passes off as constitutive of reality and as universal truths.

## NOTES

<sup>1</sup>Roland Barthes, *Elements of Semiology*, trans., Annette Lavers and Colin Smith (Hill and Wang, New York, 1968), p. 95.

<sup>2</sup>Roland Barthes, *Mythologies*, trans., Annette Lavers (Hill and Wang, New York, 1972), p. 111. Italics mine.

<sup>3</sup>*Ibid.*, p. 112.

<sup>4</sup>It should be noted that the concept for the English word *ox* is not the reality of the animal itself (which, in fact, is the referent) but its mental image (the *signified*). To paraphrase Louis Althusser, let us say, then, that our concept of reality is not more real than our knowledge of sugar is sweet.

<sup>5</sup>One must remember that for Hjelmslev, Greimas, and other theoreticians, "signifieds" have also found their place in structural analyses, thus making semantics a part of structural linguistics.

<sup>6</sup>*Mythologies*, p. 114.

<sup>7</sup>*Ibid.*, p. 115.

<sup>8</sup>In spring of 1975 a well-known sports personality made a series of television commercials for an automobile manufacturer.

<sup>9</sup>*Mythologies*, p. 118.

<sup>10</sup>*Ibid.*, p. 124.

<sup>11</sup>*Ibid.*, p. 129.

<sup>12</sup>Unlike the linguistic sign, which, as we have seen earlier, is unmotivated, myth is motivated speech. Its signification always contains some analogy, and that is what's so disturbing about it, for "motivation is the very duplicity of myth: myth plays on the analogy between meaning and form, there is no myth without motivated form" (*Mythologies*, p. 126).

<sup>13</sup>*Mythologies*, p. 119.

<sup>14</sup>Claude Lévi-Strauss, *Tristes Tropiques* (Plon, Paris, 1955), p. 50, translation mine.

<sup>15</sup>Philip Lewis, "Revolutionary Semiotics," in *Diacritics* 4 (Fall, 1974), p. 29.

<sup>16</sup>Contrary to popular beliefs, the intelligibility expressed in the articulation of the linguistic sign and denounced as being empirical by critics of structuralism does not end with the advent of Chomskian "generative grammar," for its methodology (system of categories, performance, etc.) remains very much within the prison of its own linguistic model. What the Chomskian approach signals, however, is the end of structuralism conceived as a science of taxonomies, inventories of units, and already established combinations.

<sup>17</sup>Julia Kristeva is in the process of developing what might be called a "revisionary semiotics" whose task is to focus on the basic philosophical problem of intelligibility. By using theory and practice simultaneously to test and correct acquired ground, this revolutionary semiotics enunciates its own philosophical problematics as it pursues its own formulation. New knowledge is immediately relativized, subjected to analysis, and confronted with alien and critical concepts. Thus it becomes the critic of its own models and of the science that produces them. "At every moment of its elaboration, semiology thinks its object, its instrument, and their relationship, thus thinking itself, and becomes in turning back upon itself *the theory of the science that it is*" (*Recherches pour une sémanalyse*, pp. 17-26).



## THE PRISON OF ONE'S OWN MIND\*

*Raymond S. Nelson*†

Sitting on an endless round of committee meetings has given me opportunity to observe people engaged in many levels of debate, and, more particularly, to observe how differently human minds work. On a typical committee there is a person who listens, participates, grasps the issues early and easily, and perceives the alternatives although he may not be certain of the best choice. There will also be a person who listens, gets hung up on a word or phrase, which creates for him whole trains of transverse thought, who must then go back to the point of reference, immediately or later on, to fill in any gaps of logic or of information he has missed. This person cannot leap comfortably to conclusions based on broadly parallel former experiences in thought, or on strong probabilities; he needs to proceed meticulously point by point, crossing all t's as he follows the exchanges in conversation. These two persons are polarities in the group, and many fall between. There are often persons who see problems in diagrammatic, or organizational (hierarchical) terms, who grasp discussions of problems schematically. There are sometimes persons on the committee who think relationally—that is, they see parallels between the present case and former ones, whether in unique elements in the problem, the personnel, or the prospectus. And so on. Whatever the number of varieties in actual types of thought and of human minds, it is clear that a marvelous complexity does exist, and the mere existence of such variety suggests the worthwhileness of the topic.

Experience in deliberative assemblies, however, whether on committees or otherwise, suggests not only subtle gradations in mind-shapes, but sharply different kinds of thinking. There is, for example, the artist who thinks spatially in terms of arrangement and form. He sees a scene in his unique way, very different from the nonartist, and organizes what he sees into significant lines, colors, masses, and depths. These matters are intensely meaningful to him, as they may not be to the uninitiated. In much the same way, an athlete needs to have "savvy" to play his game professionally. The baseball player who breaks to the right or the left even before he hears the crack of the bat has such savvy, and catches the ball when the average mortal would not be anywhere near it. Like T. S. Eliot's child, one would almost think such bodies thought. And perhaps they do think. It is difficult to account for super athletes unless we acknowledge some unique, kinetic-muscular, direct circuit with the human mind, directing all physical effort with a minimum of conscious "thought."

The spectator, viewing such infinite variety of human minds in operation, is staggered with the implications of the realization. It means that "logical thought" and "logical arguments" are logical to some but not to others. It means that demonstrations and proofs that will impress or persuade some are useless for others. It means that differences and divisions will

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continue to fester and flourish in all areas of human debate until we return to the veriest starting point and recognize that no one argument or demonstration can convince all people—not because people are stupid, or cantankerous, or biased, or obnoxious, or illogical, but because human minds do not all work the same way. The connections are different; the delicate balances between what we call “reason” and “emotion” and “will” are different; natural capacities to see similarities or differences are different; abilities to imagine schemes and structures, or not to see them, are different; combinations of kinetic, muscular, ratiocinative, and reflective elements are different. In short, each person is distinctively individual, and efforts to include all people into broad categories and patterns of thought are doomed before they begin.

In the face of overwhelming human complexity, one might well ask, how is communication possible at all? It is, at best, difficult. No wonder that people in all groups and at all levels of society find communication a major problem. Yet it is the modest goal of this paper to suggest that improvement in communication may begin only after society recognizes how different people really are. The mere recognition that there are essential differences is a first halting step to solving the larger problem of complete understanding and perfect communication.

The already difficult problem in human comprehension and communication is compounded by the significant number of persons who blithely and uncritically accept the notion that there is a logical way of thinking, that it indeed is “scientific,” and that all people can through education or behavior modification be forced to fit into any desirable social or intellectual mold. Such people assume simplistically and uncritically that all people think as they themselves do, and that their way of thinking is right.

Such persons forget that prior to the Renaissance and the rise of the scientific spirit many other modes of thought served men very well, even though people then had the same bewildering variety of human minds as now. It is surprising to some moderns, for example, that early seers should have complete confidence in haruspicy, the reading of sacrificial entrails, or in the flight of birds across the sky, as providing reliable predictions of future events, or that medieval philosophers were so certain that the motion of heavenly bodies was circular, not elliptical, because of a prior belief in proper symbols for ideas of perfection. Indeed, some moderns patronize many of the older modes of thought as quaint, curious, or downright unconscionable.

A case in point is the existence of spirit beings such as fill the pages of scripture and the endless commentaries on sacred texts that dominated western scholarship through the middle ages. Earlier Europeans believed implicitly in demons, ghosts, angels, devils, and other kinds of spirit beings now pretty much abandoned; and early Greeks and Romans believed absolutely in gods, dryads, nymphs, demigods, and a variety of other superhuman creatures. Yet if we ask ourselves today, “Do you believe in ghosts?” most of us smile—despite ourselves—and say, “No, I don’t believe in ghosts.” Now, how has the change come about? Why do most westerners today not believe in ghosts and witches and angels and devils? The answer is difficult and complex, yet the essential fact is that dominant minds have since Francis Bacon’s day established this world and its phenomena as the most appropriate subject matter for study, and have assumed man’s capacity to understand all things, especially when approached inductively. The drift has been steady and inexorable since those watershed Renaissance days, followed as they have been by the parallel and mutually reinforcing trends that we call the scientific revolution, the industrial revolution, and the democratic revolution. Add to such fundamental changes the ideal of universal education based on a unified curriculum, with inductive reasoning as the essential mode of thought, and you have the modern sprawling edifice known as the “knowledge explosion” or the “education mill.”

Robert Pirsig addresses the vexed question of modes of thought in his recent book, *Zen and the Art of Motorcycle Maintenance*, although he deals with several other major issues as well. “Are there ghosts?” Chris asks his father, the motorcyclist. “Tom White Bear thinks there are.” The western mind still says no, there are no ghosts, and that’s the end of it. But why not? Pirsig goes on to explain in his book, through his central figure:

“Because they are *un-sci-en-ti-fic*.” And the way he says it makes a companion smile. “They contain no matter . . . and have no energy and therefore, according to the laws of science, do not exist except in people’s minds.” Pirsig puts the case very well during his extended treatment of ways of thinking, and illustrates in his book the strait-jacket mode of western thought, which seriously limits for most people the kinds of mental activity possible.

Yet insistent and persistent voices from many parts of the world, Eastern and Western, say that human auras are real, that ghosts and spirits do exist, that gods and devils are part of human life experience, that there are psychic powers largely unknown and undeveloped in most people, and that black witches and white witches are real and that they do have occult powers. Science, as we have known it, has little to say to such subjects, but typically simply denies the validity of such claims. Indeed, the western person has difficulty taking seriously the occult or the supernatural. Such matters are outside the ken of most western minds, and tend to be impatiently dismissed unless for diversion and entertainment—and profit. Entertainment dealing with the occult is monumentally profitable, hucksters have discovered, and they are fattening their bankrolls with movies on demon possession, sorcery, exorcism, and vampirism despite the fact that neither they nor most of the public take such matters seriously.

"Are there ghosts, then?" we may well ask. The answer for most adults educated in our public schools is still no. There are no ghosts. The mind is formed pretty well during the early elementary grades, and it is the rare person who resists the acculturation that takes place day after day via the classroom and public information systems.

But there are signs that more and more people are aware of the terrible price the human race is paying through such lock-step thinking, and such people are calling for tolerance and recognition of diversity in the ways that people think. More and more scholars are analyzing the operation of the mind and concluding that there are significant differences among people and the way they think. Frederick Bartlett, an experimental psychologist, in a book called *Thinking* discusses four ways of thinking at some length (Closed systems, Experimental, Everyday, and Artistic), and concedes that "religious" and even "mystical" thinking may be yet other kinds. W. T. Jones, a prominent American philosopher, discusses scientific and humanist modes of thought, ostensibly with a view to bringing these two into harmony—reminiscent, perhaps, of Jacob Bronowski's argument that the two (scientific and artistic) actually are one at the level of imaginative, creative construction<sup>1</sup>—yet he comes to a significantly different conclusion. Jones urges, much as I am doing, that a broader relativism is needed in the place of "a decadent absolutism which nobody any longer believes."<sup>2</sup> Robert Pirsig in *Zen and the Art of Motorcycle Maintenance* also calls for the recognition of many valid modes of describing reality, and urges tolerance through his fictionalized account of one person who had been judged insane because of his insistent difference with society and its ways, and subjected by that society to electric shock treatment to set him straight.

If Jones is right that a minority of abstract thinkers tend in time to create the unconscious beliefs of the majority, and he likely is right, then educators need to be reached by those who recognize differences in ways of thinking so that the message can begin to seep far and wide into the common mind. The latent wealth of thought and available power for human beings possible through abstract philosophic effort, or mystic exercise, or religious devotion, or artistic creativity, or imaginative application, or experiment in extrasensory perception or in human auras, or research in occult matters and a hundred others should not be written off as "irrational" and therefore inappropriate. But the task of opening new frontiers for study and research is clearly just beginning.

Henry Adams used the Virgin and the Dynamo as symbols for two eras of human history, and pronounced the modern era "an exhausted wasteland" and man its "entropic victim," primarily because modern man has "no synthesizing mythology" to give meaning to himself or to society.<sup>3</sup> The failure of mythology in the twentieth century is a direct result of the scientific mode of thought which has inexorably demythologized all systems of human thought and life. Only a recognition of that fact, coupled with a deliberate effort to create an alternative climate of tolerance for uniqueness and human variety, spells hope for the future of mankind. Adams' choice of a lifeless Dynamo to symbolize the dominant mode of contemporary western thought was a stroke of genius; it remains now for sensitive, responsible human beings to create a new era where the human spirit can flourish in limitless profusion, where new symbols will suggest life, and health, and community.

Pirsig's book provides me with an apt closing. The long motorcycle ride from Bozeman, Montana, where Chris's father teaches rhetoric, is over. Father and son have traveled westward to Oregon, then south into California, generally at odds because of a brooding resentment in the boy's mind and being. But as the trip draws to a close, and the father's philosophical observations and statements to the boy begin to be understood, Chris finally asks:

"Were you really insane?"

Why should he ask that?

"No!"

Astonishment hits. But Chris's eyes sparkle.

"I knew it," he says.

Then later, based on their new-found relationship, Chris asks further:

"Dad?"

"What?"

"Will I have the right attitudes?"

"I think so," I say, "I don't think that will be any problem at all."

Nor will it be a problem, for Chris will learn that human beings are related "in ways we never fully understand, maybe hardly understand at all." Further, his father will acquaint him with ideas of preconsciousness, backgrounds to thought, alternatives to dualism in philosophy, and the possibility of tentativeness. Chris therefore has a good chance of helping to break the chains of human thought that bind so many among the dominant classes of western society. He is fortunate to discover alternatives so young, and has a fighting chance to be different.

## NOTES

<sup>1</sup>Jacob Bronowski, "The Creative Mind," in *Science and Human Values* (New York, 1956), p. 7 and passim.

<sup>2</sup>W. T. Jones, *The Sciences and the Humanities: Conflict and Recognition* (Berkeley, University of California Press, 1965), p. 3.

<sup>3</sup>Richard Lehan, "Hemingway Among the Moderns," *Hemingway in Our Time*, ed. Richard Astro and Jackson Benson (Corvallis: Oregon State University Press, 1973), p. 191.

## THE MYTH OF RELATIVISM\*

Robert Hollinger<sup>†</sup>

**ABSTRACT.** The first part of this paper attempts to bring out the historical and philosophical roots of Relativism. I take Relativism to be the view that no area of theory or practice can give rise to significant knowledge, i.e., nonarbitrary, justifiable theories, standards, and beliefs about human beings and the world. In short, I view Relativism as a form of skepticism.

Relativism is an attempt to undermine a view known as Objectivism. Objectivism in its modern form, which is associated with the mechanistic world view of classical physics, holds that one area of human concern does (in principle) give rise to nonarbitrary, i.e., "objective" truth—indeed, absolute truth, for some Objectivists—namely, science. To the extent that our knowledge claims can be reduced to, or assimilated into, the framework of classical physics, we can have knowledge in other areas; to the extent that they cannot be, such areas cannot express "objective" truths.

On the objectivist view, little else except physics and chemistry can be subject to rational inquiry, since ethics, art, religion, etc., clearly do not fit the mold of the paradigm of classical physics. At the very best, behavioristic or other reductionist analysis of such areas must be given if they are to be considered more than "subjective." Thus, Objectivism yields either Scientism or else C. P. Snow's "two cultures," where art, values, etc. are construed as subjective, irrational, noncognitive, i.e., they are interpreted along skeptical or nihilistic lines.

Relativism, in its attempt to undermine the pernicious influence of this view, holds that science, too, is subjective, etc. But this view differs in no other respect from Objectivism. In fact, it is actually a variant of that view, which rests upon the same assumptions and dichotomies, e.g., that only science can in principle give us knowledge, that there is a sharp distinction between the objective and the subjective, fact and norm, science and values. Relativism is really frustrated Objectivism, i.e., it concludes that skepticism is unavoidable once Objectivism is given up. And this is to assume that only Objectivism can give rise to a theoretically satisfying theory of knowledge.

If this analysis of Objectivism and Relativism is accurate, we can conclude that a new paradigm is needed. The rest of this paper sketches some broad features of such a framework.

The leading idea behind this paradigm is taken from Bohr's Complementarity Principle in quantum physics. I suggest several ways in which this principle can be generalized to yield a methodological and metaphysical framework that takes interdisciplinary *desiderata* seriously.

The main tasks for the view I adumbrate, center in the need for a methodology and metaphysics that are at once pluralistic, i.e., anti-reductionistic, and also capable of yielding some sort of global unity in our world picture. More specifically, some theory of partial and global truth is needed. Methodologically, this means the development of some view that preserves the integrity of each discipline or perspective-on-the-whole, while simultaneously yielding a means for unifying them all into a complementary relationship with global significance. Any future research in this area must, it seems, come to grips with these problems.

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## THE PERSONAL MYTH \*

*Scott Consigny* †

**ABSTRACT.** Myths, presuppositional structures, or frameworks that orient an individual in a culture and in nature and guide his selection and arrangement of phenomena seem to be necessary for man. But a seeming weakness of many collective myths of our culture is their incoherence or inflexibility. An individual may create an alternative to these collective myths, however, "personal myths" consisting of a family of paradigmatic texts and reconstructed contexts may be used as models to interpret and act in novel and often indeterminate situations. The individual employs the paradigmatic text or context to impute a structure to a novel situation; then, given the appearance of "anomalies," becomes engaged in a "heuristic circle," which allows interpretation of both model and new situation. The paradigmatic text consists of "figures" of thought and language—modes of functioning that facilitate hermeneutics without predetermining structure or content. The paradigmatic texts form a "family," and allow for the addition and arrangement of new texts and contexts without demanding a common principle or element. The individual is thus able to grow in capacity to interpret and act upon newly encountered texts and situations.

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**II. MYTH  
and ITS  
MANIFESTATIONS**



## THE SUN'S MYTH\*

Dell Hymes<sup>†</sup>

In his treatment of the Sun's Myth, Professor Dell Hymes noted that "one does not today present something from Indian tradition for entertainment of non-Indians, especially when one is not of Indian descent."<sup>1</sup> In spite of this declaration, Professor Hymes' performance of this myth was very stimulating to the assembled members of the American Folklore Society in Portland in 1974, and was equally challenging when reperformed as the keynote address of the Myths and Minds Symposium. The performance was certainly entertaining—it served perfectly as an example of a myth, which gave us a good starting point for our discussions; but more importantly it also pointed the way to "folklore's nature," to the nature of myths and of the dynamic processes that create, and then recreate, them when needed.

Those who heard Professor Hymes' performance at the Myths and Minds Symposium asked questions mostly about the origins and the meaning of the myth, and the values it expressed. It is possible that this myth, recorded by Franz Boas in 1891, is the mythopoetical creation of Charles Cultee, a Chinook Indian whose "remarkable intelligence" was praised by Boas himself. For Hymes the myth assimilates a "catastrophic experience to the traditional world view of the Chinook, through the genre of myth" (p. 358), that is, relates "the destruction of the Chinookan people on the lower Columbia in the middle of the nineteenth century, from 1830 on, particularly by disease" (p. 358) to the world view of "participant maintenance" in which the failure to maintain proper social norms results in the extinction of a tribe.

From the perspective of the chief it is a sort of Greek tragedy, a search for the absolute that can only result in misery. But from the perspective of the people of the tribe it is the "story" of a chief who neglects his role, who ignores advice, and fails to maintain social order. The Sun "is to be understood as maintaining proper social norms, as adhering to the rights and duties inherent in its nature" (p. 358), but the overly ambitious chief "vaults beyond the human" (p. 359) and causes the destruction of his people.

These two perspectives, however, fade before those of Cultee, the myth's creator, or of us, its hearers/readers. Why did Cultee (or someone else) create this myth about an extinct tribe, a myth that would probably never be heard by people who were intimately familiar with its traditions and language? Perhaps he felt a need to "assimilate this catastrophic experience" into a form which was meaningful to him, the same need most of us have felt at one time or another when faced with tragedy that seems unjustified. Somehow it is more bearable if it makes sense, if it can be attributed to some cause.

Perhaps even more important, Cultee told "his" myth to others, especially to people in the area, whose ancestors were possibly responsible for the destruction, because, as Professor Hymes states, "the people perish, in the myth, but the world of the myth, their world, rules and

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remains" (p. 359). The same thing could happen again, and Professor Hymes, when he first discovered this myth, "could not but associate the 'shining thing' with atomic power" (p. 360). Each person who comes into contact with this myth is forced not only to see the "lesson" of the dangers of hubris and the violation of accepted social structures, but to consider "further reverberations," including the overall question of how we understand our world. Professor Hymes stated that he could not articulate all of the reverberations that he felt, and went on to speak of the power of a myth that has become "a work of art whose performance, even in another century and another language, can speak to mankind" (p. 360). Is it any wonder, then, that his address emphasized not so much the form and meaning of the Sun's Myth itself, but the nature of such a work of art that goes so far beyond "what the story says." If man could articulate all his expressions, emotions, and ideas, there would probably be no "need" for myth or for art, and the world would be the poorer for it.

— Buford Norman

Here then is the myth, followed by Professor Hymes' brief synopsis and analysis:

## The Sun's Myth (The Sun's Nature): Text

### Preface

- (1) They live there, those people of a town;  
five the towns of his relatives, that chief.

### PART ONE

- I i/A (2) In the early light,  
now he used to go out;  
and outside,  
now he used to stay:  
now he used to see that sun:  
she would nearly come out, that sun.
- (3) Now he told his wife:  
'What would you think,  
if I went to look for that sun?'
- (4) She told him, his wife,  
'You think it is near,  
and you will wish to go to that sun?'
- ii/B (5) Next day,  
again, early, he went out;  
now again he saw that sun:  
there she nearly came out, that sun.
- (6) He told his wife:  
'You shall make me ten pairs of moccasins,  
you shall make me leggings,  
leggings for ten people.'
- (7) Now she made them for him, his wife,  
moccasins for ten people,  
the leggings of as many.
- iii/C (8) Again it became light,  
now he went,  
far he went;

- (9) He used up his moccasins,  
 he used up his leggings;  
 he put on others of his moccasins and leggings.
- (10) Five months he went,  
 five of his moccasins he used up,  
 five of his leggings he used up.
- (11) Ten months he went,  
 now she would rise nearby, that sun;  
 he used up his moccasins,  
 now he reached a house,  
 a large house.
- II iv/D(12) He opened the door,  
 now a prepubescent girl was there;
- (13) he went into the house,  
 he sat and stayed,  
 now he saw them there on the side of that house:  
 arrows are hanging on it,  
 quivers full of arrows are hanging on it,  
 elkskin armors are hanging on it,  
 wooden armors are hanging on it,  
 stone axes are hanging on it,  
 bone warclubs are hanging on it,  
 feather head ornaments are hanging on it:—  
 all men's goods there, on the side of that house.
- (14) There on the other side of that house,  
 mountain-goat blankets are hanging on it,  
 painted elkskin blankets are hanging on it,  
 buffalo skins are hanging on it,  
 dressed buckskins are hanging on it,  
 long dentalia are hanging on it,  
 shell beads are hanging on it,  
 short dentalia are hanging on it:—  
 now, near the door, some large thing hangs over there;  
 he did not recognize it.
- /E (15) Then he asked the young girl:  
 'Whose things are those quivers?'  
 'My grandmother's things, she saves them for my maturity.'  
 'Whose things are those elkskin armors?'  
 'My and my grandmother's things, she saves them for my maturity.'  
 'Whose things are those arrows?'  
 'My and my grandmother's things, she saves them for my maturity.'  
 'Whose things are those wooden armors?'  
 'My and my grandmother's things, she saves them for my maturity.'  
 'Whose things are those shields and those bone warclubs?'  
 'My and my grandmother's things.'  
 'Whose things are those stone axes?'  
 'My and my grandmother's things.'
- (16) Then again the other side of that house:  
 'Whose things are those buffalo skins?'  
 'My and my grandmother's buffalo skins, she saves them for my maturity.'  
 'Whose things are those mountain-goat blankets?'  
 'My and my grandmother's things, she saves them for my maturity.'  
 'Whose things are those dressed buckskins?'  
 'My and my grandmother's things, she saves them for my maturity.'

'Whose things are those deerskin blankets?'  
 'My and my grandmother's things, she saves them for my maturity.'  
 'Whose things are those shell beads?'  
 'My and my grandmother's things, she saves them for my maturity.'  
 'Whose things are those long dentalia?'  
 'Whose things are those short dentalia?'  
 'My grandmother's things, she saves them for my maturity.'

- (17) He asked her about all those things.  
 He thought:  
 'I will take her.'

v/F(18) At dark,  
 now that old woman came home,  
 now again she hung up one (thing);

- (19) he likes that,  
 that thing (is) shining all over;  
 he stayed there.

III vi/G(20) A long time he stayed there,  
 now he took that young girl;  
 they lived there.

- (21) In the early light,  
 already that old woman was gone;  
 in the evening,  
 she would come home;  
 she would bring things,  
 she would bring arrows,  
 sometimes mountain-goat blankets she would bring,  
 sometimes elkskin armors she would bring.

- (22) Every day (was) like this.

## PART TWO

IV vii/H(23) A long time he stayed,  
 now he felt homesick;

- (24) twice he slept,  
 he did not get up.

- (25) That old woman said to her grandchild:  
 'Did you scold him,  
 and he is angry?'  
 'No, I did not scold him,  
 he feels homesick.'

/I(26) Now she told her son-in-law:  
 'What will you carry when you go home?  
 Will you carry those buffalo skins?'  
 He told her, 'No.'

- (27) 'Will you carry those mountain-goat blankets?'  
 He told her, 'No.'

- (28) 'Will you carry all those elkskin armors?'  
 He told her, 'No.'

/J(29) She tried in vain to show him all that on one side of the house.  
 Next all those (other) things.  
 She tried in vain to show him *everything*.

- /K(30) He wants only that,  
that thing which is large,  
that (thing) put up away.
- (31) When it would sway,  
that thing put up away,  
it would become turned around,  
at once his eyes would close:  
that thing (is) shining all over.
- (32) Now he wants only that thing there.
- /L(33) He told his wife:  
'She shall give me one (thing), that blanket of hers, that old woman.'
- (34) His wife told him:  
'She never will give it to you;  
someone always tries in vain to buy it from her,  
she would never do it.'
- (35) Now again he became angry.
- viii/M(36) Several times he slept,  
now again she would ask him:  
'Will you carry that?'  
she would tell him.
- /N(37) She would try in vain to show him all those things of theirs,  
she would try in vain to show him all those men's things;  
she would try in vain to show him all.
- /O(36) She would reach that (thing) put up away,  
now she would become silent;
- (39) When she would reach that (thing) put up away,  
now her heart became tired;
- (40) Now she told him:  
'You must carry it then!  
Take care! if you carry it.  
It is you who choose.  
I try to love you,  
indeed I do love you.'
- /P(41) She hung it on him,  
she hung it all on him,  
now she gave him a stone ax;  
she told him:  
'Go home now!'
- V ix/Q(42) He went out,  
now he went,  
he went home.  
He did not see a land.  
He arrived near his uncle's town.
- (43) Now that which he held shook,  
now that which he held said:  
'We two shall strike your town,  
'We two shall strike your town,'  
that which he held said.
- /R(44) His reason became nothing,  
he did it to his uncle's town,  
he crushed, crushed, crushed it,  
he killed all the people.

- (45) He recovered:  
 all those houses are crushed,  
 his hands are full of blood.
- /S(46) He thought,  
 'O I am a fool!  
 See, it is just like that, this thing;  
 Why was I made to love it?'  
 He tried in vain to wrench it off,  
 and his flesh would be pulled.
- x /T(47) Now again he went,  
 and now he went a little while,  
 now again his reason became nothing.
- (48) He arrived near another uncle's town.  
 Now again it said,  
 'We two shall strike your town,  
 We two shall strike your town.'  
 He tried in vain to still it,  
 it was never still.  
 He tried in vain to throw it away,  
 always his fingers closed.
- /U(49) Now again his reason became nothing,  
 now again he did it to his uncle's town,  
 he crushed it all.
- (50) He recovered:  
 his uncle's town (is) nothing;  
 all the people have become dead.
- /V(51) Now he cried.
- (52) In vain he tried in the fork of a tree,  
 there in vain he would try squeezing through it,  
 in vain he would try to wrench it off.  
 it would not at all come off,  
 and his flesh would be pulled.
- (53) In vain he would try striking what he held on a stone,  
 it would never be crushed.
- xi /W(54) Again he would go,  
 he would arrive near another uncle's town.  
 Now again that which he held would shake:  
 'We two shall strike your town,  
 We two shall strike your town.'
- /X(55) His reason would become nothing,  
 He would do it to his uncle's town,  
 crush, crush, crush, crush.  
 He would destroy all his uncle's town,  
 and he would destroy the people.
- /Y(56) He would recover,  
 he would cry out,  
 he would grieve for his relatives.
- (57) He would try in vain diving in water,  
 he would try in vain to wrench it off,  
 and his flesh would be pulled.  
 He would try in vain rolling in a thicket,  
 he would always try in vain striking what he held on a stone.

- (58) He would give up.  
Now he would cry out.
- xii/Z(59) Again he would go,  
Now again he would arrive at another town, an uncle's town.  
Now again what he held would shake:  
'We two shall strike your town,  
We two shall strike your town.'
- /AA(60) His reason would become nothing.  
He would do it to the town,  
crush, crush, crush, crush,  
and the people.
- /BB(61) He would recover.  
All the people and the town (are) no more.  
His hands and arms (are) only blood.
- (62) He would become,  
'Qa! qa! qa! qa!',  
he would cry out.
- (63) He would always try in vain striking stones,  
what he held would not be crushed.  
He would always try in vain to throw away what he held,  
always his hands enclosed it.
- xiii/CC(64) Again he would go,  
Now next (is) his own town,  
he would be near his own town.  
He would try to stand in vain,  
see, his feet would be pulled.
- /DD(65) His reason would become nothing,  
he would do it to his town,  
and he would destroy his relatives.
- /EE(66) He would recover.  
His town (is) nothing.  
The ground has become full of corpses.
- (67) He would become,  
'Qa! qa! qa! qa!',  
he would cry out.
- (68) He would try to bathe in vain,  
he would try in vain to wrench off what he wore,  
and his flesh would be pulled.
- (69) Sometimes he would roll about on stones.  
He would think,  
perhaps it will be broken apart.
- (70) He would give up.  
Now again he would cry out,  
and he wept.
- VI
- xiv/FF(71) He looked back,  
now she was standing there, that old woman.  
'You,'  
she told him,  
'You'.  
I try in vain to love you,  
I try in vain to love your relatives

- Why do you weep?  
It is you who choose,  
now you carried that blanket of mine.'
- /GG(72) Now she took it,  
she took off what he held.  
Now she left him,  
she went home.
- (73) He stayed there,  
He went a little distance.  
There he built a house, a small house.

## The Sun's Myth (The Sun's Nature): Analysis

### Preface

#### PART ONE

##### I (*A chief seeks the sun*)

- i-iii. A chief watches the sun, determines to go to it, and, travelling far, reaches its large house.

##### II (*He discovers the Sun's abundant wealth*)

- iv-v. Entering, he finds a prepubescent girl, great stores of property, and one thing he does not know; he learns from the girl that her grandmother will give the wealth on her maturity, plans to take her; at night, when the old woman returns, he sees and likes a shining thing she puts up.

##### III (*He stays*)

- vi. After a time, he marries the girl, they live there, the old woman brings gifts each evening.

#### PART TWO

##### IV (*Homesick, he covets the shining thing*)

- vii. After a time, he is homesick, as the old woman discovers from her daughter; she shows him all the property, but he wants to take only the shining thing; he tells his wife the old woman must give it to him, she says she will never do so, he is angry.
- viii. After several days, the old woman again shows him all the property; reaching the shining thing, she becomes tired, tells him he shall carry it, warns him, states her love; she hangs it on him, gives him an ax, tells him to return home.

##### V (*Returning home, he discovers the Sun's transcendent power*)

- ix-xiii. He goes, and as he nears each of the five towns of his relatives in turn, the ax makes him lose consciousness; he recovers to find he has destroyed the town; he weeps, and tries vainly to rid himself of the ax.

##### VI (*He stays*)

- xiv. He sees the old woman behind him, she admonishes him, frees him from the gifts; he stays, goes a little way, builds a small house.

There are two parts, parallel but not isomorphic. If the leading topics of the action are identified as desire (to find the sun, to have the shining thing); travel (to the sun, returning home); discovery of the nature of the sun (her bountiful wealth, her transcendent power); and staying (in the sun's large house, and where the chief returns); then the disposition of the four among the three acts of each part can be shown as follows:

DESIRES	i	I	ONE
	ii		
TRAVELS	iii		
DISCOVERS	iv	II	
	v		
STAYS	vi	III	
DESIRES	vii	IV	TWO
	viii		
TRAVELS,	ix	V	
DISCOVERS	x		
	xi		
	xii		
	xiii		
STAYS	xiv	VI	

Overall, there are: a preface and two parts: (One, Two)  
 six acts (I-VI)  
 fourteen scenes (i-xiv)  
 thirty-three stanzas (A-GG)  
 seventy-three verses (1-73)  
 about 298 lines (marked by arrangement on the page)<sup>2</sup>

## NOTES

<sup>1</sup>Dell Hymes, "Folklore's Nature and the Sun's Myth," *Journal of American Folklore* 88 (1975), 345-369. This address included a performance of the Sun's Myth and several pages of comments about it; my remarks here are based on these comments, as well as on his address at the Myths and Minds Symposium.

The myth was first published in *Kathlamet Texts* (Washington, D.C.: Bureau of American Ethnology, Bulletin 26, 1901), pp. 26-33. It was edited and analyzed by Professor Hymes in 1974.

<sup>2</sup>Lines are divided to bring out parallelism of structure, first of all syntactically, but also to bring out local effects; it is not known that oral performance would have shown the same groupings of words in all cases. Verbal cohesion through repetition and parallel is the basis of establishing verses (stichs, distichs, tristichs, quadristichs, pentastichs). Parallel structure through repetition of phrases and incident plays the major part in establishing stanzas, and acts, relative to each other. Scenes are specifically established by initial markers of change of time (i, ii, iii, v, vi, vii, viii) or setting (iv, ix-xiii), but by structural convergence only in the final case (xiv) [the preceding conclusion of a 5-part sequence, reintroduction of an interlocutor, parallel to scene vi (Act III)]. Other organizations might be found, but would have to satisfy the same criteria of coherence and consistency.



## CONSERVATIVE MYTH AS A RESPONSE TO MODERNITY AND POPULAR CULTURE: THE ENGLISH AUGUSTANS AND THE AMERICAN AGRARIANS\*

*Robert R. Bataille* †

The purpose of this paper is, first, to establish the principle that those who hold threatened values, the threat dramatized often by works of popular culture, will almost always seek to mystify the past in order to attack the present, which is blamed for challenging those values. Perhaps the most extreme example of this archetypal response in Western history can be found in the attempt of some nineteenth-century German and French writers and thinkers to create primitivistic myths about the German past, an action that ultimately helped lead to the rise of Nazism. This conservative archetype will be briefly discussed for the light it sheds upon the Agrarian and the Augustan reactions.

The paper will then compare this conservative response mentioned above as it appears in two groups of widely separated writers, concentrating in particular on the roles played by primitivism and popular culture in their reaction. The English Augustans of the eighteenth century (among them Alexander Pope, Jonathan Swift, and Oliver Goldsmith) and the American Agrarians of the twentieth century (principally Allen Tate, John Crowe Ransom, and Donald Davidson) attempted to defend traditional values against what they considered to be a modern tendency towards decadence in both esthetics and ethics, especially as manifested in works of popular culture—indeed, modern culture in general.

To counter these tendencies of mass culture, both groups of writers created a similar mythology, one based in large part on related ideas that A. O. Lovejoy and others have termed "cultural" and "chronological primitivism." The paper will hence discuss how this mythology glorified the past as ethically and esthetically superior to the present. Examples from the works of both groups of writers will be marshalled to show how the past was conceived to be orderly, the present as disorderly; how the past's culture was seen as whole and wholesome, while the present was fragmented and impure. It will be seen, finally, that in the laments for the loss of a greater past there is implied a criticism of the idea of progress both in the arts in specific and in society in general, a criticism seemingly necessary to any conservative myth.

Henry Hatfield, in his "The Myth of Nazism,"<sup>1</sup> discusses the forerunners of Nazi thought, or, more fairly, those who may be said to have contributed unwittingly to some of the mythic structure that Nazism later drew upon. The most important of these were the so-called second

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generation of German Romantics—the Heidelberg schoolmen like Arnim, Brentano, and Gorres; but one of the earlier Romantics, Novalis, also helped establish the conservative mythology with his *Christendom or Europe* (1799), which glorified the Middle Ages and had harsh things to say about “book learning” and even the invention of printing.<sup>2</sup> Already with Novalis two distinct features of a conservative mythology based upon primitivism are noticeable: one, there is an idealization of the past, here specifically the Middle Ages, which was to attract the imaginations of other conservative Western thinkers; two, there is a definite strain of anti-intellectualism in the attack upon print.

But Novalis did manage to defend the French Revolution; hence he retains some semblance of progressivism. Not so the Heidelberg group who became reactionary and chauvinistic. As Hatfield points out, the historical reasons for the stance of this group are plain: the French threat to the German states in the Napoleonic years brought out nationalism and patriotism in German intellectuals. Writers like Gores, who had once favored the French Revolution, and Arnim helped create a myth of a medieval Germany, inhabited by artistic, happy peasants, poetic in spirit even if untaught formally; this mythic vision of the German past was then contrasted with a corrupt, modernistic France that had sold its soul to materialism.<sup>3</sup> Another Romantic, Kleist, went back even further into German history in order to glorify the German past: Kleist appealed to a whole series of German military myths and particularly centered on the figure of Arminius, the great hero who strove against the Roman legions. At the same time the notion of northern superiority and the establishment of the cult of the “blond and blue-eyed” were emphasized.<sup>4</sup>

All of the above, then, illustrates that segment of the conservative mythology that tends to mystify and thereby elevate the past. But there is also the stance towards modernity, towards the conservative's own times, that must be dealt with. In this connection both French and German nineteenth-century thinkers are important. Two of these, Count Gobineau (1816-1882) and Paul de Lagarde (1827-1891) are characteristically scornful of their own times. Gobineau, a racist, claimed that primitive Semites were much superior to the later “degenerate” Jews of the modern world. Lagarde attacked modern liberalism, which he described as a deadening, leveling, egalitarian movement. He, like Arnim before him, looked back in admiration to the Middle Ages and desired to see constructed in the future a new German state based on conservative aristocratic and agrarian principles.<sup>5</sup> The outlook of these two writers thus exemplifies the position of the conservative mythology vis-a-vis the present: it is a stance highlighted by a primitivism that sees only decay and decadence in the modern world and only strength and virtue in the older one.

These thinkers' hostility to their own times was not always directed against what we today should call either popular or mass culture. It is true that Wagner thought music had declined, primarily because of its being tainted by “Jewishness,” and that Gores lamented that the modern peasants had forgotten the old folk songs.<sup>6</sup> Yet if we extend the definition of popular culture to include not just arts and entertainment but also politics, then these thinkers were indeed hostile to popular culture, for they were hostile to democracy. They were so even as they paradoxically in their primitivism and agrarianism sought to idealize the peasant, and to make his songs and crafts touchstones of cultural health.

In their war with modernism the American Agrarians of the 1930's also constructed a mythic folk, only instead of the German peasant the Agrarians idealized the Southern rural farmer and his independent way of life. At the same time, Agrarians opposed modern industrialism, urbanization, and mass culture. The past that was glorified was the pre-Civil War South where, the Agrarians felt, a true marriage had existed between the culture of the soil and that of the arts. A typical view of the agrarian life is epitomized in the following excerpt from Andrew Lytle's essay, “The Hind Tit”:

.. the time is not far off when the citizens of this one-time Republic will be crying, “What can I do to be saved?” If the farmers have been completely enslaved by that time, the echo to their question will be their only answer. If they have managed to remain independent, the answer lies in a return to a society where agriculture is practiced by most of the people. It is in fact impossible for any culture to be sound and healthy without a proper regard for the soil, no matter how many urban dwellers think that their victuals come from groceries and delicatessens and their milk from tin cans.<sup>7</sup>

If a contempt for the city and for the present itself can be viewed in Lytle as he urges a return to agrarianism, then an equally fervid love of the past can be found in Allen Tate's "The Briar Patch." It is eighteenth-century, country-house life in England that Tate most admires and in the following he attempts to see parallels between this life and that of the American South:

Not infrequently in the South one meets a conservative temper which carries a naive distrust of most types of organization. It is a temper somewhat similar to the eighteenth-century English squire's cynical regard of government. The antebellum "squirearchy" of the South did not have such an attitude, but its origins in both cases are the same; in both it springs from a certain individualism. The English squirearchy arose from a century of commotion and internecine war, while the Southern squirearchy expired in our Civil War, leaving in its relics the same dubieties.<sup>9</sup>

Another admirer of the same eighteenth-century, English country life is John Crowe Ransom, who praises the English countrymen because they "long ago came to terms with nature, fixed its roots somewhere in the spaces between the rocks and in the shade of trees, founded its comfortable institutions, secured its modest prosperity—and then willed the whole in perpetuity to the generations which should come after." Modern American life, however, especially that of the cities, is hostile to such stability and rooted affections.

Not surprisingly, then, the evils of the city became a focal point for the Agrarian attack on modernity. The city became the Agrarian's materialistic hell just as the nineteenth-century German conservatives envisioned the materialism of contemporary France as their particular inferno. Agrarians even repeated the old conservative belief that extensive urbanization ultimately destroyed a civilization. Agrarian economist Herman Nixon claimed that Agrarians ought to oppose rapid industrialization in their areas of America and could "profit by recalling that the decline of the Roman Empire was accompanied by the neglect of agriculture and the growth of an idle urban proletariat of unwieldy proportions."<sup>10</sup>

As the myth that fuels the modern industrial culture, the idea of progress comes in for its share of abuse from the Agrarians. Ransom remarks that those who worship progress can never "conclude a truce with nature" but must "wage an unrelenting war on nature."<sup>11</sup> The counter-myth of primitivism is strong here in Ransom's appeal to nature; it is also evident in his subsequent charge that progress demands from man a pace and rhythm that are as unnatural as they are insatiable. "Progress never defines its ultimate object but thrusts its victims at once into an infinite series. The industrial machine can never consent to peace."<sup>12</sup>

And for the Agrarians, perhaps the most objectionable products of modern, urban culture, manufactured by this unrelenting industrial machine, were not its tractors or its motor cars but its arts and entertainments. One major complaint that the conservative myth urges against modernity is its debasement of art and the artist, removing the former from being a natural part of life. Donald Davidson, one of the most outspoken of the Agrarians, felt that in order to restore art to its natural place in human life, the artist would himself become an ally of agrarianism, "since only in an agrarian society does there remain much hope of a balanced life, where the arts are not luxuries to be purchased but belong as a matter of course in the routine of his living."<sup>13</sup>

Art should not be separated, then, from one's daily life and placed beyond the ken of ordinary people, but such separation, argued Davidson, is just what occurs with the mass art of popular, industrial culture. Mass art, "the products of machines," in Ransom's phrase, "may be used, but scarcely enjoyed, since they do not have much aesthetic character. Aesthetic character does not reside in an object's abstract design but in the sense of its natural and contingent materials."<sup>14</sup>

Of course there was once a time and place when both the artist and his art were nurtured in a hospitable environment, one that was far different from the depersonalizing, abstract condition of the twentieth-century's mass culture. That time and place was in the pre-Civil War South when "history and literature, profane and sacred, twined their tendrils about the cottage and the villa, not the factory."<sup>15</sup> This early Southern culture was linked in the Agrarian mythology to the early Roman culture, to the Roman citizen who "reeked of the soil, of the plow and the spade,"<sup>16</sup> and hence engaged as eagerly in the life of physical toil as he did in the cultivation of his intellect. It is in phrases such as these just quoted that the Agrarians in particular and conservatives in general attempt to mystify the past. Rather than revere the

Middle Ages, as the conservative German Romantics did, the American Agrarians looked back in their own vision of primitivism to the antebellum South and to those earlier times, Augustan England and Republican Rome, to which they felt their South bore some relation.

That the Agrarians looked to eighteenth-century England to sustain their myths provides a convenient transition to a consideration of the English Augustans, primarily Swift and Pope, whose own primitivism was more cultural than it was historical. True, both Swift and Pope revered ancient Rome as had so many other humanists since the early Renaissance; and that belated Augustan, Oliver Goldsmith, who held some values similar to Swift's and Pope's, looked to merry old England in his most famous poem, *The Deserted Village*. Yet just as often the Augustans did not glorify any particular past culture, but when they wished to attack the evils of modern life, they did so by creating imaginary places as vantage points from which to criticize those values they felt were corrupt. Sometimes they would merely attack modern culture, opposing it to vaguely defined pasts of greater glory.

The best example in Swift of cultural primitivism as it is used to berate the present can be found in Parts II and IV of *Gulliver's Travels* (1726). In Part II, when Gulliver visits the giants called Brobdingnagians, he finds that the giant king becomes disgusted when informed about the refinements in warfare brought about by the European nations. In particular, the king is horrified at the description given him of gunpowder. Then, too, he shows little sympathy for European politics. The following quotation shows Swift's primitivism well illustrated by Gulliver's comments upon the giant king's view of government:

He professed both to abominate and despise all mystery, refinement, and intrigue, either in a prince or a minister. He could not tell what I meant by secrets of state, where any enemy or some rival nation were not in the case. He confined the knowledge of governing within very narrow bounds; to common sense and reason, to justice and lenity, to the speedy determination of civil and criminal cases. . .<sup>17</sup>

The basic primitivistic tenet that "less is more" can be seen here as well as its belief that modern life has been unnecessarily and unhealthily complicated and multiplied. In the passage below, Gulliver begins by commenting upon the Brobdingnagians' academic disciplines:

The learning of this people is very defective, consisting only in morality, history, poetry, and mathematics, wherein they must be allowed to excel. But the last of these is wholly applied to what may be useful in life, to the improvement of agriculture and all mechanical arts; so that among us it would be little esteemed. And as to ideas, entities, abstractions and transcendentials, I could never drive the least conception into their heads.<sup>18</sup>

Again, as in Novalis, a strain of anti-intellectualism can be seen in Swift's attack on abstract learning and in his insistence upon practical applications of knowledge.

Chronological primitivism also makes its appearance in Part III of *Gulliver's Travels* when Swift has Gulliver visit a land where the governor can call up figures from history. After condemning modern history and modern luxury, Gulliver is able to view some citizens from England's past. His comments upon them amount to a Tory lament for the good old days:

I descended so low as to desire that some English yeomen of the old stamp might be summoned to appear once so famous for the simplicity of their manners, diet and dress, for justice in their dealings, for their true spirit of liberty, for their valour and love of their country. Neither could I be wholly unmoved after comparing the living with the dead, when I considered how all these pure native virtues were prostituted for a piece of money by their grandchildren, who in selling their votes, and managing at elections, have acquired every vice and corruption that can possibly be learned in Court.<sup>19</sup>

Here Swift makes the same claim about modern Englishmen that Count Gobineau was to make about modern Jews; in both cases the moderns are seen as degenerate, while the older representatives are endowed with virtue. This feeling, then, that instead of progressing, moderns have decayed, is strong in both the German Romantics and the English Augustans.

In the conservative mythology of Alexander Pope, contemporary and friend of Swift, two distinct tones are to be noted. In his primitivism Pope is mild; but in his attack on the evils of modernism, particularly modern arts and science, best seen in his *Dunciad*, Pope is extremely harsh and views modern culture rushing towards the apocalypse. In a work such as his "Ode on

Solitude," Pope to be sure disengages himself from modern urban life and pays dutiful respect to the past, but there remains something of the city man's wistfulness after the country life, a tone that still maintains a certain sophistication without any wholesale endorsement of primitivism:

Happy the man whose wish and care  
A few paternal acres bound,  
Content to breathe his native air,  
In his own ground.

Whose herds with milk, whose fields with bread,  
Whose flocks supply him with attire,  
Whose trees in summer yield him shade,  
In winter fire.

Blest, who can unconcernedly find  
Hours, days, and years slide soft away,  
In health of body, peace of mind,  
Quiet by day,  
Sound sleep by night; study and ease,  
Together mixed; sweet recreation;  
And Innocence, which most does please  
With meditation.

Thus let me live, unseen, unknown,  
Thus unlamented let me die,  
Steal from the world, and not a stone  
Tell where I lie.<sup>20</sup>

Here, although there is a desire to retire to a simple life in the country, one restricted in scope (note the phrase "paternal acres bound," for instance), and even though a self-sufficiency is desired, one feels that the speaker's distance from the modern urban world is not very far. At any rate, the poem is narrated without any hostility towards that world.

A much harsher protest against the modern world is launched by Pope in his mock-epic *The Dunciad*, which first appeared in four books in 1728. The poem, ostensibly begun as a means by which Pope could attack those numerous third- and fourth-rate minds who had often besieged him during his career, ultimately through Pope's myth-making powers turns into a rather total indictment of modern culture. It concludes with a vision of the end of all worthwhile civilization, in an apocalypse that allows the Goddess of Dullness to reign supreme over all institutions, but especially over art.

Bad popular writing is seen both as cause and effect in bringing about the cultural disaster that will eventuate in the reign of Dullness. Early in "Book One" Pope describes the low area of London, called Grubstreet, where bad writers churn out their dull products in obedience to vulgar modern taste:

One cell there is, concealed from vulgar eye,  
The Cave of Poverty and Poetry.  
Keen, hollow winds howl through the blank recess,  
Emblem of Music caused by Emptiness.  
Hence Bards, like Proteus long in vain tied down,  
Escape in Monsters, and amaze the town.  
Hence Miscellanies spring, the Weekly boast  
Of Curl's chaste press, and Lintot's rubic post:  
Hence hymning Tyburn's elegiac lines,  
Hence Journals, Medleys, Mercuries, Magazines:  
Sepulchral Lies, our holy walls to grace,  
And New Year Odes, and all the Grubstreet race.<sup>21</sup>

Grubstreet, symbol of bad journalism, catered to the popular taste and presented the reader with doses of sex and violence, just as poor modern journalism does. Journals and magazines, mentioned above, were of course all relatively new forms of writing in early eighteenth-century England, and Pope, like Swift in his *Tale of a Tub*, objected to their debasing of taste.

But the strongest indictment of modern popular culture and the contrasting mourning for the falling away from the standards of a more worthy past come at the very end of the *Dunciad* where Pope envisions nothing less than an end to civilization. He sees the dullness of mass taste and mass standards as virtually destroying all genuine learning and art. Here Pope describes the triumph of dullness's chaos:

She comes! she comes! the sable Throne behold  
 Of Night Primeval, and of Chaos old!  
 Before her, Fancy's gilded clouds decay.  
 And all its varying Rainbows die away.  
 Wit shoots in vain its momentary fires,  
 The meteor drops, and in a flash expires.  
 As one by one, at dread Medea's strain,  
 The sickening stars fade off th' ethereal plain;  
 As Argus' eyes by Hermes' wand oppress,  
 Closed one by one to everlasting rest;  
 Thus at her felt approach, and secret might,  
 Art after Art goes out, and all is Night.  
 .....  
 Lo! thy dread Empire, Chaos! is restored;  
 Light dies before thy uncreating word:  
 Thy hand, great Anarch! lets the curtain fall;  
 And universal Darkness buries All.<sup>22</sup>

Finally, the most famous Augustan rejection of modernity, though it does not speak so directly about popular culture, is *The Deserted Village*, published in 1770 by Oliver Goldsmith, a belated Augustan at once progressive and conservative in outlook. In the *Village*, however, he is passionately conservative, lashing out at modern luxury that, as a result of mercantilism and industrialism, has corrupted the simple peasant life, and, at the same time, lamenting the loss of the pastoral existence once known in the English countryside. Goldsmith's poem is perhaps a fitting close to this paper as it incorporates most of the conservative values and attacks most of the modern tendencies also singled out by the American Agrarians and the German Romantics.

Goldsmith is upset by what he sees as industrialism's cruel effects upon the country dweller, particularly insofar as he is driven from the land. In the following lines, Goldsmith also magnifies the past, the typical conservative lament for the passing of the "good old days":

A time there was, ere England's griefs began,  
 When every rood of ground maintained its man;  
 For him light labor spread her wholesome store,  
 Just gave what life required, but gave no more:  
 His best companions, innocence and health;  
 And his best riches, ignorance of wealth.  
 But times are altered; trade's unfeeling train  
 Usurp the land, and disposses the swain;  
 Along the lawn, where scattered hamlets rose,  
 Unwieldy wealth and cumbrous pomp repose;  
 And every want to opulence allied,  
 And every pang that folly pays to pride.  
 Those gentle hours that plenty bade to bloom,  
 Those calm desires that asked but little room.<sup>23</sup>

Here is the same praise of a primitive past—its independence, its innocence, and its ethic of scarcity—that was noted in both the Agrarians and the Romantics.

There is a justness and an orderliness in the old way of life in the village that the city and modern times, by implication, cannot match:

O blessed retirement, friend to life's decline,  
 Retreats from care, that never must be mine,  
 How happy he who crowns in shades like these  
 A youth of labor with an age of ease;  
 Who quits a world where strong temptations try,  
 And, since 'tis hard to combat, learns to fly!<sup>24</sup>

In particular here, Goldsmith sees the country as the best place for the aged to retire to, but elsewhere it is clear that he feels that the country life is best for any age.

This older, more virtuous country life contrasts strongly with modern country life, where the wealthy industrialists and tradesmen have turned rural areas into gross pleasure parks for the few *nouveau riche* to play their games:

But the long pomp, the midnight masquerade,  
With all the freaks of wanton wealth arrayed,  
In these, ere triflers half their wish obtain,  
The toiling pleasure sickens into pain;  
And e'en while fashion's brightest arts decoy,  
The heart distrusting asks if this be joy.<sup>25</sup>

The suggestion here of false pleasures implies a decadence that the conservative mythology often charges modernity with.

In the conclusion to his poem, Goldsmith depicts the departure from England of the "rural virtues" as the hardy British yeomen take flight for America; those country people who are displaced yet cannot travel to the New World perish in the evil city. In his final lines, Goldsmith, appropriately for the focus of this paper, complains that the loss of such rural virtues means in turn the loss of true poetry:

And thou, sweet Poetry, thou loveliest maid,  
Still first to fly where sensual joys invade,  
Unfit, in these degenerate times of shame,  
To catch the heart, or strike for honest fame;  
Dear charming nymph, neglected and decried,  
My shame in crowds, my solitary pride;

.....  
Thou nurse of every virtue, fare thee well!  
Thou guide by which the nobler arts excel.<sup>26</sup>

Goldsmith ends upon a familiar note: like the German Romantics and the American Agrarians, he sees an intimate connection between primitivism and art. Like them, Goldsmith creates a myth in which art cannot survive in a sophisticated urban and modern culture.

In conclusion, it seems not too much to say that for Agrarians and Augustans, the more complicated and commercial, the more urban and sophisticated, a culture becomes, the less hospitable it grows to art, particularly to literature. More generally, all these writers feel alienated in a mass culture that they believe lacks both ethical and esthetical worth, seem to prefer a past, often extremely idealized, where needs are elemental and work patterns are orderly, and seem, in short, to construct formidable myths of the past in opposition to the present and its worship of progress.

Of possible general applications for our own times coming from this study, one would be that the various back-to-nature movements, the earth cults, and perhaps even the broader-based, ecological-cum-political activities of present-day Americans are, when stripped of their rhetorical strategies, fundamentally conservative currents. They are radical only in their retrogression and perhaps should be judged only with a full historical consciousness of their antecedents.

## NOTES

<sup>1</sup>In *Myth and Mythmaking*, ed. Henry A. Murray (Beacon Press, Boston, 1969), pp. 199-220.

<sup>2</sup>Hatfield, p. 203.

<sup>3</sup>Hatfield, pp. 203-204.

<sup>4</sup>Hatfield, p. 204.

<sup>5</sup>Hatfield, p. 207.

<sup>6</sup>Hatfield, p. 210.

<sup>7</sup>In *I'll Take My Stand* (Harper Brothers, New York, 1930), p. 203.

<sup>8</sup>*Ibid.*, p. 257.

<sup>9</sup>*Ibid.*, p. 5.

<sup>10</sup>*Ibid.*, pp. 195-196.

<sup>11</sup>*Ibid.*, p. 7.

<sup>12</sup>*Ibid.*, pp. 7-8.

<sup>13</sup>*Ibid.*, p. 51.

<sup>14</sup>"The Aesthetic of Regionalism," *American Review*, II (1933-1934), 306.

<sup>15</sup>Frank L. Owsley, "The Irrepressible Conflict," in *I'll Take My Stand*, p. 69.

<sup>16</sup>Owsley, p. 70.

<sup>17</sup>*Gulliver's Travels*, ed. Louis A. Landa (Houghton Mifflin, Cambridge, Mass., 1960), p. 109.

<sup>18</sup>*Gulliver's Travels*, pp. 109-110.

<sup>19</sup>*Gulliver's Travels*, p. 163.

<sup>20</sup>In Alexander Pope, *Selected Poetry and Prose*, ed. William K. Wimsatt, Jr. (Holt, Rinehart and Winston, New York, 1951), pp. 60-61.

<sup>21</sup>Pope, *Dunciad*, I, ll 33-45, p. 382.

<sup>22</sup>Pope, p. 449.

<sup>23</sup>*The Deserted Village*, in *Eighteenth Century Poetry and Prose*, ed. Louis G. Bredvold, Alan D. McKillop and Lois Whitney (The Ronald Press, New York, 1956), ll 57-70, p. 809.

<sup>24</sup>*Village*, ll. 97-102, p. 810.

<sup>25</sup>*Village*, ll. 259-264, p. 813.

<sup>26</sup>*Village*, ll. 407-412, and 415-516, p. 816.

## MYTH AND SCIENCE IN THE LIBERTARIAN IDEA OF HUMAN NATURE: THREE WRITERS\*

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The living institutions that support democracy are not very old in the West, and the libertarian view of human nature that gives them philosophical sanction is similarly new. This paper will deal with libertarian myths; but in doing so one should keep in mind that the myths supporting authoritarian views are much older in, and more central to, our culture. Consider the medieval view: an orderly if fallen universe, neatly symmetrical in design, populated by human beings who should have been its chief visible glory, but are instead the visible source and epitome of its imperfections, each one of them a battleground of sin and grace. There is much more coherence in the macrocosm than in the microcosm. Such a cosmology and psychology encourage the authoritarian to regard human nature as more responsive to punishment than to reward, as a source of strife and egotistical chaos in society rather than of cooperation and mutual aid. The authoritarian sees order in society as something that must be imposed from without—stone tablets to be brought down from Sinai. Since the Christian-medieval view also supports hierarchy and patriarchy, it is not surprising that fundamentalist Christians tended strongly to support the quasi-missionary bellicosity of the United States' federal executive in Indochina. One may say that one of the chief impediments to genuine democracy is a hierarchical and patriarchal patriotism whose highest expression is supporting the President.

Universal archetypes of the hero also support authoritarian leadership, notably in the cases of German and Italian fascism. John Kennedy's most successful identification with such archetypes was, ironically, accidental, having come about through his assassination while he was still fairly young. Journalists showed more psychological insight than respect for the facts of the case by calling him "the martyred President."

Supported by such myths, the authoritarian believes that we are radically imperfect and prone to violence, crime, and other disorderliness when left to ourselves, but that strong leaders, strict laws and morals, and efficient policing will make us live orderly and productive lives more or less in spite of ourselves. The libertarian view, by contrast, rejects original sin, though without necessarily assuming human perfectibility. Agreeing with the authoritarian that human nature is vulnerable to temptation, the libertarian asks, "Who will watch the watchmen?", believing that one of the most dangerous temptations, individually and socially, is the possession of political power. This is one reason why anarchists favor decentralization and local autonomy while also regarding themselves as internationalists. Another reason for favoring such arrangements, one which is more positive and more germane to the subject of this paper, is that individuals and communities develop and function best when not regulated by a distant authority whose accountability as well as competence is likely to be limited. Individual

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impulse, interaction, and enterprise receive what regulation they need from the immediate community. Capitalist and socialist libertarians have predictable differences with each other, but they alike tend to favor loosely structured education, for instance, and considerable sexual freedom. Alex Comfort, the editor of *The Joy of Sex*, is an anarchist.

Thus, basic goodness or badness aside, libertarians tend to stress the positive in human nature. Some in particular hold that in addition to a tendency to associate and give mutual aid, there is intrinsic to our natures a creative, ordering faculty, and that the development and free play of this faculty is the prime requisite for social order. Other necessary things will follow, just as, according to progressive educators, learning grows out of the free play and exploration of children.<sup>1</sup> In this view human nature, far from being a battleground for grace and concupiscence, is an integral form of life, evolving in an unknown direction, developing new adaptations in interaction with others and with the general environment. Such a concept is implicit in the writings of three humanistic thinkers of our day who are also socialist libertarians: Herbert Read, a literary critic and aesthetician; Paul Goodman, a literary critic and Gestalt psychologist whose popular reputation rests on his social criticism and writings on education; and Noam Chomsky, a linguist and writer on international affairs, the only one of the three who is still living. Read and Goodman were avowed anarchists since the 1930's; Chomsky has been sympathetic with anarchism and libertarian socialism from his youth.<sup>2</sup> On the question whether human nature requires centralized, institutional, authoritarian government, their ideas are similar and on the whole complementary. If they had ever gathered as a committee to draft a brief position paper on the matter, the statement might read to this effect: Human drives and appetites are by and large self-regulating when given reasonable scope. Moreover, many other aspects of human behavior, notably the use of language and the practice of the arts, indicate a strong human capacity to create rational and imaginative orders. The freedom of individuals and small, autonomous groups is a sufficient condition, given a moderate amount of enlightenment, that this capacity will be used to sustain a rational and equitable social order. A powerful state can only impede this process.

This conjectural statement, like all committee prose, obscures much of what is uniquely interesting in the thoughts of the individual members. Let us look at them one by one, beginning with Chomsky.

Chomsky's innovations in linguistics arose out of his dissatisfaction over the fact that the structuralist grammar of his time did not account for different syntactical relationships in structurally similar sentences, or for ambiguous sentences, or for sentences with different structures but identical meanings. An example of the first shortcoming is that the sentence *John is easy to please* has the same phrase structure as the sentence *John is eager to please*, but the hearer of the sentence intuitively recognizes that *easy* and *eager* have different relationships to the infinitive *to please*. In order to analyze this intuition, Chomsky developed syntactical maps of sentences which he calls "deep structures." The deep structures can be shown to "generate" the surface structures by the application of transformational rules at certain points. This transformational grammar can also analyze ambiguity better than the old phrase-structure grammar. The sentence *I like her cooking*, for instance, can be linked to three deep structures with the respective readings *I like what she cooks*, *I like the fact that she is cooking something*, and even *I like the fact that she is being cooked*. Finally, transformational grammar can analyze our intuition that a pair of sentences with different phrase structures are identical in meaning, e.g., that *John was pleased to win the race* and *Winning the race pleased John* are generated by the same deep structure, one sentence being the product of transformational rules governing formation of the active voice, the other of rules governing the passive.

For Chomsky the syntax of a language, as analyzed by transformations, points to laws of mental process; and the most interesting aspect of linguistics is just this possibility that it may lead to knowledge of how the human mind works. Chomsky postulates a "universal grammar," an inborn linguistic capacity, which governs the grammars of all human languages, and which accounts for the linguistic capability of children, who can produce the infinite number of sentences in their native language at a fairly early age, before they are likely to have heard enough different sentences to be able to produce such a variety of sentences solely by analogy and imitation. Chomsky concludes, then, that the rules of sentence formation are innate.<sup>3</sup>

One rule of universal grammar that Chomsky tentatively advances is that of structure-dependency: we do not change sentences for specific purposes by simply moving morphemes around, even when it might seem simplest to do so. Rather, we move the structural elements, or

phrases. Thus, for instance, we do not turn the statement *The dog that is in the corner is hungry* into a question by simply moving the first *is* to the left—a procedure that might seem to be an adequate analysis of question-formation when one deals with simpler sentences, but which in the present instance would result in *Is the dog that in the corner is hungry?* Rather, the main verb is moved in relation to the subject, and the dependent clause is left intact. Children do make certain errors in learning to speak, Chomsky recognizes, but they do adhere to structure-dependency, and no child would say, *Is the dog that in the corner is hungry?*, even though this formation is simpler to arrive at and quite intelligible. Structure-dependency, then, is a purely formal rather than a functional rule—it is not always necessary to communication, and indeed sometimes leads to formations which appear needlessly complex. Yet it applies in all languages, and is one of those formal rules that “provide a revealing mirror of mind (if correct).”<sup>4</sup>

Formal principles, in language and other mental operations, are necessary to knowledge. They may keep us from learning certain things since formalism is by nature restrictive, but without them we would know much less altogether, and we could not construct “rich systems of knowledge and belief on the basis of scattered evidence.”<sup>5</sup> If we seek to discover the principles of all such systems we might come toward an answer to Bertrand Russell’s question, “How comes it that human beings, whose contacts with the world are brief and personal and limited, are nevertheless able to know as much as they know?”<sup>6</sup> The laws governing language may (or may not) derive from more basic laws governing all mental operations. Chomsky is not interested in the possibility that the mind does not operate by intrinsic formal principles. “The image of a mind, initially unconstrained, striking out freely in arbitrary directions, suggests at first glance a richer and more hopeful view of human freedom and creativity, but I think that this conclusion is mistaken. . . . The principles of mind provide the scope as well as the limits of human creativity. Without such principles, scientific understanding and creative acts would not be possible. If all hypotheses are initially on a par, then no scientific understanding can possibly be achieved, since there will be no way to select among the vast array of theories compatible with our limited evidence and, by hypothesis, equally acceptable to the mind.” He quotes Coleridge to the effect that science, like poetry, “must of necessity circumscribe itself by rules.” Language and other human activities are effectual precisely because they consist of “free creation within a system of rule.”<sup>7</sup> Individual and collective growth and even freedom are advanced by following and, ideally, knowing the laws of our nature.

At this point, if we compare Chomsky’s interests and biases with those of his favorite enemy, B. F. Skinner, we can see a marked contrast between contemporary authoritarian and libertarian assumptions about human nature. Skinner is not interested in such “mentalistic” notions as intrinsic principles of language learning, and it seems fair to say that he sees human behavior more in terms of reaction than of action, the product of “controls” exerted by the environment or by other human beings. In *Beyond Freedom and Dignity* he predicts that science will eventually prove all behavior to be environmentally determined and so demolish the concept of “autonomous man.” In a properly designed culture “the control of the population must be delegated to specialists—to police, priests, owners, teachers, therapists, and so on, with their specialized reinforcers and codified contingencies.”<sup>8</sup> Reviewing his book, Chomsky argues that while Skinner’s principles are too “vacuous” to be considered as a scientific defense of totalitarian society, yet “there is nothing in Skinner’s approach that is incompatible with a police state.”<sup>9</sup> If Chomsky is right, then the contrast between him and Skinner is symmetrical. Skinner takes the “antimentalistic” view that a human being is a mechanism that responds in genetically and environmentally determined ways to various stimuli; and he favors a society highly structured by a system of rewards and punishments. Like the medieval intellectual, he sees more potential for coherence and integrity in the external, social order than in individual human nature. Chomsky, for his part, is fascinated by the idea that human beings discover natural laws and create rational and imaginative orders like philosophy and art according to obscure but detectable innate principles; and he is a radical libertarian with a particular interest in anarchosyndicalist organization of modern industrial society. We can now turn to his general idea of human nature and his political applications of it.

Chomsky is drawn to organic metaphors for human nature, though he does not coin his own. He quotes Bertrand Russell: “The humanistic conception regards a child as a gardener regards a young tree, i.e., as something with a certain intrinsic nature, which will develop into an admirable form, given proper soil and air and light.”<sup>10</sup> He does not believe that the interim

state prescribed by Marxist-Leninist revolutionary theory will serve to achieve "the humanistic ideas of the left," conveying his skepticism by quoting Martin Buber: "One cannot in the nature of things expect a little tree that has been turned into a club to put forth leaves."<sup>11</sup> Coercive institutions hinder the development of persons, and so does modern capitalism as it carries on its lovers' quarrel with the state. The true end of socialism is not mere economic reform, but finally, in Russell's words, "the liberation of the creative impulse."<sup>12</sup> He concurs with Russell's ideals concerning the evolution of modern industrial society, which should be toward a "federal industrial republic . . . , with actively functioning workers' councils and other self-governing units in which each citizen, in Thomas Jefferson's words, will be 'a direct participator in the government of affairs.' The organization of production and distribution, economic and social planning must be under the direct democratic control of the workplace if socialist ideals are to be realized." This goal is quite close to, if not identical with, that of syndicalist anarchism.<sup>13</sup>

Chomsky's social thought, as he himself points out, has, like his approach to language, links with the humanistic and libertarian tradition of the Enlightenment.<sup>14</sup> He cites Descartes, Leibniz, the Rousseau of the *Discourse on Inequality*, Wilhelm von Humboldt's *The Limits of State Action*, Kant, and Schelling as some of his inspirations. He sees this tradition as best preserved and most constructively developed for political purposes in syndicalist anarchism and libertarian Marxism. Readily agreeing that the study of language has not yet revealed much about human cognition which would be useful to an argument for political liberty, he as readily points out that efforts in the social and behavioral sciences to justify strong state control have also achieved little: "skepticism is in order when we hear that 'human nature' or 'the complexity of modern life' requires this or that form of oppression and autocratic rule."<sup>15</sup>

It is hard to detect a particular personal myth animating this libertarian bias, since, as noted, Chomsky rarely hazards a metaphor of his own. But it may be that whatever disposed him to anarchism in his early youth, when most of the older relatives who had influenced him politically were Communist Party members, may also have had something to do with his approach to language: against the general trend of linguistics as he found it he attempted to square sentence structure with—of all things—intuition, such as our intuition that "John pleased Helen" means the same thing as "Helen was pleased by John." His energetic critique of our Indochina war was also, plainly, informed by his libertarian consciousness of the death-dealing propensities of the modern state. There is a peace- and freedom-loving anarchist behind those books that bristle with indignation and footnotes. I suggest that it was this bias that contributed so much to the moral clarity of his anti-war writings during the Vietnam period, and that did much for the morale of the peace movement. It may be that the libertarian myth, whatever it is, leads one to make fruitful pilgrimages. That possibility will be further explored in Herbert Read and Paul Goodman.

With Chomsky, Read and Goodman share a disposition to use the child as the norm of what is essentially human, and as a model for wholeness in adult life. Sensuous awareness, spontaneous creativity, and easy interaction with one's peers are qualities of childhood that must be preserved and developed if adult life is to be complete, satisfying, and useful to others. Many artists have such qualities, and so the artist is also a type of fulfilled humanity.

For Read, moreover, the strongest argument for a libertarian society is aesthetic, for he considers the human being to be an aesthetic animal. Living itself is an art in a profound sense: the spontaneous formation of sensation into image, the interplay of images with ideas formed from previous images—these to Read are aesthetic processes, and they are the core of abstract thought, creative work, and purposeful activity in the world at large. Read even draws ethical conclusions from this idea. The chief imperative for living is to be sensitive and attentive to this internal process, giving it precedence over dogmatic ideas or egoism. In the arts this means that no external authority, no set of norms abstractly formulated, can bring out genius. Neoclassical rules cannot substitute for the artist's own intuitive sense of form or imagination as it interacts with the medium at hand. Similarly, an abstract ethical code cannot elicit conduct of a high order, or even prescribe principles more adequate to a given situation than an intuitive response. Only a personal "sense of glory," an intuitive synthesis of personal experience into a vision of universal truth, can elicit noble conduct.

Read attributes the development of human consciousness to the practice of plastic arts. In *Icon and Idea* he attempts to show how palaeolithic painting first assisted human beings to isolate perceptual images, e.g., those of hunted animals, from their surroundings, and how

neolithic designs enhanced the ability to conceive and visualize abstract forms. He extends the discussion through classical Greek and early Christian architecture and into the abstract art of our own century. The architectural dome, for instance, came in Christian art to represent "the vault of heaven, inhabited by Christ and his saints"; thence it came to represent "the infinite distance between heaven and earth," and so enhanced the development of the concept of infinity.<sup>17</sup>

In the individual, moral as well as intellectual growth is aesthetic. Read adopts Plato's belief that a child exposed to what is beautiful, to harmony, rhythm, balance, and proportion, and encouraged to emulate such qualities in his or her activities, will have a fine moral discrimination, since the aesthetic is the common ground of the moral and the intellectual virtues. Education, therefore, ought to be aesthetic in a literal sense, an education of the senses and the feelings. The activities of young children in school would center on crafts, dancing, dramatics, music, and the plastic arts. Pupils would absorb ideas of harmony, balance, and proportion by studying the forms of plants and animals. All the child's faculties would be naturally and integrally developed by such activity. There would be fewer psychologically unbalanced individuals coming out of the schools, and citizens who do come into adult life from such tutelage would be less susceptible to "arbitrary systems of thought, dogmatic or rationalistic in origin, which seek in despite of the natural facts to impose a logical or intellectual pattern on the world of organic life."<sup>18</sup> Aesthetic education gives the child "not only a consciousness in which image and concept, sensation and thought, are correlated and unified, but also, at the same time, an instinctive knowledge of the laws of the universe, and a habit of behaviour in harmony with nature."<sup>19</sup> This is the unified sensibility attributed to the Metaphysical poets by T. S. Eliot, but developed in a completely secular way; for it was not a Christian commonwealth Read had in mind, but a restoration of the supremacy of natural law and thereby the rule of reason.

The term natural law suggests not only Aristotle and the Enlightenment, but also the biological science of the nineteenth century, and so it connotes struggle and conflict. Read accepts this connotation, for like other anarchists he is anti-utopian, and does not look forward to a future which is static and without conflict. Struggle is inevitable in any vital society, and so "the anarchist cannot abandon the revolutionary myth, much as he may realize that revolutionary *methods* can only make things worse." Following Camus, Read holds that rebellion is the "origin of form, [the] source of real life." The "tension" or "dynamic equilibrium" between struggle and moderation, which ultimately depend on each other, is necessary to life.<sup>20</sup> Kropotkin and Bergson were early influences on Read, and he refers frequently to biological science in his political theory. His revolutionary myth seems to be based, in part, on the theory of organic evolution: Leviathan is a dinosaur, against which humanity, the emerging mammals, is struggling.

Paul Goodman connects his idea of human nature with his politics very succinctly: "... It is by analogy with experiences of sex and art that I am a political anarchist: I hypothesize that if people would get out of their own way and stop governing themselves, they would have more peace and justice."<sup>21</sup> The self-governing he speaks of is an ironic term for the mental blocks experienced by writers and artists and the tendency of people in general to tolerate their own inhibitions, obsolete social conventions and traditional sexual morality to the detriment of their health, clarity of thought, and community life. The conclusions he came to as a writer, creative artist, and highly sexual individual were corroborated by Gestalt psychology, and he himself became a practicing Gestalt therapist. It is natural for an artist to be attracted to this school of psychology, for there the criteria of health are aesthetic. Good visual perception involves the formation of a clear, balanced image in which the "figure" is distinct from the "ground." Healthy bodily movement has not only strength and force but also grace. Generally healthy behavior in an organism is initiating and creative. But behavior is not considered in terms of the organism alone; rather, it is a phenomenon within an entity comprising the organism and its environment, called the "organism-environment field." Healthy behavior in this context is a "creative adjustment" of organism to environment, consummated when the organism "finishes a situation" by producing a "figure" or Gestalt. The parallel to Read's idea of the "sense of glory" is notable. For Read the intuitive faculty is responsible for the creation of art or of an intellectual synthesis, and for noble or otherwise praiseworthy or beautiful behavior. Both Read and Goodman see human nature as capable of forming rational and meaningful aesthetic or

conceptual structures by virtue of the same power or faculty, which is also the central fact of human nature. This faculty is best exercised with a good deal of spontaneity and involves the whole organism.

But this is to speak of a faculty when Goodman would say that he is speaking of the unitary functioning of the whole organism. Goodman bases his libertarian view of human nature not just on verbal behavior, as does Chomsky, and not just on the continuum from sensation to expression as Read does: always before Goodman is the whole organism-environment field, the whole person doing or being something somewhere, whether this be as concrete as playing handball, or as intangible as acting within a political situation, or in a certain cultural environment. Goodman is critical of what he terms Chomsky's idea of "a special language faculty" or "innate algebra." While Chomsky is quite right to concentrate on "the active power of speakers and hearers to form language," his theory rests "on a misplaced concreteness. The intellectual power of a speaker operates primarily not on strings of sentences but *in* his global experience, in the situation in which he is cast, that includes the inherited code, the hearer, the need to say his say. The Gestalt that he then forms is language."<sup>22</sup>

Since the environment figures so largely in Gestalt theory, it is easy for a Gestaltist to develop strong opinions on politics and society. For Goodman the best human environment is close and personally absorbing, face-to-face community, an environment of peers and friends which he often called natural society. He often characterized himself as a community-anarchist. The members of a good community interact and collectively act with force, grace, and intelligence. He was much inspired by a meeting of young draft-card burners in 1967: "I did not hear a sentence that was not intelligent, not a tone that was not beautiful." Specifically, "they never voted on anything. Like a primitive village, they seemed to know by tacit signs when they had come to a decision. This was astonishing, for in fact they were hardly acquainted. They spoke a language."<sup>23</sup> He generally saw much to praise in the dissident youth of the 1960's (and was not sparing of criticism), including the fact that many of them unconsciously revived the insights of major anarchist thinkers. This revival he attributed in part to "permissive" childrearing: "a generation ago we were warned that this freedom would produce an unruly brood; it has, and I like the results."<sup>24</sup> A generation before he wrote the preceding there were no permissively raised youngsters around in any significant numbers, but Goodman was arguing that a free society must be made by people who had first liberated themselves. In the 1945 "May Pamphlet" he describes the traits of such an individual, and the dimensions are indeed mythical: "The libertarian manifests the nature in him much more vehemently than we who have been trained to uniformity. His voice, gestures, and countenance express the great range of experience from child to sage. When he hears the hypocrite orator use words that arouse disgust, the libertarian vomits in the crowd."<sup>25</sup> To become like this godlike being, one must personally decide where to "draw the line" that the forces of coercion may not cross. In the matter of influencing others, the libertarian should "advocate a large number of precisely those acts and words for which persons are in fact thrown into jail." Such acts, provided they do not harm natural society, have a "libertarian force" and tend to "undermine the present coercive structure." One need not go out of one's way to commit these crimes so much as to loosen one's own discipline and prejudice against them. "Once his judgment is freed, then with regard to such 'crimes' the libertarian must act as he should in every case whatsoever: if something seems true to his nature, let him do it with a moral good-will and joy. Let him avoid the coercive consequences with natural prudence, not by frustration and timid denial of what is the case, for our acts of liberty are our strongest propaganda." This strategy is aimed at liberating not the personal but the natural, since the unfortunate case is that the personality, being formed by the "coercive" forces of education, publicity, and entertainment, is likely to choose for itself "just what is objectively advantageous for the coercive corporation," with which it in fact identifies itself.<sup>26</sup> And the norm of human nature, described in the less political context of *Gestalt Therapy*, is "what is actual in the spontaneity of children, in the works of heroes, the culture of classic eras, the community of simple folk, the feeling of lovers, the sharp awareness and miraculous skill of some people in emergencies."<sup>27</sup>

It is not hard to find mythically reinforced elements in Goodman's ideas concerning human nature and society; but because he is so frankly conscious of these it is hard to dismiss his ideas on their account. We should keep this self-awareness in mind when we read, "Of all politically advanced peoples, the Americans are the only ones who started in an historical golden age of

anarchy."<sup>28</sup> In *Gestalt Therapy* he speculates that "our repressed unused natures... tend to return as images of the Golden Age, or Paradise; or as theories of the Happy Primitive." Poets, he continues, devote themselves "to glorifying precisely the virtues of the previous era, as if it were their chief function to keep people from forgetting what it used to be to be a man."<sup>29</sup> He was faithful to his own myths, considering them useful as norms or metaphors. He thought that it was his Jewish background, for instance, that made him wish for "the culture of Paradise"<sup>30</sup>; and when an interviewer suggested that he yearned for the return of the Noble Savage, he promptly replied that it was rather the Neolithic man, an ideal which is given flesh in his poem "Adam":

With little learning and no history  
yet Adam was a good farmer for he noticed.  
Having fine senses and no preconceptions  
what plants were weeds oh he did not uproot  
what love us well and flourish where they are.  
Except for treats he planted nothing,  
but he cut back what choked the useful  
so his acre of jungle became a garden.<sup>31</sup>

Goodman uses Adam's gardening as a metaphor for the way we should deal with the nature in us, and for the way we should foster and defend natural society: allow what is there, and productive, to flourish in its place according to the laws of its own development—like a young tree.

The implicit values of Chomsky, Read, and Goodman are those of humanism, and this symposium is an occasion to dwell somewhat on the term and to put it into a libertarian context. In the Renaissance the humanities meant the study of pagan texts, which were recognized as valuable even though they were hard or impossible to reconcile with Christian doctrine and were in fact offensive to piety; the humanities were opposed to divinity. Pious scholars felt the contradiction to their world view, and allegorical readings abounded; but to one degree or another the learned world had to accept that there existed letters and science, which, neither divinely inspired nor orthodox, were creations of the human spirit that commanded attention. Theology, the queen of the sciences, was having trouble with newly acquired territory.

Except at Bob Jones University and such places, theology no longer reigns. But a kind of scientism is trying to take its place, an unscientific orthodoxy of science that would reduce human nature to whatever is within the purview of principles or methodology already established. Like the old orthodoxy, the new has allied itself with the state. Bakunin predicted this, and Chomsky and Goodman have made their attacks on that alliance.<sup>32</sup> With Read they respect the methods and discoveries of science, and also possess the Renaissance sense of wonder at human nature that Hamlet expressed. Such a sense of wonder is not a mystique that prohibits analytic inquiry, today any more than during the Renaissance; rather, particularly in the case of the three writers being discussed, it at once sharpens inquiry and infuses a certain intellectual modesty. Chomsky has made the most venturesome speculations concerning cognitive processes discussed here, but he has also stressed that very little has been discovered by himself or anyone else concerning these processes, and that it may be in the nature of the case that little more will ever be known. Though he is much less a literary scholar than Read and Goodman, Chomsky, like them, gives serious attention to the insights of practitioners of letters and the arts concerning human understanding and creativity. He expresses contempt for "behavioral scientists who can't tell a pigeon from a poet," and considers Coleridge's remarks on imagination to be far from beneath his notice. Chomsky's, Read's and Goodman's work can be compared to Shelley's defense of poetry; but we can also go back to the Renaissance and Sidney's, a defense also occasioned by the attacks of a narrow orthodoxy.

In *Love's Body* Norman O. Brown makes a statement which to me suggests that there is a myth common to Read, Chomsky, Goodman, and other libertarians of the left: "Freud's myth of the rebellion of the sons against the father in the primal, prehistoric horde is not a historical explanation of origins, but a suprahistorical archetype; eternally recurrent; a myth; an old, old story." This archetype recurs in history and in the history of social thought: fatherhood and brotherhood, patriarchy and fraternity, are "giant forms" always at war, e.g., Locke's *Two Treatises of Civil Government* against Robert Filmer's *Patriarcha*. Brown's discussion teases: he observes that property is patriarchal, communism fraternal; that fraternity is unlike

patriarchy in being voluntary, the product of a covenant; that the intense rivalry of fraternal society is often tempered by an awareness of mutual need.<sup>33</sup> Yet he does not mention libertarian thought—not, that is, the radical libertarianism that developed in the nineteenth century, with which all these traits of fraternity are compatible. For instance, the jealous, castrating patriarch embodies coercive authority, which mutilates the natural powers and even the social instincts of the individual for its own purposes. Paul Goodman in his earlier writings holds “fraternal socialism” up as a desideratum for society, and he also held that competition was good when it was “fraternal”—an idea similar to Kropotkin’s view of creative conflict in the free city. Similarly, Read defines the anarchist as “the man who, in his manhood, dares to defy the authority of the father.” The adamantine sickle used by Zeus to castrate Chronos was for Read a symbol of the liberating power of reason. As a combat officer during World War I, Read found that fighting discipline was formed not by the authoritarian harassments of the training camp, but by group solidarity confirmed in actual battle.

All this, of course, is too male-centered; but it is intriguing to consider a male-centered myth not wholly patriarchal or hierarchical, in which social bonds grow out of voluntary association instead of patrilineal descent and are mutual, reciprocal, and egalitarian. The founders of the United States can be seen as a fraternal band. Paul Goodman liked to cite Jefferson’s prescription for a revolution every twenty years. Perhaps Jefferson would not have liked to be called a Founding Father, or to see the Constitution, like another patriarchal document, preserved in a helium-filled ark. Women folklorists and the people, largely women, who write stories for children may some day undo the work of the Brothers Grimm, and those who inherit the work of remaking society will have more humanistic myths to animate them than that of fraternal rebellion. But such as it is, this myth does not seem to have crippled the thought of Chomsky, Read, and Goodman. One might say, on the contrary, that it has given considerable impetus to their study of language, art, and human nature in general toward a vindication of human freedom.

## NOTES

<sup>1</sup>George Dennison’s *The Lives of Children* (Random House, New York, 1969) is a particularly well-written statement of the principles of progressive education in an explicitly libertarian context.

<sup>2</sup>It may be hasty to label Chomsky an anarchist, but his essay “Objectivity and Liberal Scholarship” in *American Power and the New Mandarins* (Pantheon, New York, 1967) shows considerable acquaintance with what was at the time little-known material concerning the anarchist collectives during the Civil War in Spain. His sympathetic “Notes on Anarchism” is the introduction to Daniel Guerin, *Anarchism, from Theory to Practice* (Monthly Review Press, New York, 1970). Since then he has granted a long interview to the first number of *Black Rose: Journal of Contemporary Anarchism* (n.d., but issued, as I recall, early in 1974).

<sup>3</sup>“Linguistics and Philosophy,” in *Language and Mind*, enlarged ed. (Pantheon, New York, 1971), p. 171. Two introductions to Chomsky’s thought, which have been useful to me in writing this paper, are Judith Greene, *Psycholinguistics: Chomsky and Psychology* (Penguin, Baltimore, 1972) and John Searle, “Chomsky’s Revolution in Linguistics,” *New York Review of Books*, 29 June 1972, pp. 16-24.

<sup>4</sup>*Problems of Knowledge and Freedom: The Russell Lectures* (Pantheon, New York, 1971), p. 44.

<sup>5</sup>*Ibid.*, p. 49.

<sup>6</sup>Quoted *ibid.*, p. 47.

<sup>7</sup>*Ibid.*, pp. 49-50.

<sup>8</sup>Quoted in Chomsky, “Psychology and Ideology,” in *For Reasons of State* (Vintage, New York, 1973), p. 320.

<sup>9</sup>*Ibid.*, p. 343.

<sup>10</sup>Bertrand Russell in collaboration with Dora Russell, *The Prospects of Industrial Freedom*, quoted in Chomsky, *Problems of Knowledge and Freedom*, pp. 50-51.

<sup>11</sup>Martin Buber, *Paths in Utopia* quoted in *For Reasons of State*, p. 373.

<sup>12</sup>Quoted in *Problems of Knowledge and Freedom*, p. 57.

<sup>13</sup>*Ibid.*, p. 61. The goal of workers' control of industry is anarchosyndicalist, but anarchists would tend to draw back from the term *republic*, which connotes a stable central state apparatus. Anarchists typically prefer to work outside the political process, though there have been and are exceptions.

<sup>14</sup>See "Language and Freedom," in *For Reasons of State*, for elaboration of these points.

<sup>15</sup>*Ibid.*, p. 371.

<sup>16</sup>Herbert Read, *Icon and Idea; The Function of Art in the Development of Human Consciousness* (Schocken, New York, 1965), p. 31.

<sup>17</sup>*Ibid.*, pp. 67, 69.

<sup>18</sup>*Education through Art* (Faber & Faber, London, 1961), pp. 7-8.

<sup>19</sup>*Ibid.*, p. 70.

<sup>20</sup>Paul Goodman, *The Society I Live in Is Mine* (Horizon, New York, 1962), p. 80.

<sup>22</sup>*Speaking and Language: Defence of Poetry* (Vintage, New York, 1971) p. 54. This may not be entirely fair, since, as noted above in the present discussion, Chomsky is willing to consider the possibility that linguistic competence rests on more fundamental principles ("rules") of behavior.

<sup>23</sup>*People or Personnel/Like a Conquered Province* (Vintage, New York, 1968), pp. 410-411.

<sup>24</sup>*Ibid.*, p. 276.

<sup>25</sup>*Art and Social Nature* (Vincio Publishing Co., New York, 1946), p. 9.

<sup>26</sup>*Ibid.*, pp. 19-21.

<sup>27</sup>Frederick Perls, Ralph Hefferline, and Paul Goodman, *Gestalt Therapy: Novelty, Excitement, and Growth in the Human Personality* (Dell, New York, 1951), pp. 230-231, 319.

<sup>28</sup>*People or Personnel/Like a Conquered Province*, p. 364.

<sup>29</sup>*Gestalt Therapy*, p. 319.

<sup>30</sup>*Five Years: Thoughts During a Useless Time* (Vintage, New York, 1969), p. 227.

<sup>31</sup>*Collected Poems*, ed. Taylor Stoehr (Random House, New York, 1973), p. 207.

<sup>32</sup>See Chomsky, *American Power and the New Mandarins*, *passim*, and Goodman, "A Causerie at the Military-Industrial," in *Like a Conquered Province*.

<sup>33</sup>(Vintage, New York, 1966). See Chapter 1, "Liberty."



## IF IT BE NOT SWEET, SOME YOU MAY TAKE AS TRUE. . . \*

Charlotte H. Bruner †

Oral literature represents the wisdom of a people, the beliefs and absolutes valuable enough to be perpetuated. Although a tale may be embellished, reshaped, altered, the folk wisdom it embodies may last and guide its hearers for centuries. In Africa, until this century, the tale—myth or fable—guided culture. Chanted, danced, and enacted by participants, it was art and allegory, sermon and song. It could explain oddities of creation: why the sun chases the moon across the sky, why the jackal's forefeet are shorter than the hind ones, why the sky has moved from the earth, how agriculture began. Yet, after such a tale of elemental "truth," for example, the Ghanaian storyteller will conclude his story with "This is a lie," or, "We do not really mean it." Does his comment weaken the force of his truth? If not, why?

He is disclaiming his own responsibility for specific application. He is a carrier, a transmitter, an interpreter, but he is not originating new law. If his story shows Ananse, the spiderman, as a trickster and thief, he cannot be called for libel at the striking resemblance between Ananse and some tribesman he intends his hearer to recognize.

In Francophone West Africa, the *griot* tradition requires this praise-singer, as an artist, to select details and to emphasize occurrences so as to inculcate respect for accepted cultural values; his mission is didactic, and he must limit his invention. Birago Diop claims simply to pass on the tales of Amadou Koumba; Djibril Tamsir Niane claims only to transcribe Sundiata's glorious past. The stories themselves are sanctified and cherished from antiquity; too close an identification with a character or too literal an inference applied to a present event faults the singer, so he protects his fallibility. "It's a lie."

We know, however, of the power of a lie. A retraction never erases a calumny. The oral literature art forms may be imitated in propaganda. Hence the mock myth, the fake fable, can borrow the authenticity of past wisdom and authority and influence us when we least suspect it. Entranced by story, captivated and curious, we can be influenced, as children and as adults, by the fascination of supposed legendary truth. Before we react to fallacies or act by them, we must learn to check: Is it a lie? What can we believe?

In the childhood of the world, we say, man discovered truth in myth. In our own childhoods we loved stories, listened to myths, absorbed points of view. Even today we can recount these stories, knowing they are only perhaps half-truths. So the Ghanaian teller of tales concludes, absolving himself from responsibility for practical application by this refrain: "This, my story, which I have related, if it be sweet, if it be not sweet, some you may take as true, and the rest

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you may praise me."<sup>1</sup> But he knows he is relaying folk wisdom; he is a soothsayer; he is shaping public opinion. The sweetness of the story form, the liveliness of the characters and their dialogue, the art of the teller in letting the listener find for himself which part is true—all this makes the myth a vehicle for skillful propaganda.

This force of myth and oral tale does not evaporate when writing and printing occur in a culture. First, before we read or write, we learn through stories and are influenced thereby. We may learn from counting rhymes, jump-rope ditties, singsong melodies. Instead of seeking rationality, we take an easier route for choice. "Eeny, Meeny, Miny, Mo, catch a Nigger by the toe." Only later do we substitute *tiger*—and we can still recall, or prefer, the original version. Prejudice may begin here.

The child also asks *why*? He may delight in fanciful explanation; he may repeat his question endlessly, not necessarily doubting the answer, but liking the repetition and variation. The explanatory myth also delights the adult reader, who may know the question to be unanswerable, but who can still enjoy the invention. The child repeats, "Who am I? Where did I come from? How did I begin? Who made me?" We must admit the eternal fascination of these inquiries. In our Europeanized and Christianized world, we find first origins in the Adam and Eve story, so we dislike snakes. In the reconstitution of the race, we learn of Noah, though we may ignore the assertion that Ham is Black. (Unless like Melvin B. Tolson, it matters: "I was born in Bitchville, Lousyana/A son of Ham, I had to scam/I was born in Bitchville, Lousyana;/so I ain't worth a T.B. Damn!"<sup>2</sup>

Somewhere, somehow, we pick up further information, perhaps that God made men out of clay and baked them in the oven; that the last batch was defective, that God had forgotten it and left it in the oven to be scorched brown or burned black. Prejudice may begin here.

Since these stories come into our consciousness before we are alert to checking sources or validating assertions, we may wonder how ancient and how widespread they are. Why are you black? Why is he white? Who is red? If you are yellow, are you "Oriental" or "cowardly"? Is brown black? Indeed, these questions are not spurious. In South Africa today the legal definition of *colored* officially determines one's dwelling, one's employment, one's education. We may be confused by these legalities, where Indians and Chinese are classified as Asians, but Japanese are Honorary Whites. In North African, *Toucouleurs* (literally all-colors) designates a population group. Examples are legion. We must realize that not only do we react emotionally to these words, but we also may unconsciously react to myths we have absorbed involving them. When do these stories start?

Apparently, such stories are mock myths—possible only when clash of culture and racial confrontation exist. For, among first questions, color, at least human color, does not seem to be an issue. In another context, the Nigerian Wole Soyinka has been widely quoted that a tiger does not question his tigrity; hence Negritude or "Black is beautiful" may be outworn considerations, nonbasic issues. Furthermore, color of course depends upon the viewer. Is Black black or indigo or brown? Is White white or red or *clair* or pink? Frantz Fanon said "C'est le Blanc qui crée le nègre." "It is the White man who creates the Negro." Color as a racial designation for man seems to accompany confrontation only; it may be a basis for antagonisms, not really relevant to self-identity. Hence we may infer that myths of human color differences may be old or new inventions to create dissimilarity and unease, all the more effective as their artistic impact seems ingenuous. Some modern African writers are making satirical use of such pejorative fables by underscoring the prejudice of the teller-character. Some seem to suggest a modern countermyth to counteract this falsity.

In ancient African folk tales of man's origins, despite the vastness of the continent and the varieties of beliefs existent, color appears not to be a factor for discrimination between humans. Some stories explain man's creation or his initial encounters with evil, death, knowledge. Even in stories where man changes to and from animal form, human color is not commonly noted. In contrast, there are many charming tales of explanation for physical traits of animals and for natural phenomena. We can discover how Leopard got his spots, why there are cracks in Tortoise's shell, why rabbits have short tails and why mice have short necks.<sup>3</sup> Furthermore, man is interested in animal coloration; he is not colorblind. For example, we find that the calao bird has white wing tips, in a Malian Bambara legend told by Roger Cazziol.<sup>4</sup> The calao taunts three passersby. They return, and in retaliation, taking hold of his wingtips,

roll him in black cinders; hence only his wingtips remain white to this very day. Captain Rat-tray translates an explanation for "How the tail of Efuio the Black-Colobus monkey became white."<sup>10</sup> We hear that several monkeys went wife-seeking, but, fearing that Efuio would outshine the others, they beat him up and ducked him in the muddy pool. Thus these three were chosen by the three girls present. However, the prettiest girl had gone on an errand. On her return, she discovered Efuio, rescued him, washed him and fell in love with him. The other wives then also wanted him, so their jealous husbands laid an ambush for the Black-Colobus monkey. When they attacked him, he climbed a tree, but they threw white clay up at him and some stuck to his tail and some hit his chin. "That is why his chin became white. Long ago the tail and chin of the Black-Colobus monkey were tun,tun,tun very black."<sup>10</sup> Certainly, although color is basic to both these stories, there is no favorable difference between black and white—both are the results of malicious mudslinging.

In much African art, black and white provide contrast, even in depicting man or god. On an Ibo spirit mask, used at funerals, "White is the symbolic color of death."<sup>11</sup> On a woman's wooden mask of the Congo, "The finely modelled face is enhanced by the whitening which leads one to think that it is a mask symbolising the spirit of the dead."<sup>11</sup> In a Bobo-Fing mask, white on facial surfaces gives an air of "suffering."<sup>11</sup> A Mpongwe ancestor mask has the face painted white with kaolin.<sup>11</sup> In a double-faced Ekpo mask "The male is black with closed eyes like the past, and the female is light with open eyes looking to the future." Here the dark-light contrast represents past and future, death and life.<sup>11</sup> Black may contrast with white, dark with light in these masks, but the colors do not signify race.

Geoffrey Parrinder discusses twenty-one myths of "The First Men" in his chapter on myths of human creation, taken from all over Africa. In two only is white or light featured. The Dinka of the Sudan venerate the first man, Garang. "Garang is sometimes associated with a snake, of red and white color and other animals which have white in association with red or brown are emblems of Garang, such as giraffes and oxen, and there is a tree with yellow-brown fruit. These colours also associate Garang with the sun" (p. 41). A pygmy story shows man as emerging during a flood from an opened tree trunk. "With this water, emerged the first human couple, a woman and a man. Both were light skinned, like the lightest coloured of Pygmies" (p. 45). In neither of these is black mentioned. In Botswana the recognizable lightness of the Bushman skin serves to identify a member as of the lowest caste, or race, in no way comparable to our use of white.

We see a different reference to white in the creation story of the Yoruba in Oladele Taiwo's *An Introduction to West African Literature*. "Obatala created human beings out of clay. When he had finished moulding their forms, he gave them to Olorun, who blew the breath of life into them. One day, Obatala went drinking, and on that day he created albinos, cripples and blind people. . . Albinos, cripples and blind people are considered to be especially sacred to the god and they are given positions of some importance in his shrines; they are his special favourites. . . The worshippers wear white dresses with white beads as necklaces, because Obatala likes the colour white."<sup>12</sup> In Ghana, white clay or dust is rubbed upon a person in a state of possession; hence white may denote mysticism, but certainly not racial origin.

When the Whites "discovered" Africa, relatively late, they were viewed not as white but as red or pink. Statues of the early European explorers and traders coming to West Africa are painted with red, not white, skin color. Many Wolof words are direct cognates of American Black English: hep, jive, cat, etc. The most pertinent here is the Wolof word *honk* which means pink or red. In Twi, the word for pink or red is *kɔkɔ* whereas the word for white is *fitaa* (*fufu* — White). The word for European, singular, is *ɔburoni* *kɔkɔ*, plural *aburofo*.<sup>13</sup> In 1954 Cheikh Anta Diop ironically noted that, once Egypt was accepted as the cradle of civilization, the European historians discarded the idea of Negro Egypt. So a new interpretation of color came into fashion in modish art criticism. "Then one seemed to see more clearly, for one succeeded in distinguishing on these frescoes where everyone had previously recognized Negro faces, nuances of a 'white race with red skin', a 'white race with dark red skin', a 'white race with black skin.'<sup>14</sup>

Yet, certainly we have heard *myths* of man's color origins. We grew up with some, not recognizing their pejorative implications, unless, like Malcom X, we felt their sting. In *The Autobiography of Malcom X* he recounts "Yacub's history," a fanciful counter-myth of creation making Whites a "bleached-out, white race of people," "a devil race" eugenically fostered by Yacub, a renegade scientist. The teaching of this myth by Elijah Muhammad was a turning point in the life of Malcom X.<sup>15</sup>



**Bapende Mask**—fine example of this tribe; light coloring; sharp teeth; cloth trim and woven hair. Traditional wood carving from Kinshasha, 10½ inches high. In many such masks in West Africa, white symbolizes death—the color of ghosts and spirits. *Gift of Julian and Irma Brody to the Brunnier Gallery, ISU.*

Just before Malcom's assassination, the North African writer and scholar, Albert Memmi of Tunisia, summarized this created Black mythology and defined its impact. "Toute la structure de l'univers va être remaniée en fonction de cette urgente efficacité! le passé et l'avenir, l'art et la métaphysique; le premier homme était noir, et l'homme futur sera noir, et jusqu'à Dieu lui-même, qui a toujours été noir, et non blanc, comme le prétendent les exégètes tendancieux et ignorants des Ecritures saintes. Mythes, Bien sûr! Désirs collectifs aussi désastreux que ceux de l'opresseur! Mais, s'il s'agit de mythes, ce sont plutôt des *contre-mythes*, des réponses délirantes aux délires de l'accusation."<sup>16</sup>

Some of these countermyths appear as vehicles for disguised propaganda arising from confrontation. Almost a century ago, for example, Privat d'Anglemont recounted a supposed African myth: "God made the day, summer, beauty, and leisure; the devil made the night, winter, suffering, and work. Finally God created his masterpiece: the monkey; the devil countered with man, 'who is but an imperfect monkey, much more vicious, much less clever.'" The wicked, those most anxious to serve the devil, immediately obeyed his order to bathe in a stream; they became white. The indolent, reaching the water after the whites had dirtied it, emerged yellow. When the third group, the good men 'who detested Satan,' got to the stream, only enough water was left to turn the palms of their hands and the soles of their feet yellow. God rewarded these men, the Negroes, by giving them a place 'in the sun, in the land of the monkeys.' Whereupon Satan sent the white men and the yellow men to attack them. For protection, the blacks tried to enslave and make soldiers of the monkeys. This angered God, who abandoned them. That's why the poor Negroes have always been sold, enslaved, snatched from their own country; because men are the children of the devil and because the whites, as the most cruel of men, are his chosen people."<sup>17</sup> The writer, from Guadeloupe, pretended to recount this as a Senegalese legend.

René Maran, precursor of Négritude, in 1921 led the way for some subsequent Black writers in a new stylistic twist: he quotes the obviously bigoted White character in his novel recounting just such a myth of racial origins, and, by the discrediting of the teller, negates the force of the supposed mythical verity. In *Batouala Véritable Roman Nègre* Maran, through a supposed White interpreter, tells of the making of man by the White god. "Le N'Gakoura de nous autres, blancs, prit, au commencement des commencements, tout ce qu'il trouva de mieux au monde, et avec ça, nous fabriqua. C'est pour ça que le dernier des blancs sera toujours supérieur au premier des nègres. / Malheureusement pour nous, notre N'Gakoura ne s'en tint pas là et fabriqua les sales nègres comme toi, avec les déchets des premiers blancs. / C'est que beaucoup plus tard que l'idée lui vint de créer les Portugais. Il chercha autour de lui de quoi les modeler. Ne restaient que les excréments des gens de ta race..."<sup>18</sup> Thus, with heavy irony, Maran adds the final jibe at the Portuguese, early explorers of the West-African coast.

Ulli Beier in his collection *Political Spider* says that "Luis Bernardo Honwana of Mozambique uses the form of a folktale to talk about racial prejudice."<sup>19</sup> He then includes the story "The Hands of the Blacks" in which Honwana offers us several pejorative explanations of coloration: Blacks used to crawl on all fours so the sun never burnt their palms; or, their palms are white so as not to contaminate food; or, when drying out in clay form in a sooty chimney, they had to hang on by their hands; or, God made the Blacks early in the morning, and, when he sent them to bathe in heaven's lake, it was too cold so they washed only their hands and feet; or, in America the Blacks used their hands to gather white cotton and it lightened the palms. A final version, told to the bewildered Black child by his mother, gives the only "right" version. "God made blacks because they had to be... Afterwards he regretted having made them because the other men laughed at them and took them off to their homes and put them to serve like slaves or not much better. But because he couldn't make them all be white, for those who were used to seeing them black would complain, He made it so that the palms of their hands would be exactly like the palms of the hands of other men... it was to show that what men do is only the work of men... That what men do is done by hands that are the same—hands of people, who, if they had any sense, would know that before everything else they are men" (p. 83). Even in this last, more kindly version, the teller weeps.

In 1959 Ghana's Michael Dei-Anang published his poem "Little Darkie, Little Darkie" and a new telling of the order of human creation. God started man with skin "dark as ebony" and "God was delighted/ To see you,/ So beautiful and brown." As God continued, however, his water colors thinned and turned pale, so he made reds, then yellows, and lastly pales.<sup>20</sup>

Fred Kwesi Hayford in his own experience *Inside America: A Black Diplomat Speaks Out* ironically offers two supposed myths of legendary origin. The first is credited to a Black Rhodesian: "... the reason for the plight of the Black man on this earth is our own intrusion into a world in which the Creator had no room for us. God was so tired after creation that he dozed for a few minutes. It was during God's sleep that the Black man sneaked into the world because he could not understand why everything in the world was White. When God woke up, and saw what had happened He told the Black man he had no place on earth and would have to suffer for his intrusion." But, says Hayford, he was heartened by Ambassador Debrah's counter-story: "The Good Lord... created men and women, placed them in a big sack and travelled the ends of the world placing them on the continents as they became matured—the sign of maturity being evidenced by the color of the person's skin. The deep Blacks were the most mature and those of lighter skin the less mature. God first went to Africa where he set down the matured Blacks. As he travelled over Europe the impatience of those within the sacks caused the sack to tear open, releasing over the land all the light-skinned persons who were not really ready to be discharged."<sup>21</sup> Thus a modern counter-myth may seek to displace a mock myth propagandistically originated from racial antagonism and confrontation.

Some of the Négritude poets, too, retaliate against the stereotypes of European white supremacy of supposed mythical origin. They refer as if to an ancient oral folk belief, although they may be in reality embellishing or even inventing a color connotation. They also claim continuity with the remote, prewhite African past, sometimes a personal link. Léopold Sédar Senghor reiterates: "J'étais moi-même le grand-père de mon grand-père / J'étais son âme et son ascendance..."<sup>22</sup> Christianity is an overlay, only partly obscuring animistic belief, as he indicates in "Totem." "Il me faut le cacher au plus intime des mes veines / L'Ancêtre... / Mon animal gardien, il me faut le cacher / ... Il est mon sang fidèle qui requiert fidélité... " (p. 46). "I must hide him deep in my veins / The Ancestor... / My guardian animal, I must hide him / ... He is my faithful blood requiring my fidelity." The poet's origins predate Christian myth. "Je suis d'avant Adam. Je ne relève / ni du même lion ni du même arbre. / Je suis d'un autre chaud et d'un autre froid."<sup>23</sup> So he chooses his *peuple noir*.

Bernard Dadié of the Ivory Coast also traces his origins, perhaps even the African origin of man, again predating Christianity and all its angels, as he addresses "Hommes de tous les Continents." "J'étais là lorsque l'ange chassait l'ancêtre, / j'étais là lorsque les eaux mangeaient les montagnes / Encore là lorsque Jésus réconciliait le ciel et la terre."<sup>24</sup> He creates his own color mythology in thanking God for creating him Black, the color of everyday. "Je vous remercie mon Dieu, de m'avoir créé Noir / Le blanc est une couleur de circonstance / Le noir, la couleur de tous les jours / Et je porte le Monde depuis l'aube des temps. / Et mon rire sur le Monde, dans la nuit, crée le Jour."<sup>25</sup>

However, Cameroonian poet Francis Bebey mocks creation, the creation which gives his son black skin, white teeth, light palms, red tongue and kinky hair, but no distinguishing blood by which, if questioned, to distinguish himself from even his father's goat. "Car tu sais, ils n'ont rien compris / A la farce créatrice qui donna / Du sang rouge à l'animal et à l'homme..."<sup>26</sup>

Anthony Phelps of Haiti is doubly ironic. In his epic of Haiti's past, "Mon pays que voici" he posits a re-peopling of the Caribbean Islands with Blacks, imported by the Spanish overlords, since their God, if appeased by gold, is not prejudiced by color. "Sa peau tannée défia la trique et le supplice / Son corps de bronze n'était pas fait pour l'esclavage / car s'il était couleur d'ébène / c'est qu'il avait connu la grande plaine / brûlée de Liberté"<sup>27</sup>

Paul Niger of Guadeloupe also attacks first God and then Christ for forgetting Africa. "Dieu, un jour descendu sur la terre, fut désolé de l'attitude des créatures envers la création, il ordonna le déluge, et, de la terre resurgie, une semence nouvelle germa / Il avait oublié l'Afrique. / Mais quand on s'aperçut qu'une race (d'hommes?) / Devenait encore à Dieu son tribut de sang noir on lui fit un rappel / Elle solda. / Et solde encore. Et lorsqu'elle demanda sa place au sein de l'oecumène on lui désigna quelques bancs. Elle s'assit. Et s'endormit. / Jésus étendit les mains sur ces têtes frisées et les nègres furent sauvées. / Pas ici-bas, bien-sûr."<sup>28</sup>

Taban lo Liyong, in his collection of Lwo folk literature, says: "I have been not so much interested in collecting traditions, mythologies or folktales. Anthropologists have done that. My idea has been to create literary works from what anthropologists collected and recorded. It is my aim to induce creative writers to take off from where the anthropologists have stopped."<sup>29</sup> Some writers do this and more. They develop ironically an antagonistic, made-up mythology of

racism based on color differences, as told by White characters unfavorably portrayed. Then, in counterstroke, they create a new and sympathetic legend defending the Black. Frantz Fanon saw a similar need in political, rather than literary, engagement. "We must not therefore be content with delving into the past of a people in order to find coherent elements which will counteract colonialism's attempts to falsify and harm. We must work and fight with the same rhythm as the people to construct the future and to prepare the ground where vigorous shoots are already springing up. A national culture is not a folklore. . . . A national culture is the whole body of efforts made by a people in the sphere of thought to describe, justify, and praise the action through which that people has created itself and keeps itself in existence. . ." <sup>30</sup> So if, as he said, the White man created the Black, now the Black must be viewed as complementary, necessary, equal. Once in Ghana a friend said to me, "There is no Black without White and no White without Black. There is no race prejudice in Ghana." Perhaps the Black writer by the vividness of his artistic creation and the force of his conviction can fascinate us with his new mythology, at least long enough to make us question the old.

## NOTES

<sup>1</sup>R. S. Rattray, *Akan-Ashanti Folk-tales* (Oxford Univ. Press, London, 1930) p. 181.

<sup>2</sup>Melvin B. Tolson, *Harlem Gallery Book I The Curator* (Twayne, N.Y., 1965) p. 83.

<sup>3</sup>Geoffrey Parrinder, *African Mythology* (Paul Hamlyn, London, 1967) p. 134. Susan Feldman, *African Myths and Tales* (Dell, Laurel Ed., N.Y., 1970) pp. 182-5. Yves et Marie-Jeanne Igot, *Contes et fables du centre de l'Afrique* (Didier, Paris, 1970).

<sup>4</sup>Roger Cazziol, *Lectures Africaines* (George Harrap, London, 1968) p. 19.

<sup>5</sup>R. S. Rattray, "How the tail of Efu the Black-Colobus monkey became white," *Akan-Ashanti Folk-tales*, pp. 44-47.

<sup>6</sup>*Ibid.*, p. 47.

<sup>7</sup>*The Language of African Art*, Smithsonian Exhibition, 1970.

<sup>8</sup>*African Maska*, ed. Franco Monti (Hamlyn, London, 1966) p. 138.

<sup>9</sup>*African Art*, ed. Dennis Duerden (Hamlyn, London, 1968) p. 30.

<sup>10</sup>Parrinder, p. 24.

<sup>11</sup>*Ibid.*, p. 72.

<sup>12</sup>Oladele Taiwo, *An Introduction to West African Literature* (Thomas Nelson and Sons, London, 1967), p. 37.

<sup>13</sup>Dennis M. Warren, Lecture "Emic-Etic Approach," Fall, 1975, ISU.

<sup>14</sup>p. 221; quoted in Mercer Cook "The Last Laugh" *Présence Africaine* special edition *Africa as Seen by American Negroes* (Présence Africaine, Paris, 1958) p. 209.

<sup>15</sup>Malcom X. *The Autobiography of Malcom X* (Grove Press, N.Y., 1964), pp. 164-8.

<sup>16</sup>Albert Memmi, *L'Homme Dominé* (Payot, Paris, 1968), p. 20.

<sup>17</sup>Cook, pp. 201-2.

<sup>18</sup>René Maran, *Batouala: Veritable Roman Nègre* (Albin Michel, Paris, 1938), pp. 87-8.

<sup>19</sup>Ulli Beier ed. *Political Spider* (Africana, N.Y., 1969) p. viii.

<sup>20</sup>Michael Dei-Anang, *Africa Speaks* (Star, Accra, 1959) pp. 30-1.

<sup>21</sup>Fred Kwesi Hayford, *Inside America: A Black Diplomat Speaks Out (Acropolis, Washington, D.C., 1972)*, pp. 235-6.

<sup>22</sup>Léopold Sédar Senghor, "que m'accompagnent kôras et balafong," in Clive Wake, ed., *An Anthology of African and Malagasy Poetry in French* (Oxford Univ. Press, London, Three Crowns Ed., 1965), Stanza VI, p. 51.

<sup>23</sup>Quoted in Lilian Kesteloot, *Aimé Césaire* (P. Seghers, Paris, 1962) p. 73.

<sup>24</sup>Quoted in *The African Assertion: A Critical Anthology of African Literature*, ed. Austin J. Shelton (Odyssey, N.Y., 1968), p. 74.

<sup>25</sup>Bernard Dadié, "Je vous remercie Mon Dieu," *Wake*, p. 135.

<sup>26</sup>Francis Bebey, "Un jour, tu apprendras," *Ibid.*, p. 165.

<sup>27</sup>*Black Poets in French*, ed. Marie Collins (Charles Scribner's Sons, N.Y., 1972), pp. 80-1.

<sup>28</sup>Paul Niger, "Je n'aime pas l'Afrique," *Ibid.*, pp 90-3.

<sup>29</sup>*A Reader's Guide to African Literature*, ed. Hans Zell and Helene Silver (Africana, N.Y., 1971), p. 51.

<sup>30</sup>Frantz Fanon, *The Wretched of the Earth*, trans. Constance Farrington (Grove Press, N.Y., 1968). p. 233.

## WILHELM VON HUMBOLDT'S THEORY OF LINGUISTIC RELATIVITY: LANGUAGE AS THE ORIGINAL MYTH\*

*Roberta Graber Ross*<sup>†</sup>

**ABSTRACT.** Wilhelm von Humboldt (1767-1835) developed a philosophy of language which has greatly influenced succeeding generations of linguists. A major tenet of this philosophy is his contention that the language people speak provides them with a particular mental structure or world-view. All other myths or world-views rest on this original linguistic foundation. In discussing this claim the paper considers three interrelated aspects of Humboldt's philosophy of language. First, it investigates his view that thought is impossible without language ("linguistic determinism"). It then examines his contention that the particular language people speak determines the way in which they perceive and structure reality ("linguistic relativity"). Finally, it explores how this contention is modified by Humboldt's belief in the oneness of humanity ("linguistic universality").

Humboldt's theory of linguistic determinism follows from his understanding of the nature of language and thought. Language is an organic entity which mediates between the following pairs: the self as subject and the external world as object, the self's mental and physical natures, and the self and other selves. Language is uniquely fitted to carry out this function. Uniting in itself both the physical realm (sounds) and the mental one (concepts), it separates and combines entities in both realms. Thought is the reflection (separation) of the thinking subject from the object of that thinking and the simultaneous synthesis (combination) of subject and object into an objectified concept. Thought is thus obviously impossible without language.

Humboldt's theory of linguistic relativity rests on this belief in the primacy of language. All languages have as their common content the realm of all that can be thought. Yet no one language is able to incorporate all of this realm. Instead, each language incorporates it in an individual manner which is determined primarily by its sound system. The sound used by a particular language to designate a concept places that concept in a certain position in a particular network of logical and emotional relationships. Each word thus helps create the distinctive perceptual and conceptual universe in which the speakers of that language live.

Humboldt's theory of linguistic universality significantly modifies this view. His theory rests on three premises. First, he agrees with Kant that certain categories of thought are common to all people. Second, each language is able to incorporate a particular view of the realm of

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all that can be thought only because the inherent form of each language is identical to the inherent form of that realm. Each language reflects the manifestations of this form— separation, combination, and organic unity—and re-creates this form in the thinking of its speakers. Finally, the oneness of humanity enables individuals to overcome the isolation created by language. No two people ever speak exactly the same language, for it is through the action of language that each individual becomes a self-aware human. At the same time language is not individual. It is a process which exists only in the community created by speaker and listener. Thus the oneness of humanity is the necessary condition for language, which in turn simultaneously disrupts and restores this unity.

## STEPHANE MALLARME: A STUDY IN MYTHOPOESIS\*

D. Hampton Morris<sup>†</sup>

**ABSTRACT.** Stéphane Mallarmé, a French poet of the latter half of the nineteenth century, was one of the few individuals who are capable of engaging in mythopoesis at its highest level, *i.e.*, the creation, practically *ex nihilo*, of a personal mythology with its own coherent internal structure. As Gardner Davies has admirably demonstrated in his *Mallarmé et le drame solaire* (Paris: José Corti, 1959), Mallarmé was especially fascinated by the "solar myth" and used its themes in much of his poetry. But instead of merely adopting the solar myth and elaborating upon all of its symbolic possibilities, Mallarmé chose one of its most unusual aspects, the summer solstice. When seen from the earth, the sun reaches at midday its highest point in the sky and seems for a moment to hang suspended there, frozen in space, in what Mallarmé described in his poem *Cantique de Saint Jean* (*Saint John's Canticle*) as the *halte surnaturelle*. Mallarmé attributed a supernatural quality to this "eternal moment" because, in effect, it annihilates time, fusing all past and future into one instant. Actually this moment is the opposite extreme of eternity; it is an instant of absolute *timelessness* which seemingly escapes from the ordinary confines of time.

We can more easily understand why this striking symbolic conjunction of the sun and saint's head during the *halte surnaturelle* described in the poem held special meaning for Mallarmé when we consider the poet's unusual, quasi-mystic experience which occurred while he was living in Tournon. The years that Mallarmé spent as an English teacher at the *lycée* in Tournon (1863-1867), were difficult, and for the most part, unhappy ones for the poet. Much of this time Mallarmé was plagued with moods of great depression, illness, fears of insanity, and a general dissatisfaction with his career and way of life. During the winter of 1866-1867, the poet's previous moods of overwhelming despondency culminated in a grueling mental crisis which finally found its resolution in an experience not at all unlike those related by "traditional" mystics. In all of his letters describing this experience, Mallarmé declares that he has undergone a complete transformation, involving a "spiritual suicide," a "dying" of the old self and a "rebirth" of the new, which has given him at last a "pure conception", a harmonious comprehension of the cosmos and its mysteries, an understanding of "the intimate correlation of Poetry with the Universe."

Mallarmé felt that, like Saint John at his execution, he was "exalted" within the eternal moment of his spiritual death which he experienced to the depths of his innermost being. For

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this reason, the *halte surnaturelle*, the eternal moment, came to represent for Mallarmé the resolution of his excruciating mental crisis. It was a symbolic reminder of his feeling of oneness with the universe, even though the original experience could not be relived. It is not surprising, therefore, to discover the eternal moment as a basic element in Mallarmé's personal mythology, and as such, a frequent image in his greatest works.

In his essay on Richard Wagner, "Rêverie d'un poète français," Mallarmé presents his lifelong meditations upon Myth and its significance for mankind. According to Mallarmé, the ideal Myth would not be based on national mythology for folklore, like Wagner's, but would actually be a "supra-Myth," entirely divorced from the casual circumstances of space and time. Thus, the Mallarméan Myth would represent absolute timelessness, the *halte surnaturelle*, experienced not by a national hero or a legendary figure, but instead by "un être dégagé de personnalité." Mallarmé attempted to incorporate these theoretical principles in a great masterwork to which he referred simply as "the Book." Unfortunately, Mallarmé's ambitious project was doomed to failure from its inception, for he persistently refused to settle for anything less than the Absolute, but it is his Promethean attempt to capture his Ideal in "the Book" that makes Mallarmé one of the most intriguing examples of modern mythopoesis.

**III. UNITY  
through  
MYTH**



## ANDROGYNY AND LITERATURE \*

Fern Kupfer †

### WHAT IS ANDROGYNY?

Androgyny implies that "the characters of the sexes and the human impulses expressed by men and women are rigidly assigned."<sup>1</sup> The androgynous personality would possess many characteristics traditionally considered "masculine" or "feminine," without regard to the actual gender of the individual; androgyny suggests individual choice without regard to conventional "appropriate" behavior for men and women. Individual men might be accepted as nurturing without being considered "weaklings"; individual women might be accepted as dominating without being considered "castrators." The authenticity of their personalities would not necessarily be related to their genders. What androgyny further implies is a vision of potential and possibility—"the unlimited personality"—a vision that remains unrealized until the structure of male-female opposition is integrated within the individual psyche.

In a society in which many intelligent people are trying to minimize sexual differences in order to create a world whereby an individual's behavior is not prescribed or defined by his or her gender, the emergence of a condition called "androgyny" is met with favorable response. In her book, *Towards a Recognition of Androgyny*, Carolyn Heilbrun states that "our future salvation lies in a movement away from sexual polarization and the prison of gender toward a world in which individual roles and the modes of personal behavior can be freely chosen."<sup>2</sup> Whether or not one agrees that the answer to salvation lies in the acceptance of such a condition, the "recognition" of androgyny offers a new interpretative basis for literary study. Most importantly, it challenges the Freudian precept to which we have clung for so long, that "anatomy is destiny." Under the condition of androgyny, masculinity and femininity are not seen as products of anatomy or even as results of cultural differentiation, but as qualities that are not absolutely known and are often understood as symbolic forms. The recognition of androgyny enables us to examine the characters we read about with a far less limited perspective.

As a literature reflects the mythic ideals of a society, so it also creates them. When we talk about androgyny as an *ideal* in literature, we are not merely recognizing a lack of sexual stereotypes among the characters in particular novels, but are establishing a paradigm for transcending all dualities.

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Heilbrun mentions Joseph Campbell's account of the "anti-androgynous" world in *The Masks of God*. This is characterized by the "setting apart of all pairs of opposites—male and female, life and death, true and false, good and evil."<sup>3</sup> In this world the pairs are seen in conflict, warring with each other. In contrast, the androgynous view suggests harmony and relationship rather than discord and polarization. Represented in the androgynous ideal is the concept of balance, a search for equilibrium, and the recognition of the mutual enhancement of antithetical characteristics when in harmony. So there emerges, as Alan Watts describes the Yin-Yang pair symbolized in the *Book of Changes*, a "perpetual interplay" and a "view of life which sees its worth and point, not as a struggle for constant ascent but as a dance. Virtue and harmony consist not in accentuating the positive, but in maintaining a dynamic balance."<sup>4</sup>

This is, of course, a positive interpretation of the androgynous state of being, and perhaps I should just mention here an opposing perspective. The negative view counters that androgyny would result not in a "harmony" but only in a bland neutralization by ultimately cancelling out all sexual characteristics until women and men are virtually indistinguishable. We would end up then with only boring uniformity, or—taking the negative to the extreme—a total asexuality, a perverse "sexlessness." This view is revealed, for example, in T. S. Eliot's depiction in *The Wasteland* of the blind seer, Tiresias, as the "old man with wrinkled breasts" and by Anne Sexton in *Transformations* where the fairy-tale character Rumpelstiltskin is seen as an androgyne who is a "monster of despair...all decay" and who speaks with a "tiny no-sex voice." Both these poems connect androgyny with the author's larger themes of impotence, sterility, and despair in the modern world.

I can only offer that while this interpretation may be metaphorically lively, it presents no new beginnings for mythopoetic analysis and is finally less complex and less intriguing than the androgynous ideal of the "unlimited" personality. Since androgyny in the latter view implies following one's natural inclinations rather than societal dictums, and implies choice rather than prescription, the result would yield not uniformity and stagnation, but variety and endless possibilities for change in open-ended combinations. Androgyny in the positive view is life-enhancing and even erotic. Watts explains that

the "square" or profane interpretation of this [hermaphroditic] imagery is that holiness is sexlessness, and, similarly, that transcendence of the opposites, such as pleasure-and-pain or life-and-death, is mere detachment from physical existence. But if holiness is wholeness, the meaning of this imagery must be plus rather than minus, suggesting that innocence is not the absence of the erotic, but its fulfillment. . . . Hermaphroditic imagery suggests, rather, that there is a state of consciousness in which the erotic no longer has to be sought or pursued, because it is always present in its totality. In this state all relationship and all experience is erotic.<sup>5</sup>

The androgynous ideal suggests that the relationship of opposites is *more than* the individual elements; the whole has an energizing power and a vitality that is absent when the elements are separate from one another and unable to connect.

Of course, it is finally impossible to discuss androgyny, even as an "ideal," without defining something called "masculine and feminine principles" (remembering that these as principles should not be confused with men and women). We can see these principles as ways of understanding all human behavior. To author D. H. Lawrence "every single impulse" was either male or female, "distinct." The "complete consciousness" is of both. Lawrence's lengthy essay, "Study of Thomas Hardy," is more an explication of these impulses than an examination of Hardy's work. Simply abstracted, the characteristics of the male element include movement toward discovery, change, multiplicity and diversity, doing, knowledge, abstraction, and consciousness. The female element includes movement toward origin, stability, eternity, feeling, being, and instinct.

For Lawrence, progress and civilization are associated with male "mental" consciousness and the movement toward discovery. Isolated from the feminine sensibility, male assertiveness tends to the misuse of power; abstract "cerebral" concerns dominate, untempered by the warmth of human feeling and emotion.

Instinct (or "blood consciousness," as Lawrence calls it, although it is, in more conventional frameworks, linked with the *unconscious*) is a female component which is characterized by spontaneity and sensation. It is essentially "anti-culture." Unchecked by masculine reason and control, the feminine sensibility yields to lust and depravity.

The male essence can be more easily "seen" or concretized by conventional opinion, institutions, and organizations. The female essence is more mysterious; the feminine perception is intuitive and not often comprehensible or translatable.

This principle of male-female opposition corresponds to the Jungian view that the psyche is structured in polarities and that "these polarities—conscious/unconscious, flesh/spirit, reason/instinct, active/passive—are most often characterized in masculine/feminine terms."<sup>8</sup> Seen as archetypal structures, these masculine and feminine components of the psyche come to symbolize certain modes of behavior and ways to understanding. Jung describes these symbolic concepts as the *anima* (the feminine component of the man's psyche) and the *animus* (the masculine component of the woman's psyche). The *anima* "expresses the so-called feminine qualities of tenderness, sensitivity, desirousness, seduction, indefiniteness, feeling, receptivity." The *animus* "expresses qualities traditionally associated with the man's capacity to penetrate, separate, take charge...to articulate and express meaning."<sup>7</sup>

Jung notes the "projection-making factors of the *anima* and *animus*—the 'woman' who is in every man, the 'man' who is in every woman." The well-balanced human being (what Jung calls the "integrated individual") is the "contrasexual" person who is "consciously related to internal male and female elements which operate in polarity to each other."<sup>9</sup> "Wholeness" is achieved by the relation between these principles within the individual psyche. The urge toward "wholeness" or "integration" is toward the androgynous ideal.

Writer Virginia Woolf posited "two sexes in the mind" as a kind of androgynous idea; she thought that thinking of one sex "as distinct" from the other was an effort. Yet Woolf also maintained that the male and female elements (or "powers," as she refers to them in *A Room of One's Own*) were radically different. Woolf saw these opposite elements in conflict with each other in our society—both with men and women "warring" within ourselves. Essentially, Woolf saw the world as "man-made" and so much the worse for it, because in a "male-dominated society, not only are the women oppressed, but also that which is considered female is suppressed."<sup>9</sup>

The celebration of the harmonizing influence of the feminine sensibility seen in much of Woolf's fiction (the novels *Mrs. Dalloway* and *To the Lighthouse*, for example) is shown as a reaction to male excess. What Woolf ultimately sought was some kind of reconciliation that would put the world back into harmony and help integrate the individual.

For Lawrence, the world is so bullied by industrialism, education, and organized religion (seen as the product of the male qualities of will-to-motion, knowledge, and service for the public good) that integration would be met only by a return to female principle. The emergence of the feminine consciousness and a recognition of its value is not the ultimate goal. It is a necessary step prior to the emergence of the androgynous personality. About his last book (*Lady Chatterley's Lover*) Lawrence wrote, "Life is only bearable when the mind and the body are in harmony, and there is a natural balance between them, and each has a natural respect for the other."<sup>10</sup>

The overcoming of sexual polarity revealed in literature by either the androgynous character or the androgynous love relationship serves as a paradigm for transcending all dualities. But androgyny is a difficult concept to concretize and it is perhaps more helpful to place a literary work in a kind of continuum to see, with respect to the work's theme, characterization or symbolic structure, its relation to androgyny.

## ANDROGYNY AND UNANDROGYNY IN FICTION

Some of the best examples of the unandrogynous view—where the sexual roles are virtually polarized, where there is little communication between men and women—are found in the milieu of popular culture. One need only experience a Clint Eastwood double feature to appreciate the character of the totally masculine hero who makes his solitary journey without nurture or guidance from the feminine spirit. The hero can have sexual relationships, but they are never, to use a modern cliché, "meaningful"; that is, the hero is never dependent upon women, never absorbs any of the "feminine" qualities into his own steely, utterly self-sufficient male personality. That, of course, is part of the macho mystique. Jules Feiffer, in *The Great Comic Book Heroes*, makes the distinction between "the sissy" and "the man":



but the male characters in so many of these books are still viewed as "the other"—the same emotional blockheads we found in the women's magazines. The males are estranged, not only from the female protagonists, but from the reader as well. In books such as *Fear of Flying*, *Memoirs of an Ex-Prom Queen*, and *The Bell Jar*, it is almost impossible for the reader (male or female) to identify with the unsympathetic portraits of the male characters.

*The Golden Notebook* by Doris Lessing is a more unique and valuable work. Despite Lessing's protestation in her new introduction, the novel is essentially a feminist work. Men are viewed as "the other"—an unattractive "other": selfish, pedantic, closed, terrified of emotional commitment or real tenderness. Anna calls herself a "free woman" because she chooses to reject conventional morality, especially with regard to sexual behavior. However, the title is misleading, because Anna's need for relationships conflicts with her independent life-style. What is more ironic is Anna's realization that there is really no use at all in declaring herself "free" if men just keep seeing her as "easy." Her friend Molly laments, "If we lead lives like men, shouldn't we use the same language?"

Finally, it is the struggle against the barrier of gender that distinguishes *The Golden Notebook* with respect to androgyny: symbolic of the struggle is the *form* of the novel itself. Anna, the heroine (and author of the various notebooks that precede the last chapter, called "The Golden Notebook") needs to compartmentalize her life. She feels she must "separate things off from each other, out of fear of chaos, of formlessness, of breakdown." Yet ultimately, the effort is too much for her. At the end of the novel, as she is breaking down, she meets a young American, also a writer, and, at an exhaustive pitch, they go mad together. They go through all of the roles, then they break down into each other. Anna writes, "I feel towards him as if he were my brother, as if like a brother, we strayed from each other. How far apart we were, we would always be flesh of one flesh and think each other's thoughts."

Anna's final plunge into madness ends her writer's block. The last chapter, *The Golden Notebook*, is the synthesis and integration of her new self. Her lover gives her the first line for her novel, she gives him the first line for his. Anna writes, "Things have come together, the divisions have broken down, there is formlessness with the end of fragmentation." *The Golden Notebook* holds the promise that indeed "the divisions have broken down"—the promise of the androgynous ideal.

*Ada*, by Vladimir Nabokov is a novel coming closest to a genre we would call "Androgynous Erotica" and best exemplifies to skeptics who foresee androgyny as a passionless affair, just how very sexy androgyny can be. *Ada* is the story told (in part) by nonagenarian Van Veen as he recalls his affair with his cousin (really his sister) Ada Veen. The names *Ada* and *Van Veen* serve as an anagram for *Adam* and *Eve* and what Nabokov is doing is depicting the androgynous arcadian paradise in *Amor of Ada* in the *Arbors of Ardis Manor*—the nineteenth-century, Russian, country estate of his childhood.

I have said that the story is told *in part* by Van Veen; it is also told by *Ada* who has supposedly collaborated with Van on this yet unpublished manuscript. In midsentence, the aging Van requests *Ada* to "take over from there, please." *Ada* picks up the story from wherever "there" is: she certainly writes as well as Van, and not from a different point of view. Although she sometimes disagrees with Van about specific events, essentially their memories of eight or so decades, and the recollections of sensations are alike—so alike, in fact, that the reader cannot tell where one begins and the other leaves off. It is partly this quality—the blur of individual distinction—that characterizes this novel with respect to androgyny.

*Ada* clarifies Van's statements, issues addendums, makes parenthetical comments. The book (to be published posthumously after Van dies) is the product of a synthesis of *Ada* and *Van Veen*. Together they deliver the manuscript. At the end of the first chapter, *Ada* leaves and Van writes that he is "pregnant with his first book"—although the reader is told that Van is sterile, it is acknowledged that the *book* is their baby.

*Ada* and *Van* reveal the two sides of Nabokov himself. *Ada*, who "loves anything that crawls," is the scientist and the ultimate pragmatist. Her interest in lepidoptery provides the outlet for her penchant to classify and record. *Van* is the dreamy literary type, given to lofty philosophical speculation about his favorite subject—"the texture of time." In *Ada* the androgynous ideal is presented by the relationship between *Ada* and *Van Veen*, by the balance and ultimate fusion of dualities and by Nabokov's suggestion that this reality is all really different reflections from the same mirror.

I have said that the presence of the androgynous spirit in literature can best be apprehended by viewing the work in some kind of gestalt, comparing it with other works, and placing them in perspective to each other; but also certain kinds of check-list criteria may be used. Heilbron suggests that "it is in those works where the roles of the male and female protagonists can be reversed without appearing ludicrous or perverted that the androgynous ideal is present." I would add that in at least some works (as revealed in the last two novels I have discussed) there is a blur of individual distinction—perhaps in an attempt by the author to go even beyond the limits of corporality. It is this quality that characterizes the work of one writer who has searched for the androgynous ideal—Virginia Woolf.

Also significant in relation to androgyny and literature is the ability of the artist to use his or her own resources and ably portray a protagonist of the opposite sex. Many writers (Coleridge, Woolf, Rilke, to name a few) claim that the creative mind, the great mind, must of course be androgynous or "bisexual."<sup>1</sup>

The male writers' successful use of the feminine persona suggests the presence of the androgynous ideal even more strongly when the female protagonist is herself an androgynous individual who employs certain masculine aptitudes (most significantly, independence and will-to-action) to attain heroic stature. Much of the fiction of D. H. Lawrence and Nathaniel Hawthorne, for example, is of an androgynous nature, since both these writers consistently portray vital female protagonists whose heroic qualities are not defined by conventional female roles, but are universally significant.

We often start out with certain preconceptions about characters in literature, and the sex of the character at least partially influences the interpretations and evaluations we make. We can hope that the recognition of androgyny offers new interpretations and helps to expand our critical consciousness.

## NOTES

<sup>1</sup>Carolyn G. Heilbron, *Towards a Recognition of Androgyny* (Harper and Row, New York, 1973), p. xi.

<sup>2</sup>*Ibid.*

<sup>3</sup>*Ibid.*, p. 11.

<sup>4</sup>Alan Watts, *The Two Hands of God* (George Braziller Publishers, New York, 1963), p. 58.

<sup>5</sup>*Ibid.*, p. 204.

<sup>6</sup>Ann Belford Ulanov, *The Feminine in Jungian Psychology and in Christian Theology* (Northwestern University Press, Evanston, Ill., 1971), p. 143.

<sup>7</sup>*Ibid.*, p. 38.

<sup>8</sup>*Ibid.*, p. 164.

<sup>9</sup>Nancy Topping Bazin, *Virginia Woolf and the Androgynous Vision* (Rutgers University Press, New Brunswick, New Jersey, 1973), p. 167.

<sup>10</sup>D. H. Lawrence, "Apropos of *Lady Chatterley's Lover*," *Sex, Literature, and Censorship*, ed. Harry T. Moore (The Viking Press, New York, 1959), p. 231.

<sup>11</sup>*The Conscious Reader*, ed. Schrodde, Firestone, and Shugrue (Macmillan, New York, 1974), p. 347.

<sup>12</sup>An exception, I think, is Melville's *Billy Budd*, since Billy Budd himself is an androgynous figure.

<sup>13</sup>Many feminist critics raise the issue of the "female sensibility" (as yet, still undefined) and object to what they feel is the exploitation and perversion of the female character at the pens of male authors. This is one of Kate Millet's focal points in her discussion of D. H. Lawrence, Mailer, and Genet in *Sexual Politics*. Katherine Anne Porter discusses what she considers the supreme male arrogance: D. H. Lawrence's description of the female orgasm in *Lady Chatterley's Lover*. (See "A Wreath for the Gamekeeper," *Encounter*, 14:16, 1960.)

## THE MYTH OF UNITY AND POETIC LANGUAGE\*

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One of the most effective scenes in *Nausea* by Jean-Paul Sartre is Roquentin's realization of the existence of innate objects. His experience is linked to language and its function. To appreciate the full extent of this relationship, the passage must be quoted in its entirety.

I [Roquentin] lean my hand on the seat but pull it back hurriedly: it exists. This thing I'm sitting on, leaning my hand on, is called a seat. They made it purposely for people to sit on, they took leather, springs and cloth, they went to work with the idea of making a seat and when they finished, that was what they had made. They carried it here, into this car and the car is now rolling and jolting with its rattling windows, carrying this red thing in its bosom. I murmur "It's a seat," a little like an exorcism. But the word stays on my lips: it refuses to go and put itself on the thing. It stays what it is, with its red plush, thousands of little red paws, this belly floating in this car, in the grey sky, it is now a seat. It could just as well be a dead donkey tossed about in the water, floating with the current, belly in the air in a great, grey river, a river of floods, and I could be sitting on the donkey's belly, my feet dangling in the clear water. Things are divorced from their names. They are there, grotesque, headstrong, gigantic and it seems ridiculous to call them seats or say anything about them: I am in the midst of things, nameless things. Alone, without words, defenseless, they surround, are beneath me, behind me, above me...<sup>1</sup>

For Roquentin, and for any other human being, words are a defense against the world. Things are things and have their places in our minds because we attach names to them and assign them a position in our scale, in our organization of the world. Without words Roquentin feels engulfed in the maelstrom of existence. There are no landmarks, no points of reference. "The words had vanished and with them the significance of things, their method of use, and the feeble points of reference which men have traced on their surface," laments Roquentin.<sup>2</sup>

Indeed, the first task of language is to organize things, to control the anarchical exuberance of nature. In the biblical account Adam's first objective was the naming, and thus classification of all animals and all the birds of heaven: "He [God] brought them to the man to see what he would call them, and whatever the man called each living creature, that was its name. Thus the man gave names to all cattle, to the birds of heaven, and to every wild animal..."<sup>3</sup>

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The naming of things not only serves as a defense against them but implies a definite separation from the rest of creation. As Mikel Dufrenne puts it in *Language and Philosophy*: "Independent thought starts as a result of a break: it is, indeed, by a sort of original sin that we denounce the primordial pact that we have with a milieu . . . and it is through such a break that we lose paradise. Then it is that we separate ourselves off, so as to say 'I.'" The Cartesian *Cogito ergo sum* is first of all an *ego cogito*. Mikel Dufrenne notes that "to become conscious of the world is also to become conscious of oneself as a distinct pole of reference."<sup>10</sup> In a sense Dufrenne is absolutely right in using the expression of "original sin," since in this break man sets himself up as a god, as the center of language and of the world. But the result of sin is death. By referring only to his reason man not only is divided from the universe but also creates a chasm within himself: he becomes separate from his nonrational powers. Thus when man's reason, his *cogito*, is the sole point of reference not only does a dualistic view of the self and the universe come into being but a dualistic view of man himself results as well.

Language exacerbates this dualism. In itself it has a binary nature referred to by Ferdinand de Saussure as the signifier and the signified—inner and outer forms and meaning. W. M. Urban, in *Language and Reality* speaks of the dual function of language as evocative and indicative: "Even as we look on language solely as a medium of communication we are aware that it requires a sender and a receiver, a message and a code." And the transmission is plagued by so many interferences that the sender has to reinforce his message by using redundancies. In fact, one must transcend one's selfishness to catch glimpses of the message emitted. Furthermore, in communication language is a tool that may convey emotion and meaning but more often commands and imposes one's own desires and opinions on another. Thus, even as a medium of communication, language promotes a dualistic view of the world.

This problem is carried over into the realm of language as a bearer of meanings. The relationship of word to object is one of the key problems around which all culture and knowledge finally revolve. Among the first discussions of the problem is the one recorded by Plato in the *Cratylus*. The main theme of this dialogue is the relation of language to reality. The chief problem discussed is whether knowledge of names gives knowledge of things and whether names are the result of convention or of a natural process. The question is not resolved, but for Plato there seems to exist some intimate and primal relation between the word and the object. Plato, as a myth-maker, in his search to explain the mysteries of the universe, refers to a myth of primal unity between reality and language.

In the *Order of Things* Michel Foucault elaborates upon this myth of unity between words and things, saying that "in its original form . . . language was an absolutely certain and transparent sign for things, because it resembled them. The names of things were lodged in the things they designated. . . . by the form of similitude."<sup>11</sup> This primal unity was lost at Babel when "languages became separated and incompatible with one another only in so far as they had previously lost this original resemblance to the things that had been the prime reason for the existence of language."<sup>12</sup> George Steiner in *After Babel* refers to the *Ur-Sprache*, the original, Adamic vernacular in which words and objects dovetailed perfectly.<sup>13</sup> For him, Babel was a second Fall, men "were exiled from the assurance of being able to grasp and communicate reality."<sup>14</sup>

The myth of unity, though somewhat obscured, survived the Middle Ages and the Renaissance. The search for the original word that fits an object perfectly is evident in the work of Isidore of Seville, his *Etymologiae*. His purpose is to go from designation to essence, from *verba* to *res*. "If you know the origin of a word," said Isidore, "you more quickly understand its force. Everything can be more clearly comprehended when its etymology is known."<sup>15</sup> Because of the great influence of the *Etymologiae*, knowledge in the Middle Ages "consisted in relating one form of language to another form of language; in restoring the great, unbroken plain of words and things; in making everything speak."<sup>16</sup> Thus the problem of meaning and the relation of language and reality did not plague the *episteme* of the period. Foucault remarks that for the Middle Ages "the art of language was a way of 'making a sign', of simultaneously signifying something and arranging signs around that thing; an art of naming, therefore, and then, by means of reduplication both demonstrative and decorative, of capturing that name, of enclosing and concealing it, of designating it in turn by other names that were the deferred presence of the first name, its secondary sign, its figuration, its rhetorical panoply."<sup>17</sup> Knowledge consisted in interpreting the signs.

The iconography and the arts are evidence of the secret link between language and objects. Emile Mâle notes that "the art of the Middle Ages is first and foremost a sacred writing of which every artist must learn the characters."<sup>16</sup> The medieval art, the gothic churches are in effect a sacred script. The outward forms have a direct relation with the inner meanings. The material and the spiritual worlds are one, thus the word and the object are one. Conversely the object could refer to the word. This is the aspect stressed by Emile Mâle. "The medieval Church tried through sculpture and stained glass to instill into the faithful the full range of her teaching... it was necessary to give concrete form to abstract thought."<sup>17</sup>

Although the basic *episteme* did not change, the Renaissance accorded a greater primacy to the written word. Printing, the arrival of Oriental manuscripts, and the rediscovery of Classical texts were manifestations of the fundamental place accorded to writing. The shift to the printed word was in no way a departure from the idea of the relation between signs and objects. Foucault sees "no difference between the visible marks that God has stamped upon the surface of the earth, so that we may know its inner secrets, and the legible words that the Scriptures, or the sages of Antiquity, have set down in the books preserved for us by tradition. The relation to these texts is of the same nature as the relation to things: in both cases there are signs that must be discovered."<sup>18</sup>

It is only from the seventeenth century on that the question shifts from how to interpret the sign to how a sign could be linked to what it signified. According to Michel Foucault "things and words were to be separated from one another. . . Discourse was still to have the task of speaking that which is, but it was no longer to be anything more than what it said."<sup>19</sup> There began to appear a distance between the word and the object, expressed by the "re" in representation.

Language becomes a means for representing reality, and representation becomes life. It is no wonder that the seventeenth century is the golden age of the great French classical theater. Corneille, Molière, and Racine were masters in the art of representing life and its passions or foibles on the stage. With representation comes a renewed need for classification, to put order and clarity into the universe. The result is the beginning of science and of scientific thought based on observation. One of the great achievements of the eighteenth century was the *Encyclopedia* of Diderot, d'Alembert, and Voltaire. Historians have called this period the Age of Reason. Language is but a tool of reason. In *Grammaire de Port-Royal* language is not a means to know the world but an expression of thought. According to Arnault and Lancelot "one cannot understand the several kinds of signification enclosed in words if it is not understood what is happening in our thoughts, since words have only been invented to make our thoughts known."<sup>20</sup> The *cogito* is placed in the midst of language, separate from the rest of the universe. The result of this dualism, as Marcel Raymond puts it, is that civilization "has become increasingly identified with the rational and positivistic view of the world and of life, and its constraint on the human mind... has been increasingly more violent. Because it separated man from the universe and from part of himself, that is, from his nonrational powers... it aggravated to an almost intolerable degree the natural discordance between the total exigencies of the mind and the limited existence that is the lot of man."<sup>21</sup>

Up to the middle of the nineteenth century, literature and the arts did not offer a remedy to this inner division. They were themselves involved in the total view of representing man and nature. As for literature, it never questioned its own language. As George Steiner notes: "from the beginnings of Western literature... poetry and prose were in organic accord with language."<sup>22</sup> In other words literature accepted the view of language which was prevalent in its time. Thus, from the seventeenth century on, literature implicitly accepted the dualism of self and the world.

The Romantic movement beginning with Rousseau was aware of the division of man and his universe. With this awareness the myth of unity reappears in literature. But if poetry and poetic prose suggested a relationship between nature and man, it was only in terms of a pathetic fallacy, as in the poetry of Lamartine. The fundamental question of language was never discussed. The attempt of the Romantics to bridge the gap between language and reality restricted itself to the interjection of feelings and an existential approach to poetry. George Steiner remarks that "Goethe and Victor Hugo were probably the last major poets to find that language was sufficient for their needs."<sup>23</sup>

Around the middle of the nineteenth century the Symbolists sensed that the concept of language as reflected in their time was inadequate for the expression of man's totality of being. Language as used and conceived was unable to render the essential and mysterious kinship of all things, the participation of all aspects of man's nature, including the subconscious, into a "universal correspondence." An alienation of language and poetry appears. The reasons for this alienation are numerous and cannot here be analyzed fully. George Steiner attributes alienation to sociological causes such as the industrial revolution and conflicts between artists and the middle class, at the same time referring to the possible influence of linguistic entropy.<sup>24</sup> For Foucault alienation occurs because language becomes an "object of knowledge among others, on the same level as living beings, wealth and value, and the history of events and men."<sup>25</sup> The result is that literature becomes "differentiated from the discourse of ideas and encloses itself with radical intransitivity."<sup>26</sup>

Literature creates its own values, which deviate from the norms of order, taste, and clarity set up during the seventeenth and eighteenth centuries. It breaks with the whole definition of *genres* and becomes simply a manifestation of itself. The ugly, the scandalous, the obscure are affirmations of a new order of language and a denial of the old.

A return to the myth of unity and a rejection of dualism is uppermost in the poetic mind and expression. The poetic word becomes one that adheres to the object, and, as Mikel Dufrenne expresses it, is able "at once both to depict the thing and to conjure it up, rather than to serve merely as an arbitrary sign of it."<sup>27</sup> Thus in poetry we may start talking about the "Alchemy of the Word," a transforming power, which like the alchemy of old changes base metals into pure gold, or in the words of Rimbaud invents "a poetic language accessible someday to all the senses."<sup>28</sup>

The result is a poetry of reconciliation, of unity:

It is found again!  
What! Eternity.  
It is the sea mixed  
With the sun.<sup>29</sup>

Language will no longer be a barrier between man and his world, between man and man. It "will be of the soul for the soul, containing everything: smells, sounds, colors..."<sup>30</sup>

This search for a language of an immediate and unifying relationship will take many forms. Each poet has his own approach but all have in common the questioning of language and the desire for a deep unity between the word and the world.

For Baudelaire, who defines art as a suggestive magic containing both the subject and the object, the world external to the artist and the artist himself, the search will lead him to establish a communication between things, to bridge the gap between the visible and invisible world.

Like long-drawn echoes afar converging  
In harmonies darksome and profound,  
Vast as the night and vast as light,  
Colors, scents and sound correspond.<sup>31</sup>

Herein is expressed his famous theory of Correspondence and the basic unity of all life. The poet reconstitutes unity where the ordinary man sees only dispersion and incoherence.

For Verlaine poetry is a musical language conveying all the impressions of the soul. His poetic language is a unifying medium in which expression and impression are intimately intertwined. Through rhythm and sound, word and meaning are united in the presence of the poem. This unity can be musically expressed. Fauré, Debussy, and Ravel have translated Verlaine's poetry into musical compositions.

For other poets, like Isidore Ducasse, the search for unity is expressed through violence and deep irony. Under the pseudonym of Lautréamont, Ducasse writes some of the most violent and disturbing poetic prose of French literature—poetry totally separated from rationality, completely open to the expression of the unconscious mind. Lautréamont insists that his purpose is to return to the beginnings of poetry: "La science que j'entreprends est une science distincte de la poésie. Je ne chante pas cette dernière. Je m'efforce de découvrir sa source."<sup>32</sup>

To discover the source of poetry, a poet must go against the current of normal, everyday language. For Mallarmé the function of the poet is to "purify the language of the tribe." Poetic language is the pure, pristine form of expression in which the word, freed from the impurities of normal use and the contingency of existence, encloses the essence of things. The word and the essence are one. The word compels the presence of the object. In the famous, yet quite untranslatable sentence of Mallarmé: "Je dis: une fleur, et, hors de l'oubli où ma voix relègue aucun contour, en tant que quelque chose d'autre que les calices sus, musicalement se lève, idée même et suave, l'absente de tous bouquets."<sup>33</sup> A mysterious sense of unity is revealed through the word. Dufrenne reinforces this by saying that "to evoke something by naming it is to make it present."<sup>34</sup>

In the twentieth century this quest for unity and the participation of inner being was continued by the Surrealists. André Breton's *Second Manifesto* clarified this fact: "Everything suggests the belief that there is a certain point of the mind where life and death, the real and the imaginary, the past and the future, the communicable and the incommunicable, the high and the low are no longer perceived as contradictions. It would be vain to look for any motive in surrealist activity other than the hope of determining that point."<sup>35</sup>

The search for a point in which all contradictions are resolved is still going on in contemporary poetry. The Surrealists with their excessive appeal to the subconscious were doomed to failure. Marcel Raymond writes: "They have tried to force the unconscious to conquer by violence secrets that might be revealed more readily to more artless minds. . . they have lacked perseverance, devotion to something more inward than the self."<sup>36</sup>

Unlike the Surrealists, the contemporary poets "have," according to Alexander Aspel, "an acute sense of human fragility and limitation, of the obstacles separating this quest from its goal."<sup>37</sup> The search through a poetic language set beyond conceptual limits is for the presence of reality, "a direct relationship with things, matter, inner demons, or everyday events."<sup>38</sup> An example of this quest of reconciliation is the "Art of Poetry" by Yves Bonnefoy.

Dredged out of that nights were the eyes.  
Fixed and dried up the hands.  
The fever was reconciled. The heart was told  
To be the heart. There was a demon in those veins  
Which fled howling.  
There was in the mouth a dejected and bleeding voice  
Which was bathed and restored."<sup>39</sup>

Poetry becomes a renewal of the intuitive presence, of life and reality. Words do not divide anymore, they do not separate but integrate human experience and reality in perfect harmony and unity. The experience from which Roquentin recoils in horror and which produces the nausea is accepted gladly by the poets. As Marcel Raymond indicates: "the power of poetic genius to transfigure and authenticate the world includes the power to consider man and his life without rejecting any of their elements, to penetrate them to the point where vile matter is mysteriously transmuted."<sup>40</sup> This transmutation is the essence of the poetic language in which the heart is the heart and the bleeding voice is restored to its fullness. Man is brought back into unity with the world.

## NOTES

<sup>1</sup>Jean-Paul Sartre, *Nausea*, trans. Lloyd Alexander, The New Classic Series (Norfolk, Connecticut, n.d.), pp. 168-169.

<sup>2</sup>*Nausea*, p. 171.

<sup>3</sup>*The New English Bible* (Oxford University Press, New York, 1971), Genesis II, 19-20.

<sup>4</sup>Mikel Dufrenne, *Language and Philosophy*, trans. Henry B. Veatch (Indiana University Press, Bloomington, 1963), p. 72.

<sup>5</sup>*Ibid.*

<sup>6</sup>W. M. Urban, *Language and Reality* (Macmillan, New York, 1939), p. 463.

<sup>1</sup>Roman Jakobson, *Selected Writings* 11 (Mouton, The Hague, 1971), p. 556.

<sup>2</sup>cf. *Language and Reality*, "Plato on Language," pp. 52-53.

<sup>3</sup>Michel Foucault, *The Order of Things* (Pantheon Books, New York, 1970), p. 36.

<sup>4</sup>*Ibid.*

<sup>5</sup>George Steiner, *After Babel* (Oxford University Press, New York, 1975), p. 58.

<sup>6</sup>*Ibid.* p. 59.

<sup>7</sup>Ernst R. Curtius, *European Literature and the Latin Middle Ages* (Harper & Row, New York, 1963), p. 43.

<sup>8</sup>*The Order of Things*, p. 46.

<sup>9</sup>*Ibid.* p. 43.

<sup>10</sup>Emile Mâle, *The Gothic Image* (Harper & Row, New York, 1958), p. 1.

<sup>11</sup>*The Gothic Image*, p. 391.

<sup>12</sup>*The Order of Things*, p. 33.

<sup>13</sup>*Ibid.* p. 43.

<sup>14</sup>Arnauld and Lancelot, *Grammaire de Port-Royal* in *Point de vue sur le langage*, ed. André Jacob (Klincksieck, Paris, 1969), pp. 54-55.

<sup>15</sup>Marcel Raymond, *From Baudelaire to Surrealism* (Methuen, London, 1970), p. 2.

<sup>16</sup>*After Babel*, p. 176.

<sup>17</sup>*Ibid.* p. 177.

<sup>18</sup>*Ibid.*

<sup>19</sup>*The Order of Things*, p. 296.

<sup>20</sup>*Ibid.* p. 300.

<sup>21</sup>*Language and Philosophy*, p. 77.

<sup>22</sup>Arthur Rimbaud, *Complete Works*, trans. Wallace Fowlie (The University of Chicago Press, Chicago, 1966), p. 193.

<sup>23</sup>*Ibid.*, p. 199.

<sup>24</sup>*Ibid.*, p. 309.

<sup>25</sup>Charles Baudelaire, "Correspondences," trans. Kate Flores in *An Anthology of French Poetry from Nerval to Valéry*, ed. Angel Flores (Doubleday, New York, 1958), p. 22.

<sup>26</sup>Isidore Ducasse, Comte de Lautréamont, *Oeuvres Complètes* (Corti, Paris, 1958), p. 388.

<sup>27</sup>Stéphane Mallarmé, *Avant-Dire* to René Ghil, *Traité du Verbe*, in *Oeuvres Complètes* (Gallimard, Paris, 1945), pp. 857-858.

<sup>28</sup>*Language and Philosophy*, p. 91.

<sup>29</sup>André Breton, *Manifeste du Surrealisme* in *From Baudelaire to Surrealism*, p. 268.

<sup>30</sup>*Ibid.* p. 272.

<sup>31</sup>Alexander Aspel and Donald Justice, *Contemporary French Poetry* (The University of Michigan Press, Ann Arbor, 1965), p. 4.

<sup>32</sup>*Ibid.*

<sup>33</sup>Yves Bonnefoy, "The Art of Poetry," trans. Vincent Stewart in *Contemporary French Poetry*, p. 124.

<sup>34</sup>*From Baudelaire to Surrealism*, p. 323.

## MYTH, MATHEMATICS, AND RHETORIC: THE EXAMPLE OF PASCAL\*

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This paper is an introduction to a case study of myths and minds at work. But what I have to say about Pascal, as a result of juxtaposing texts drawn from his scientific and literary writings, is, I believe, rather widely applicable.

First I must say a few words about what "myth" will mean here. I am very grateful to the Humanities Symposium Committee for its document entitled *Call for Papers*. The list of subjects furnished at the end of paragraph three seems to me to be an admirable instance of mythical thinking. In fact, each subject—"Science and Literature," or "Myth and Fact," or "Language and Reality," or "Anarchy and Law," or "New Ways of Communicating among Disciplines, among Cultures," to mention a few—is a little myth. Without exception they propose antitheses, distinctions, enumerations that mean (1) *something*, (2) something *obvious*, and, it is safe to say, (3) something *different*, to everyone who reads them.

Those are important clues. (1) Like any myth, each of these subjects has an identity and structure that is fixed by the number and internal relationships of certain basic terms. (2) As in every myth, so here there is something obvious and immediately appealing in each subject. But we need to remember that what is obvious, since it is a matter of common opinion and hearsay, may be quite different from what is self-evident, which is a matter of technical insight. (3) Like any myth again, the subjects before us are ambiguous, a fact which may appear to be bad, though I do not think so at all: take away the ambiguity, and the myth immediately loses all usefulness as a center of possibility and initiative. It is already something, but not all we want it to be. In mythical thinking, man is the measure of all things.

Now I should like to explore some of Pascal's favorite distinctions, which are as mythical in their way as those suggested by the Symposium Committee. Some other notions will have to be introduced as we go along, but they all depend in one way or another on the traits I have mentioned: obviousness, ambiguity, inchoate structure.

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I imagine that all or most of us think that Pascal's *Pensées* form one of the masterpieces of French literature. But right away we must be careful. If we think of literature—and here I

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mention a few possibilities that seem plausible now—as instances of the emotive and imaginative use of language, as chains or combinations of signs, as traces of a psyche that is structured by the inmixing of an otherness—if we like any of those formulas, we may easily go astray. We must exchange one or more of our myths for one of Pascal's. He did not consider the *Pensées* to be "literature" or even "thoughts" (the title we know them by was invented by his first editors), but as a lot of bits and pieces: catch phrases to help him remember something, reflections, short paragraphs, a few longer developments, amounting in all to about nine hundred fragments and written for the most part with the idea that they would be of use to him when he settled down to composing his defense of the Christian religion. (There are a number of problems and qualifications accompanying that statement, but we cannot go into them here.) In other words, what he did was not addressed to people interested in literature but to people, indifferent or hostile, whom he hoped to move in the direction of a faith-seeking line of thought and action. Pascal is engaged in *rhetoric*, and all his terms or distinctions are inevitably affected, like filings in a magnetic field, by the questions that constitute rhetoric and distinguish it from any other intellectual enterprise. In the light of those concerns certain collocations of terms seemed obvious and promising to him. We shall look briefly at two such sets, and see whether we can identify in his scientific writings something that corresponds.

Once more, we must set aside our reflexes in order to enter into the mythical aspects of Pascal's thought. He did not think in terms of science with a capital *S*. He wrote *traités*, treatises on particular mathematical or physical questions, or he followed out in a technical way lines of thought suggested by those questions. His approach then is usually problematic and *ad hoc*, not synthetic or synoptic. In the examples treated here we shall have to remember that Pascal's distinctions appear in *mathematics*, just as surely as in *rhetoric*; and the change in discipline entails semantic changes that flow from the dimensions, factors, and procedures of mathematics as an intellectual enterprise distinct from any other. Not to pay attention to these changes is to invite misleading countersenses in our efforts to interpret the texts. By juxtaposing and commenting on some sets of distinctions that are related and yet differ consistently in application, we shall see, I hope, something about the games Pascal thought and, at the same time, something about the games we think.

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Almost everyone has heard of the *pari* or wager of Pascal: it is one of the best known (and most frequently misunderstood) fragments in the *Pensées*. Pascal wants his imagined interlocutor to see that acting as if, or more precisely thinking as if, God exists is not contrary to reason—to mathematical reason, that is, because he goes into a demonstration that proceeds from a cluster of terms like *gambler, stakes, odds, losses, winnings*. If we look back to Pascal's correspondence with Fermat and his work on "la règle des partis," while keeping an eye on the fragment in question of the *Pensées*, we note the careful adaptation that the idea and image of the gambling situation undergo as one moves from one context to the other. We find ourselves saying yes and no all the way, as we make our comparisons.

(1) The players are all men in the literal game, but in the moral game one of them is a transcendent person, and therefore a difficult being to visualize: moreover, we cannot be sure that he exists: one of the participants in the game may be missing. Another crucial difference emerges as we note that the players in the game for money may leave the game; indeed, the problem created by that fact inspired Pascal to write on probabilities to begin with, but in the game of life and death there is no leaving the table: "Vous êtes embarqué," you are on board, and you cannot get off.

(2) What is at stake in one case is money—32 *pistoles* on each side for a total of 64; in the other it is life, also quantified, as one life, two lives, three lives, and . . . an *éternité de vie*. All of a sudden the finite stakes and rewards are relativized radically by the appearance of the infinite, for Pascal uses interchangeably the expressions "une éternité de vie" and "une infinité de vie."

(3) Furthermore, as to the odds, the situation is much simpler and, as Pascal sees it, more attractive in the moral game: it is heads or tails, one winning versus one losing chance; but in the game with dice, we play within a framework that includes several losing combinations.

(4) Finally, here below a settlement can be, and is, worked out by the rules Pascal proposes; and the things to be won are homogeneous—whereas in the moral game we are talking about two distinct orders of being, temporal and eternal, and one of them, the decisive one, may not exist at all.

When we look at the details of the two arguments and see how the different contexts cause changes in the coloration and behavior of the terms, we are moving into the technical aspects or the technical elaboration of this mythical cluster of ideas and images. For every myth has a *technical* aspect and a *topical* aspect, and the former is derived by specification from the latter. The myth, if you like, that presides over these two arguments, without being identifiable entirely with either, can be outlined as follows: man must make his way in a universe full of forces and events that exceed him by far; but by calculation he can see that working for an uncertain goal is not contrary to good sense; he can in fact take the measure of the unknown and put something of a human face on it; and in this drama he may even get what he thinks is his due.

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Let us now consider a somewhat more complicated example, that of Pascal's celebrated distinction of the three orders, *les trois ordres*. They are body, mind, and heart. Pascal's point here is that these are the dimensions of reality, that all the furniture of the universe, the created universe, is distributed over these three distinct and hierarchically related domains. A theory of knowing is involved here—the senses being correlated with body, reason or intellect with *esprit*, and intuitive sentiment with heart—as well as some moral consequences to which we shall return in a moment. What do we see, what comes to light in a juxtaposition of this fragment (and those like it) from the *Pensées* and the *opuscules mathématiques*? One is struck by the frequency of the word *ordre* in the latter, especially in the *arithmetical* works. There are at least two sets of numerical orders, constituted by series of numbers related by various formulas of summation on the one hand or by formulas of multiplication on the other. The factors in the series or order 1, 2, 3, 4, 5, etc. may be added successively from left to right to form another order: 1, 3, 6, 10, 15, etc.; and the second order will generate another order 1, 4, 10, 20, 35, etc. If we treat the original series by successive multiplications we get 1, 4, 9, 16, 25, etc. by squaring; or 1, 8, 27, 64, 125, etc. by cubing; and still other orders by multiplying to further powers. Each series of numbers stretches horizontally *ad infinitum*; and the number of series builds up vertically, one on top of the other, *ad infinitum*. In the *geometrical* works Pascal regularly distinguishes and works back and forth over the sequence of the four orders constituted by points, lines, surfaces, solids.

He enunciates at one point in the treatise on the *Sommation des puissances numériques* the following principle: "One does not increase a continuous magnitude when one adds to it in any quantity, magnitudes of an inferior order of infinitude. Thus points add nothing to lines, nor lines to surfaces, nor surfaces to solids; or—to speak in terms of numbers as is appropriate in an arithmetical treatise—roots do not count with regard to squares, squares with regard to cubes, cubes with regard to *carro-carrés*, i.e., to factors carried to the fourth power, etc." In other words, in the realm of geometry and arithmetic, Pascal commonly works with the notion of order both as linear series, and as ranks or domains of quantitative elements that are (1) distinct but (2) interrelated in a hierarchy.

The resemblances and differences in the distinctions that carry the argument in the *Pensées* and in the mathematical treatises are notable in a technical way, of course, but also in a more general way that suits our mythical purpose in this paper.

(1) In geometry there appear to be four orders—constituted by points, lines, planes, and solids; in arithmetic (whether you proceed by a rule of addition or by a rule of multiplication) there is no end to the number of orders that may be constituted: you may go on forever. But in the discussion of morality and apologetic thinking Pascal is led, by his metaphysical and religious intuitions, to assert the existence of three orders, no more, no less. He starts from the dualistic notion of two substances, one material or corporeal, and the other immaterial or spiritual—the thinking part; and as a believer he must add a third dimension outside of nature—that of grace and supernature, with which the heart is correlated.

(2) The orders, which are carefully separated and (in the *Pensées* at least) found to be infinitely distant from one another, may, nevertheless, be pulled into an enveloping order, hierarchical in character, such that each level repeats directly or indirectly numbers or figures or beings located on every other level. If the problem is drawn from mathematics, Pascal asks questions about figures and their parts, analyzing the relations of parts to parts, of parts to wholes, and of wholes to wholes; or he inquires into the factors that generate numbers and the

resulting serial relationships. In both areas, geometrical and arithmetical, the typical concluding statement takes the form of an assertion of equality or proportionality. If, on the other hand, he places himself in a moral and metaphysical framework, as in the *Pensées*, he uses as a base a vocabulary that is most appropriate to the order of bodies, the *ordre des corps*. He evokes the plutocrats, the captains and kings of the world as they go about dealing with their difficulties, fighting their respective battles, and winning their victories. From there he goes on to the problems, the solutions, the inventions, and the brilliance of great minds. On this level his representative figure is Archimedes. Thence he moves to the plane of the heart, where he discerns the trials, victories, and *éclat* of the saints in general and of Jesus Christ in particular. Thus, in spite of the distance between these orders, the same or quite similar factors are present and are in interaction wherever he looks, and his statements take the form of assertions of basic identity among the inhabitants of a particular realm and the basic proportionality of those on one level with reference to those on another.

(3) The theme of progression (i.e., of hierarchical ordering) shows in turn interesting contrasts. In mathematics, whether we think in geometrical or arithmetic terms, we have before us magnitudes that stretch toward quantitative infinities. In morals there are, of course, no lateral boundaries on the respective levels of bodies, minds, and hearts, but one must note an important qualitative progression, as one moves from one order to another: the whole diagram, so to speak, is oriented not toward infinite quantity but toward an infinite Person.

(4) Progression is akin to proportion, and we must therefore note that in the *Pensées* the concept of proportion has uses that extend beyond mathematics. Every act of knowing depends on a proportion between a knowing faculty and an object. There is a "proportion" between us and physical objects, since we are, in part at least, bodies. There is a proportion between us and the objects of geometry and arithmetic: we have a power of definition and of mental manipulation that enables us to locate the objects of mathematics and draw out their properties. There is a *disproportion*, however, between us and the infinities, large and small, of nature, and also between us and the infinite being of God. In neither of those cases can we know satisfactorily, because we are radically unlike the objects to which we turn our attention.

Many other things could be added to this brief discussion of *order* in the mathematics and the apologetics of Pascal. I think I have gone far enough into it to make visible again the role of mythical distinctions in minds and thought. The more we discuss *order*, the further we get into the *technical* aspects of problem-solving in mathematics and apologetics, and the closer we come to the point at which we shall want to declare the two treatments to be incommensurable. But if we look back over the ground covered, we can always retrieve, at the vanishing point of technicality, our myth in its ambiguous or topical aspect. We may formulate it somewhat as follows: man's mind, as it explores being intuitively and discursively, makes distinctions and sorts things out, but having done so, tries to unify them without obliterating the differences. This time the myth is not a drama but a procedure: it is the rule of the game that Pascal plays endlessly a propos of man, nature, and God. It sounds banal, but it is so only at the moment just before it is assumed as a place of invention.

My examples have been drawn from complexes of terms that seem to move back and forth between the mathematical treatises and the rhetorical texts of the *Pensées*. We could consider in a similar way formulas that appear in the treatises Pascal wrote or projected in the field of physics and experimental science. I shall simply mention that a frequent phrase in the *Pensées* is "Raison des effets": the reason for the effects, the cause of what is or happens. It is clear that he means in the *Pensées* to work out the consequences of that phrase with regard to *human* nature: similarly papers on the *vide* and the equilibria of liquids may be seen as applications of the same distinction to phenomena occurring in *inanimate* nature.

Pascal once judged physics and mathematics to be irrelevant to what he intended in the *Pensées*, because they do not tell us what the happiness and destiny of man are. I believe that he saw the implications of this verdict and abided by them. That is why I have decided not to act here as if the *Pensées* were in some essential way *applied science*, but have preferred to keep the fields apart and to place my argument under the sign of interrelation.

The notion of myth, when used here in connection with topics and their divisions, leads one to stress movement along a line from almost amorphous possibility to technical elaboration, to finished work that actually repudiates myth and calls itself certain knowledge. For ultimately Pascal has no patience with myth: in his vocabulary it is custom or opinion, useful at the outset

but of little or no intrinsic value. He behaves as though one can escape myth through discipline, as though the obvious may be replaced by something self-evident or demonstrated, the ambiguous by something literal or analogical, the inchoate by something specific or final in structure. But would it not be closer to the truth to say that as disciplines rhetoric and mathematics have their mythical aspects and grounds, too? The play of distinctions that emerge from a topic is only one phase of intellectual life. At all stages and in all phases of thinking, mythical possibility confronts us, not only as our technical *concepts* and *divisions* revert to commonplaces or sign-posts, but also as we watch our *facts* turn into questions or *wanderlust*, our *disciplines*—designed to treat those facts—into more or less inviting itineraries leading away from cross-roads, and our *systems* into various panoramic views, none of which is immediately compelling. This result is disconcerting, but the shock is valuable. Since myths oblige us to recognize the presence of an ambiguous third something that gives rise to intelligible exchanges in discourse, they prepare us for recovering better than we might otherwise do what others have said and thought—as I have tried to show in my remarks on Pascal—and they permit us to think and communicate without necessarily agreeing. They unite as well as divide.

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P.S. "Myth" cannot be defined apart from some coherent perspective that brings it into focus and gives it its peculiar structure and status. I have acted as though, in order to use the term, one has only to take it up, put it into some plausible equations, and then apply it to a subject in a way that does not disturb one's hearers too much.

But of course we do not have that kind of near-absolute freedom. There is no way to make "myth" prior to *principles*. The perspective chosen here for my remarks on Pascal is that within which the term means a jointly held possibility, *i.e.*, a means of communication. That is fine for operational or rhetorical thinking—whether it is in an elaborated or unelaborated but identifiable pretechnical form. Along such a line of thought "myth" is the ultimate name for any acceptable or effective standpoint in any kind of discourse. But, unless we have a taste for intellectual tyranny, this cannot be the only allowable version of "myth".

"Myth" may also be an outline or an account of natural or human action as discernible in its primitive state, before it receives harmonic development in the hands of a thinker or a poet. As such it takes its place on some inclusive list of germinal forms that underlie making and expression in theories of science and works of art. Again, "myth" may be imitation or allegory, in which case it formulates an example and depends on prior intuitions and convictions. It has its place then among those kinds of discourse that embody ideal patterns. Finally, "myth" may be fiction or composition, a use of imaginative and affective language in which facts are not stated. Whatever people may once have thought or now think, it has no value apart from the mental activity it stimulates and the pleasure it affords. It has no standing as verifiable discourse, though it may provide the subject matter for a technical study of unconscious or non-cognitive behavior.

There is no easy way to decide which of these possibilities is the right one, though I do not say it is impossible to do so. The choice is complicated by the fact that various combinations occur when this or that possibility is taken as dominant and as having the power to use and unify in its way all the others. And so, peremptory statements such as those with which I began my paper must be seen in their proper light.



## SOME SIMILARITIES BETWEEN THE CLASSICAL AND MODERN SCIENTIFIC AND LITERARY MINDS\*

*Buford Norman* †

I would like to make a case for the existence of certain basic similarities between the "scientific" mind (in particular, that of physics) and the "literary" mind (including literary criticism). I would like to attempt this by pointing out certain developments in these two areas in the seventeenth and in the twentieth centuries, with particular emphasis on such concepts as the relative and the absolute as they apply to systems developed in these two periods (which I shall call classical and modern).

I do not mean to imply that this is the only way of looking at the question or at the disciplines and periods involved, nor that there are not differences in addition to the similarities I will mention. I do think, however, that these similarities are important, since they affect the mental structures and the world-view (*i.e.*, the mythologies) of the thinkers involved, and perhaps of their period as a whole. The parallels—and differences—between the two periods should help us come to a better understanding of the disciplines involved, and perhaps of our own situation.

The seventeenth century (with such pioneers as Galileo, Descartes, and Newton) could be said to mark the beginnings of "classical" physics. No longer content to rely on authority nor on explanations for which there was no objective basis, scientists began to study the world around them, often through the use of improved instruments such as Galileo's telescope; this is essential, since so much time in the past had been spent studying what Aristotle or the Bible had said about various phenomena, not the phenomena themselves. Scholars took a great interest in the workings of the world, and began to come to an understanding of these workings which could be proved by observation and experiment, and which could also be applied to other endeavors.

A great interest soon developed in what Galileo called "world systems," as can be seen in the works of Descartes and Newton. These systems were great achievements, but there is a problem—they were rather abstract, and they were built on absolutes. Descartes' treatises *The World* and *Man* dealt with artificially created worlds and men, and Newton's absolute space and time are "without any regard to anything external" (*Principia*, I, 6). Cartesian and Newtonian space are absolute, geometrical extensions, identical from all angles and with no place for man; and they have become abstract tautologies, from which there is no escape, or rather, into which there is no entry.

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These systems, so useful in formulating the laws governing the universe, have been found in the twentieth century to be in some ways a misrepresentation of the situation. Einstein's theories of relativity have forced modifications in Newton's system, which could perhaps be described as "too perfect," and the theory of indeterminacy destroyed all hope of ever constructing a complete system that would explain the workings of the universe. Scientific progress has made great advances toward a better understanding of the universe, but it has also undermined the optimism of men such as Descartes, Newton, and Laplace. We have profited greatly from the lessons of the seventeenth century, but we have brought to the front another, perhaps more important, lesson: there are many different ways, or at least different levels, of explaining various phenomena, and they are not always necessarily mutually exclusive. This was hardly unknown in the seventeenth century, but its importance was usually overshadowed (and almost always is for us in our historical perspective) by the great need for and love of absolute systems.

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French literature of the seventeenth and twentieth centuries, at least when seen in the traditional way, follows much the same pattern. While French scientists were playing a prominent role in the scientific "revolution," writers and critics were developing what is known as classical French literature. This literature is traditionally characterized by strict rules: taste, *bienséance*, symmetry, purity of language, and in general by what some people consider a cold, abstract formalism. Working with commonplace themes, just as scientists worked with phenomena which were usually observable by anyone, writers often devoted most of their efforts to making their works impersonal and to having them fit the rules established for the various genres. To push this point to the extreme, the system seemed more important than its content, and few works were considered acceptable unless they fit the accepted mold.

This conception of literature began to be undermined by the romantics, with their emphasis on content and personal involvement in literature, and was overthrown, as Barthes suggests in *Le Degré zéro de la littérature*, by writers from Flaubert on in the latter part of the nineteenth century. By the twentieth century, French literature had undergone the influences of dandyism, art for art, symbolism, cubism, dadaism, surrealism, and other such movements which sought a literature that would reflect an existence that was more complex than the historical exterior and everyday experience. Many rules were abandoned, along with such concepts as order, purity, and symmetry, and writers such as Proust, the absurdist playwrights, and the new novelists reflected a universe that was dominated more by relativity (Proust) and indeterminacy (Beckett, Ionesco, Simon, Robbe-Grillet) than by the absolute order represented by Louis XIV. They often used careful systems, but ones in which events do not always follow a predictable sequence, much less stand unchanging on their own.

When seen in this way, there are obviously several similarities between literature and physics in these two periods. The seventeenth century, as described by Michel Foucault in *Les Mots et les choses (The Order of Things)*, is characterized by representation as opposed to resemblance, by an effort to discover how things worked and were organized rather than in the medieval, mystical similarities between signs. The need for a new order—but one that was absolute, not relative—was keenly felt, and systems such as those of Descartes and Newton, or of Malherbe and Boileau, were developed.

This interest in representation involves an ordering of signs, or of the elements that make up a larger whole—for example, words in language, and physical phenomena in physics. Certain literary genres, such as occasional and official poetry, became as much a careful arrangement of certain accepted words as anything, while physicists tried to arrange observed phenomena into systems that would explain as many of these phenomena as possible. These systems can be compared to theoretical literary systems, such as those mentioned above, but also to the proliferation of grammars, rhetorics, and dictionaries during the period. For perhaps the first time, writers tried to understand the workings of the tools of their trade, just as scientists tried to understand the workings of what they observed through their instruments.

This need—almost an obsession—for the creation of an impersonal, objective system that would include and explain as many elements as possible and would be symmetrical and regular is characteristic of a general optimism during the period, a confidence in man's capabilities to understand his world, which is not far from positivism. This can be seen in the

belief in scientific progress, which was to become even more widespread in the eighteenth century, and also in the confidence shared by writers that their "Age of Louis XIV" was a golden age comparable to anything in antiquity, a confidence that was defended with success by the moderns in the famous quarrel of the ancients and the moderns at the end of the century.

Twentieth-century reactions to classical systems in both fields also show certain similarities. Foucault, Barthes, and others have pointed out that classical discourse—and the reality it is supposed to represent—has lost its clarity, that words have become opaque or ambiguous, almost a barrier, and that the essence of thought and language seems to lie in a realm beyond what one can represent. These developments are reflected in many new systems that seem greatly removed from the exterior appearance of the works with which they deal.

This can be seen on the popular level, where the jargon of modern science and of avant-garde literature is incomprehensible to the layman, but also on a more professional level where specialists are becoming more and more isolated, even within closely related fields. This lack of communication is a symptom of the rejection of the comparatively simple, satisfying systems of Newton or Boileau in favor of systems that more accurately reflect the complexities of the modern world. Literature seems to have followed physics here and reflected the new situation brought on by relativity, indeterminacy, the existence of such unobservable phenomena as black holes and radiation belts, and the need for constant updating of theories to include new developments and discoveries.

The idea of indeterminacy has been seen over and over in novels, for example, in which there is no predictable connection between the parts, and in which the only constant is perhaps the author's personal point of view (physical or mental). Just as the presence of an observer makes it impossible to plot atomic particles, so the idiosyncracies of the author obscure the structure of a novel. Some find this even more impersonal than classical systems, but it is in fact ultimately personal—the author is involved 100% in his creation, and if the reader is to make the work personal from his own point of view, he must organize the elements of the work around himself. This is obviously rather difficult to do; it reflects a certain pessimism, a sense of being lost in the immensity of modern existence with all its new dimensions, especially those discovered by physicists and astronomers. The interpretation of a sign depends on one's point of view, just as the accuracy of one's watch depends on how fast it is moving.

This idea of relativity, of a multiplicity of points of view and explanations, is perhaps at the heart of twentieth-century literature as well as that of physics. Although the old genres and styles continue, more and more writers are becoming aware that there is no one way of writing a novel, nor even one conception of literature that is always "valid." Not only do many writers take an approach to their art that is completely individual and dependent on their own point of view, but they insert this relativity into their works as well; it is one thing to believe that everything depends on one's point of view, and quite another to write a novel that may be incomprehensible to a reader who does not share the same point of view.

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This brings us to the point of view of the reader, and of the critic, who is a sort of professional reader. A reader feels at home only when he is familiar with the system of the author of the work which he is reading, and a critic needs standards of judgment or of interpretation. This becomes difficult, if not impossible, when contemporary authors refuse to orient their works around everyman's point of view, and stick to their own, which is usually unknown to the reader, and even to the critic who does not make a special effort to familiarize himself with the works and with the "system" of each individual author.

Literary criticism has found itself confronted with this type of literature at a time when it does not really have the tools to deal with "traditional" literature. This is perhaps because, as a newer art—or science—than literature or physics, it has not been at the same stage of development as the literature that is the subject of its investigations.

Much of what is known today as literary criticism had its beginnings during the Renaissance and the early seventeenth century, when humanists, like scientists who made direct and experimental investigations of physical phenomena, went to the original texts. No longer content to accept the ancient authorities, they relied on their own critical sense. Unfortunately, however, many of these critics began to impose their opinions on others who, often too lazy to read the original sources, welcomed them. In this way a whole body of "authority"

grew up around literary texts, which often kept readers from forming their own opinions; popularized literary publications began to appear, culminating in the salons of eighteenth century France and in the essays of the *Spectator*.

One will notice that this movement seems to proceed from the sixteenth century to the eighteenth without the break with the past that characterized literature and physics in the seventeenth century. Indeed, this break does not seem to take place until the twentieth century, and this earlier period of criticism, although it grew out of a modern spirit of investigation, seems to reflect the medieval mind, which, as Foucault interprets it, is characterized by resemblance rather than by representation and by the search for connections, comparisons, and other such means of organizing man's experience. The world was good, its creator benevolent and supremely intelligent, and the parts of it were to be admired in relation to the others.

The similarities between this frame of mind and that of "old" criticism, of literary history, are striking. The student listens with awe as his professor explains to him the greatness of, for example, Victor Hugo, points out the various passages that are fit to be admired, and especially those which are deserving of a certain reverence. And to explain one passage, a string of footnotes beginning with *cf.* gives the students the various ways in which the godlike poet expressed his ideas to the lesser mortals, who, of course, failed to understand him during his life and caused him much despair and ennui. One pays more attention to a writer's origin and to his family than to his writings, and the student is not encouraged to discover for himself, much less herself, why literature is written, nor even what literature is.

A reaction against this oversimplified, romantic—almost scholastic—conception of literary criticism was inevitable among people who were truly concerned with literary creation in particular and with artistic creation in general. Criticism, however, was slower to react than literature, and the beginnings of modernism in French literature (late nineteenth century) coincide chronologically with the criticism of Taine and Lanson, representatives par excellence of old criticism. It was really only after 1945 in France that "new" criticism was born: authority was rejected, as were comparisons with other creations. The critics went back through the mass of biographical, historical and often superfluous comments to the text itself, reflecting the methods of the sixteenth and seventeenth centuries, and began to analyze it as something to be explained.

So, three hundred years later, literary criticism caught up with itself, with the spirit of the age in which it was born; critics have developed new systems, profiting from the accomplishments of many disciplines to devise such approaches as structuralism and semiotics. However, many of the new systems seem abstract and greatly removed from the exterior appearance of the works with which they deal. They can be quite helpful, but in the end the search for new systems is open to the same limitations and dangers as were the new world systems of the seventeenth century. Many contemporary critical systems can lose all contact with reality by abstracting a work of literature to too great a degree, and a tautology of critical language can develop. A critic can invent his own language and system, with its own absolutes, and babble on to his heart's content in words devoid of meaning for anyone else.

Such a system becomes an absolute in itself, only rarely relating to the text as a whole, and even more rarely to the reader. It may do an excellent job of explaining certain relationships within the text, but it needs to be supplemented by a more comprehensive ordering which includes all the levels of the text as well as interplay with other works. If a neat, "classical" order cannot explain man's experience, one needs to work toward a different order, one that includes everything even if it does not correspond to surface reality. This is the movement described above, where criticism finally reflects contemporary developments in literature and physics.

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Although literary criticism, at least where it is involved with French literature, has not followed the same chronological development as literature and physics, the stages through which it has gone are similar. This indicates that, though the timing may be different, all three disciplines—and I would think many more—have undergone the same development. I would like to suggest that this is because the members of each one live in the same world and civilization and that they have basically the same mental structures, the same ways of attacking problems. They also experience, in a general way, the same problems, and sooner or later come to see the world and to organize it in the same way.

This development, and the common mental structures that go with it, can be summarized in the following manner. Men are confronted with the unknown and develop a desire to understand this unknown, which results in the establishment of a way of organizing these unknown quantities, be it through "primitive" means such as superstition, through belief in some superior authority, or through classical world systems. These systems of organization—the myths of our topic—must be comfortable and adaptable to current ways of seeing the world, if for no other reason than to conquer a fear of the unknown and unorganized (and therefore uncontrollable). The system begins to break down, however, as it must contain more and more various and contradictory elements, and a civilization is confronted with the same uneasiness until a new means of organizing and conquering the unknown is found. The question is, will man be able to find a new way of encompassing all the elements of his existence?

The preceding summary of this common development has been phrased in terms that are perhaps most appropriate to the field of physics, but I contend that the writer confronted with his art and the critic confronted with a body of works to be understood are no different from the Galileos and Newtons and Einsteins who were confronted with the problems of the physical universe. The productions of man's mind are not only as complex and important as the "productions" of the creative force of the universe; more important, they are the productions of men who live in this universe, who experience it directly along with explanations of it given by scientists.<sup>1</sup> Or could it be—especially since I find many indications that much of classical French literature is not so one-dimensional and absolute as is usually believed—that these scientists live in the same universe that is described by artists, and that their methods of problem solving derive ultimately from the way it is described by the imagination? In any case we all live in and explore the same world, and do it, I believe, in basically the same way. There may be many differences among disciplines, but I think they are all superficial when compared to the essential similarity of the human mind and the myths it creates.

## NOTE

<sup>1</sup>Men—physicists, writers and critics—do not really experience the world directly, and here lies a similarity between humanistic and scientific disciplines, which is perhaps even more fundamental than what we have been considering. We all deal with signs, not with some objective reality; the physicist who observes phenomena is dealing with signs just as is the critic who is observing words, and the physicist's explanations are arrangements of signs just as are the words arranged by a poet. And it is quite possible that the signs with which we represent natural phenomena are just as arbitrary as the linguistic or mathematical signs that we assign to them (the antecedent of this pronoun is purposely ambiguous).



## THE POETRY OF PHYSICS AND THE PHYSICS OF POETRY: ISAAC NEWTON AND WILLIAM BUTLER YEATS\*

*Robert A. Leacock* †

**ABSTRACT.** The physics of Isaac Newton and the poetry of William Butler Yeats are discussed as linguistic structures. The criteria for "elegance" in physics and in poetry are shown to be identical: generality, precision, and completeness. The development of poetry and physics is described as proceeding via two principles: respect for previous forms and a criterion of esthetics. Objective reality, as a concept, is analyzed with respect to poetry and physics, and is shown to be difficult to maintain. The conclusion is that, within the context of the model, poetry and physics are parallel human achievements.

### INTRODUCTION

It is essential to keep in mind that science and poetry  
have the same root in human nature.

Alfred North Whitehead

This statement by Whitehead is no surprise to physicists and poets; unfortunately, to most other persons the statement is surprising, or unbelievable. The accepted wisdom is that there are qualitative differences between the sciences and the humanities, that the aims, techniques, and effects of the two areas do not overlap. The purpose of my discussion is to show that this prevailing view is wrong, and that there are deep similarities between, specifically, physics and poetry.

### PHYSICS AS LANGUAGE

Physics and poetry may both be viewed as linguistic structures. They are both composed of "words" and "sentences" to which are attached meanings. This notion is commonly understood to be true in human language, and also to be true in poetry, but it is not well recognized that

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physics is also a language. To introduce the linguistic character of physics and the relation of physics and poetry, it is useful to compare Yeats' poetry directly with Newton's law of gravitation. In Figure 1 are shown five lines from the poem "Adam's Curse," first published in 1904 in the volume *In the Seven Woods* (Yeats, 1956). These lines occur near the end of the poem and describe the poet's feelings during a pause in a conversation he is having with two women on a summer evening. The poet's feelings for one of the women are later compared to the moon. Also shown in the figure is the law of gravitation, first invented by Newton as a young man in 1666, which gives the gravitational force of attraction  $F$  between two objects of masses  $m$  and  $M$  that are a distance  $R$  apart. The law states that the gravitational force is proportional to each of the masses, and is inversely proportional to the square of the distance between them. As an example, this law gives a prescription for calculating the force between the moon and the earth. Both Yeats and Newton are concerned with the moon, each in his own way.

Let us begin our comparison by observing that both the poetry and the physics are composed of words. For Yeats the words are *moon, shell, washed, waters, days, years*, while for Newton they are  $F, m, M, R$ . Yeats' words are symbol structures to which are attached meanings in the reader's mind; thus, for example, each person understands the word *moon*. While different individuals have different understandings of a given word, there is sufficient agreement on meanings for language and poetry to become possible. The situation in physics is precisely parallel. For example, mass, which has been denoted by the symbol  $m$  (and  $M$ ) in Figure 1, is a concept that each physicist understands in his or her own way, but upon which there is sufficient agreement so that different physicists can communicate about mass. Thus, when Newton writes  $m$  in his equation, physicists have a general understanding of what he is saying. The same is true of force and distance, denoted by  $F$  and  $R$ , respectively. These concepts are not understood in exactly the same way by all physicists, but there is a certain common definition of the ideas. Thus we may conclude that both poems and physics are composed of words, and that these words have a similar character.

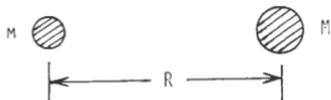
Physics and poetry contain words; also, both contain "sentences." The five lines quoted from "Adam's Curse" form one sentence in the usual sense. This sentence expresses a thought; that is, words are grouped by the poet to convey thought and feeling. In this particular sentence Yeats uses an image of the evening sky to convey the passage of many years. The words are put in their precise order to create the impression the poet needs. Inspection of the law of gravitation  $F = mM/R^2$  reveals that Newton has done the same, using the words of physics. The equation  $F = mM/R^2$  is essentially a sentence constructed from the words  $F, m, M$ , and  $R$ . Newton's law of gravitation is a powerful sentence of, as will be discussed in the next section, precision and beauty. The power and beauty occur because Newton, like Yeats, has skillfully organized his words into a striking sentence.

In the above discussion I have implied that words are given independent definition in language and in physics, and are then used in sentences. This is, of course, only partly true. Poets are constantly re-forming language by putting well-established words into new combinations. These new combinations then contribute toward a redefinition of individual words. Thus, the use of words in sentences by poets and others continually redefines the words. Anyone who reads the poetry of Yeats will have his or her sense of the English language significantly altered. The same redefinition process occurs in physics. While the individual words in the law of gravitation—force  $F$ , mass  $m$  and  $M$ , and distance  $R$ —do have careful individual definitions in both theoretical and experimental physics, it is also true that each of these ideas acquires additional scope and meaning as a result of occurring in the law of gravitation. For example, the idea of mass is interesting in its own right, but it becomes much more significant because it occurs in Newton's law of gravitation. The word or idea *mass* or  $m$  in physics acquires added density and interest because it is used in "sentences" such as  $F = mM/R^2$ . To summarize, the use of words in sentences in both poetry and physics contributes toward a redefinition of the words.

Given the above observations it is clear that one may view both poetry and theoretical physics as linguistic structures, or simply as languages. This notion can be useful for the angle of vision it provides on both poetry and physics.

LAW OF GRAVITATION (1666)

$$F = \frac{mM}{R^2}$$



FROM "ADAM'S CURSE" (1904)

WE SAW THE LAST EMBERS OF DAYLIGHT DIE,  
 AND IN THE TREMBLING BLUE-GREEN OF THE SKY  
 A MOON, WORN AS IF IT HAD BEEN A SHELL  
 WASHED BY TIME'S WATERS AS THEY ROSE AND FELL  
 ABOUT THE STARS AND BROKE IN DAYS AND YEARS.

Figure 1. Newton's law of gravitation giving the gravitational force  $F$  between two objects with masses  $m$  and  $M$  a distance  $R$  apart. Five lines from the early Yeats poem "Adam's Curse."

LAW OF GRAVITATION (1666)

$$F = \frac{mM}{R^2}$$

SECOND LAW (1666)

$$F = mA$$

FROM "THE TOWER" (1928)

THE PEOPLE OF BURKE AND OF GRATTAN  
 THAT GAVE, THOUGH FREE TO REFUSE -  
 PRIDE, LIKE THAT OF THE MORN,  
 WHEN THE HEADLONG LIGHT IS LOOSE,  
 OR THAT OF THE FABULOUS HORN,  
 OR THAT OF THE SUDDEN SHOWER  
 WHEN ALL STREAMS ARE DRY,  
 OR THAT OF THE HOUR  
 WHEN THE SWAN MUST FIX HIS EYE  
 UPON A FADING GLEAM,  
 FLOAT OUT UPON A LONG  
 LAST REACH OF GLITTERING STREAM  
 AND THERE SING HIS LAST SONG.

Figure 2. Newton's law of gravitation and second law of mechanics. The second law gives the relationship between the force  $F$  on a body of mass  $m$ , and the acceleration  $a$  of that body. Thirteen lines from the late Yeats poem "The Tower."

## ELEGANCE IN LANGUAGE

An adjective applied by the theoretical physicist to certain equations is "elegant." This word is reserved for results of distinction, and its use conveys a high degree of admiration. No doubt scholars of poetry have adjectives they use to describe lines which especially affect them. In this section I want to describe what the theorist means when he or she uses the word *elegant*, and to show that identical criteria mark physics and poetry.

In Figure 2 is shown a passage from "The Tower" first published by Yeats in 1928 in the volume *The Tower*. "The Tower" is a long poem, and one of Yeats' most powerful works; this passage is one of the most lyric in English literature. Also shown in Figure 2 is the law of gravitation,  $F = mM'R'$ , and the "second law,"  $F = ma$ , which states the relation between the force  $F$  on a body of mass  $m$  and the resulting acceleration of that body  $a$ . Both these equations, which together contain a large part of what is called classical physics, were invented by Newton during his twenty-fourth and twenty-fifth years while staying on his uncle's farm to avoid the plague. In a word, these equations are "elegant." Why does the physicist admire the law of gravitation and the second law, and is the admiration based upon the same standards as those used to judge Yeats' "The Tower"?

There are three basic criteria for "elegance." The first is generality: to be elegant the physics must be general; it must apply to a wide range of phenomena. The second law and the law of gravitation are general. For example, together they provide an accurate description of the motion of all astronomical bodies, both the solar system and the farthest galaxies. By itself the second law is sufficient to describe the motion of macroscopic bodies such as the motion of plants and animals and human beings, or of mechanical devices such as doors, cars, and clocks. All macroscopic mechanical phenomena are described by  $F = ma$ . Thus, considered together or separately, these two apparently simple equations are able to reproduce an enormous range of experience. Exactly the same is true of Yeats' poetry, and particularly of "The Tower." In this poem a no-longer-young Yeats brings forth the undiminished passions of his youth and reforms them into his will, to leave

To young upstanding men  
climbing the mountain-side.

Yeats uses "the people of Burke and of Grattan" as representative of a "pride" he admires and needs to complete his life. The poet casts back to his youth:

when with rod and fly,  
Or the humbler worm, I climbed Ben Bulben's back,

and ahead to his approaching old age as he considers the interplay of his passions and intellect. The poem is general in its direct approach to a fundamental human problem, a problem shared by all men and women: to reconcile youth and age, emotion and reason, death and rebirth. It is this generality, this wide applicability, that is one mark of poetry and of physics.

The second criterion of "elegance" is precision: "The Tower," the law of gravitation, and the second law are precise in their construction, and in their operation. Precision in the construction of poems and equations is essential. To see this one may attempt to alter a word or phrase in the passage from "The Tower" shown in Figure 2. A little experimentation reveals that Yeats has chosen his words and their order carefully. Even small changes in the wording result in major alterations of the effect of the passage. Poetry, contrary to some views, requires great technical precision. The same precision is critical in theoretical physics. In Newton's law of gravitation, for example, the distance appears squared in the denominator. One may ask is the 2 in  $R'$  really 2; could it not be 2.01 or 1.99 or some other similar number? There are two answers: experimental and theoretical. This "2" has been experimentally determined and is found to be exactly 2 within the accuracy of the experiments, which are exceedingly precise. The theoretical answer is that physical laws must be esthetically pleasing and therefore the exponent must be exactly 2, and not 2.01 or 1.99 which are less pleasing. Thus, in both "The Tower" and in the law of gravitation, precision is a critical element in construction.

These intellectual structures are also precise in their operation. Used together the law of gravitation and the second law, for example, can be used to predict the positions of the planets and moons of the solar system for thousands of years in the future to within a distance of a few meters. In other words, these laws yield accurate results. A discussion of the precision of the effect of a given poem is, of course, made difficult by the varieties of experience, but it appears likely that a given poem is highly specific in its action and produces a precise effect. In summary, both poetry and physics are precise in construction and operation.

The third and last criterion of "elegance" in physics or poetry is completeness. A powerful physical law must, in addition to being general and precise, completely describe the phenomena in its domain of applicability. For example, the law of gravitation and the second law would not be impressive if every time they were used to compute the motion of the moon it was necessary to use, in addition, a third, separate law to complete the calculation. Deep physical laws give the complete answer by themselves without recourse to other laws. The essence of this notion is that one uses an equation only in its own domain. Generality requires the law of gravitation to have a wide range of application; completeness requires this law to fully describe phenomena inside that range. Correspondingly, one does not expect a given poem, for example "The Tower," to exhaust the poetic spectrum, but one does expect the poem to be complete in its domain. "The Tower" is complete in its action; it is not necessary to read another poem to complete the thought and feeling. Yeats' poem and Newton's two laws are complete in this sense.

To conclude, an "elegant" equation in theoretical physics covers a wide range of phenomena, is exact in construction and operation, and describes all of a phenomenon; a strong poem also meets these criteria.

## MAKING NEW LANGUAGE

Language fails. Physics and poetry are languages of power and beauty; how can they fail? Newton's law of gravitation is strong; how can it be inadequate? In physics the failures are artistic and operational. In time the most beautiful of equations appears less esthetically pleasing and, in addition, fails to describe experience. The law of gravitation has suffered or enjoyed this twin failure: it is no longer considered perfectly elegant, and in three small but definite instances it has failed an experimental test. The esthetic failure of the law of gravitation is that it describes a gravitational force that acts across an "empty" space between two bodies. How can the earth and the sun exert a strong force on each other across one hundred million miles of empty space? Newton himself found this notion contrary to common sense, and physicists in this century, knowing electromagnetic theory, find the notion even less pleasing. The most well-known experimental failure of Newton's law of gravitation is its prediction for the bending of starlight by the sun. The predictions of Newton's law of gravitation and Einstein's gravitational field equations differ on the amount of bending, and the experimental results favor Einstein's view. Thus, in our century the language of Newton is no longer a perfect instrument.

Parallel esthetic and operational failures occur in poetry. It is unlikely that anyone will write more lyrical verse in English than Yeats, yet it is also unlikely that anyone will try. The forms that Yeats invented are appropriate to him, and are not appropriate to later writers such as W. H. Auden or Theodore Roethke. It is perhaps imprecise to describe this supplanting of one poetic form by another as an artistic "failure" of the earlier form, although, in effect, the form fails to meet the poet's needs. Each poet continuously creates new poetry, or language, because of the inadequacies of the old. Operationally, for the reader, similar breakdowns in poetic language occur. A young reader will often be delighted by Yeats' earlier poems, while a more experienced reader will be affected by the later poems. The early and late poems differ not so much in their content as they do in their style: the style of the later poems, which has clearly affected Auden and Roethke for example, is more effective for contemporary readers. Thus poetic forms, like the forms of theoretical physics, evolve.

How do the physicist and poet create new language? In Figure 3 are shown Newton's law of gravitation  $F = mM/R^2$  and Einstein's general field equations for gravitation  $R_{\mu\nu} = 0$ . Einstein's equations are likely to replace Newton's law as they appear to be the more powerful

theory. How was Einstein able to construct his equations, especially since direct experimental motivation was entirely lacking? The theorist uses two fundamental tools to construct new theory: respect for old theory, and a principle of esthetics. Einstein is well known to have the highest respect for Newton's work (see, for example, Hoffmann, 1972). The practical manifestation of this respect is shown in Figure 3 where Einstein's equations (large box) entirely enclose Newton's law (small box). This symbolic representation is intended to indicate that  $R_{\dots} = 0$  applies to every phenomenon that  $F = mM/R^2$  does, plus many more. Thus the field equations contain the physics of the law of gravitation, plus more physics. Einstein's respect for Newton's physics is shown by the fact that he included all of Newton's gravitational theory, in a formal sense, in his own gravitational theory. This respect for previous theory acts as a guide when the theorist searches for new theory, new "language." The new theory must include the old.

The other main tool used by the theorist is a principle of esthetics. Both Newton's law of gravitation and Einstein's field equations have a simple form. These simple forms are indicated by the esthetic principle that simple, beautiful equations are the correct equations of physics. This principle has practical usefulness. When Einstein was searching for a new view of gravitation he constructed many possible equations. In order to select the correct view from among the many competing theoretical forms, he applied the esthetic principle and chose the simplest, most elegant form. Thus, while it may appear abstract, the esthetic principle is the most important tool the theoretical physicist has for making new theory.

Respect for previous poetic form and the esthetic principle are the chief tools of the poet. In Figure 3 are given eleven lines, again from "Adam's Curse" (1904), which indicate the labor of making new poetry, and thirteen lines from "The Statesman's Holiday," which appear more than thirty years later in *Last Poems* (1936-39). How did Yeats move from the early to the late form, and does his evolution compare to the movement from Newton to Einstein? The poet respects the work of his predecessors and his own earlier work, and this respect forms a framework in which construction of new language can occur. An older Yeats tests his ideas against the poems of a younger Yeats much as Einstein tests his various rival theories against the established law of gravitation. Without predecessors, and respect for those predecessors, the writing of poetry is impossible. Esthetic sense is equally essential to the making of new poetic language. Yeats' transition from the lyrical lines of 1904 to the spare song of the late nineteen-thirties is guided by his own poetic sense, his feeling for words. The poet chooses one poetic direction from the countless directions possible in 1904: toward a more economical yet still lyrical style. A decision of this kind, in either poetry or physics, is necessarily an artistic decision.

## REALITY IN PHYSICS AND POETRY

Physics is usually viewed as the study of the material world: natural philosophy. For comparison one might view poetry as the study of a human world: the world of feeling. But in what sense do these "material" and "human" worlds exist? In physics, for example, is gravity a piece of an objective reality, or is it an intellectual construction of the physicist? In poetry, is the poem an expression of a human reality, or simply an art form? While these questions are in the domain of epistemology, it is useful in the present context to consider examples of the concept of reality from physics and poetry.

In Figure 4a is shown a diagram of the relationship of the physicist, physical theory, and the material world, and of the parallel relationship of the poet, poetry, and the human world. As shown, physical theory acts as an intermediary between the physicist and the material world. In the context of this model the physicist is able to engage the material world only through the medium of physical theory: physical theory is a sort of apparatus through which the physicist observes. The concept of gravity is an illustration of this phenomenon. One defines the gravitational force as that force given by Newton's law of gravitation  $F = mM/R^2$ . Being inanimate objects, the earth, moon, and sun are ignorant of this concept of gravity. A picture emerges of physicists interacting with a material world through a medium of theory and experimental technique. This view removes the "material world" from direct contact with the physicist, and raises questions about the nature of this world. Correspondingly, one may view poetry as the medium by which the poet engages the human world. In the example given in

FROM "ADAM'S CURSE" (1904)

FROM "THE STATESMAN'S HOLIDAY" (1936-39)

I SAID: 'A LINE WILL TAKE US HOURS MAYBE;  
 YET IF IT DOES NOT SEEM A MOMENT'S THOUGHT,  
 OUR STITCHING AND UNSTITCHING HAS BEEN NAUGHT,  
 BETTER GO DOWN UPON YOUR MARROW-BONES  
 AND SCRUB A KITCHEN PAVEMENT, OR BREAK STONES  
 LIKE AN OLD PAUPER, IN ALL KINDS OF WEATHER;  
 FOR TO ARTICULATE SWEET SOUNDS TOGETHER  
 IS TO WORK HARDER THAN ALL THESE, AND YET  
 BE THOUGHT AN IDLER BY THE NOISY SET  
 OF BANKERS, SCHOOLMASTERS, AND CLERGYMEN  
 THE MARTYRS CALLED THE WORLD.'

WITH BOYS AND GIRLS ABOUT HIM,  
 WITH ANY SORT OF CLOTHES,  
 WITH A HAT OUT OF FASHION,  
 WITH OLD PATCHED SHOES,  
 WITH A RAGGED BANDIT CLOAK,  
 WITH AN EYE LIKE A HAWK,  
 WITH A STIFF STRAIGHT BACK,  
 WITH A STRUTTING TURKEY WALK,  
 WITH A BAG FULL OF PENNIES,  
 WITH A MONKEY ON A CHAIN,  
 WITH A GREAT COCK'S FEATHER,  
 WITH AN OLD FOUL TUNE.

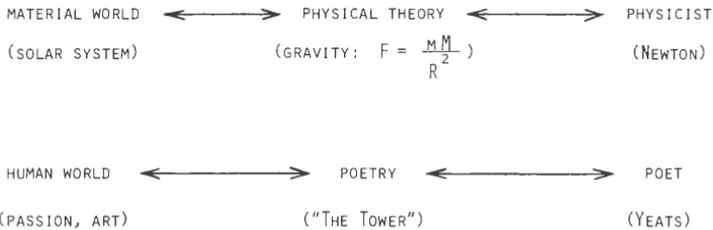
TALL DAMES GO WALKING IN GRASS-GREEN  
 AVALON.

LAW OF GRAVITATION (1666), GRAVITATIONAL FIELD EQUATIONS (1915)

$F = \frac{MM}{R^2}$	$R_{\mu\nu} = 0$
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Figure 3. Eleven lines from the earlyYeats poem "Adam's Curse" and thirteen lines from the late Yeats poem "The Statesman's Holiday." Newton's law of gravitation and Einstein's general field equations for gravitation. The field equations are more general than the law of gravitation (see text).

(A)



(B)



Figure 4. (A) Symbolic representation of the relationship between the physicist, physical theory, and the material world; corresponding diagram for the poet, poetry, and the human world. (B) Symbolic representation of the relationship between observer and observed object as it occurs in classical physics and quantum physics.

Figure 4a. Yeats engages his feelings through the medium of "The Tower." More generally, the experience of the poet is "met" through poetry. Again, this model tends to remove the "human world" from the poet.

As used in the above discussion, the phrases "material world" and "human world" denote objective realities that have an existence independent of human observers. In the context of a critique of the quantum theory Groenewold (1974) says, "The idea of an objective reality appears far the most satisfactory and best verified hypothesis that we possess, under the familiar conditions of daily life and of classical physics. Without applying it, we could neither practice physics, nor maintain life." For the purposes of the present discussion, the significant word here is "hypothesis." In this view, the material world is a hypothesis which physicists have found to be useful.

The idea that objective reality is a hypothesis gains theoretical and experimental support from a comparison of classical and quantum physics. In classical physics, the theory is formulated so that the observer (the physicist) and the object (the system studied) can be separated to any desired degree. Thus, the idea of an objective reality is possible in classical physics. In quantum physics, however, the theory is formulated so that the observer and object cannot be separated. In this case the distinction between observer and object is blurred, and the concept of an objective reality is difficult to maintain. Since the quantum theory is well verified, the conclusion that objective reality is a hypothesis is supported by this example. In Figure 4b is shown, symbolically, the relationship of observer and object in classical and quantum physics. In summary the concept of an objective reality is subtle in both physics and poetry.

It is appropriate to conclude this discussion of poetry and physics with the closing lines from "Under Ben Bulben," one of Yeats' last poems.

Under bare Ben Bulben's head  
 In Drumcliff churchyard Yeats is laid,  
 An ancestor was rector there  
 Long years ago, a church stands near,  
 By the road an ancient cross.  
 No marble, no conventional phrase:  
 On limestone quarried near the spot  
 By his command these words are cut:  
     Cast a cold eye  
     On life, on death.  
     Horseman, pass by!

## ACKNOWLEDGMENTS

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Readers interested in further readings in the connections between the arts and sciences may consult the bibliography compiled by Davenport (1975).

## LITERATURE CITED

- Davenport, W. H. 1975. Resource letter TLA-2: Technology, literature, and the arts, contemporary. *American Journal of Physics* 45: 4-8.
- Groenewold, H. J. 1974. Skeptical Quantum Theory. *Physics Reports (Section C of Physics Letters)* 11: 327-354.
- Hoffmann, B. 1972. *Albert Einstein, Creator and Rebel*. Plume Books (New American Library), New York.
- Yeats, W. B. 1956. *The Collected Poems of W. B. Yeats*. Macmillan, New York. All Yeats' poetry cited in this paper may be found in this book.