

LOREN EISELEY: RELIGIOUS SCIENTIST

by *Robert G. Franke*

Abstract. Loren Eiseley is known both as a scientist and an essayist/poet. The disillusionment with science and technology among many in the late 1950s and the search for new values in the 1960s help account for Eiseley's significance as a writer. He appears to offer a solution to mankind's contemporary disillusionment by reminding that science has limits and that intuitive, nonscientific insight is valid, especially when it is complementary to scientific knowledge. The thesis of this essay is that in content and style Eiseley writes as a religious writer in the sense that he reaffirms what is necessary for humankind to be happy and even to be "saved."

Although social critics even in the 1800s had worried and spoken on the schism developing between scientific and other perceptions of the world, Charles Darwin's declaration of natural selection and Louis Pasteur's elucidation of the cause of disease, examples of major developments in the nineteenth century, seem benign when compared with the spectre of midtwentieth-century developments such as the atomic annihilation of Nagasaki and Hiroshima and the insidious destruction of our natural environment with chemicals. For the first time science and technology are threatening a universal erosion of the quality of human life and perhaps its eradication.

In 1959 C. P. Snow's "The Two Cultures" was a prophetic and alarmed commentary on the growing dichotomy between modern science and technology and the rest of the culture.¹ Many writers immediately took up Snow's cause and expanded his theme; others such as the environmentalists took to defining better the nature of the specific kinds of problems that contributed to the two culture division. Clearly by the late 1950s many in western society were becoming disillusioned with the broken promise of technology and science; they realized that, like the long gleaming car with extravagant horsepower

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that polluted the environment and exploited the resources, the closer we came to a fulfilled dream of a better and easier life the more our ambition and accomplishments threatened us. The despondent understanding of the comic strip character Pogo, that the enemy was in fact ourselves, was an eloquent statement of a loss of faith and hope in our values. The 1950s could be labeled the "decade of disillusionment."

That many citizens in the western world were becoming aware of the disillusionment seems to be indicated by the overwhelming and excited responses to Snow's essay. Four years after he presented his thoughts, he said with surprise, "The ideas were in the air. Anyone, anywhere, had only to choose a form of words. Then—click, the trigger was pressed" (Snow 1964, 54).

Such strong response suggests the degree of discomfort with the accomplishments of science and technology as they related to nonscientific areas—what Snow termed "the whole traditional culture" or "the humanist culture." The discomfort and disappointment of the late 1950s explain in part the activity of the 1960s that generally could be thought of as the reasserting of the significance of principle, the resurfacing of moral concern regarding the place of values: consider the organizing for the rights of blacks, women, and gays, and the antagonism toward the Vietnam War. If the 1950s may be regarded as a decade of disillusionment, then the 1960s may be called a decade of a search for values.

Into this cultural milieu of disillusionment and search came Loren C. Eiseley—scientist, essayist, and poet. The unrest and disenchantment revolving around a loss of confidence in old values and the search for new explains the meaning and significance many readers found in Eiseley's writing then and still today. Eiseley said in the decade of disillusionment that "the always somewhat specious industrial frontier has given way, under our thickening unrest of technological achievement, to a renewed search for an inward frontier of personal experience" (1971, 16). Elsewhere he wrote, "In a sudden horror we discover that the years now rushing upon us have drained our moral resources and have shape out of our own impotence" (1978a, 117). Eiseley offered and still offers a way to a new value orientation for those feeling loss and disillusionment in the face of the advances in science and technology. In this sense, Eiseley performs a spiritual or religious function in the broadest sense. I will attempt to point out those particular aspects of Eiseley's writing that help him accomplish this purpose: the characteristics of content and style that evoke religiousness in the broadest and most inclusive sense and that help Eiseley promulgate his message regarding the need for a life orientation that will function as mankind's "salvation." I feel the religious characteristics of Eiseley's work are so

manifest and salient that, even though a scientist, he also can be regarded as a religious writer of the mid-twentieth century. In fact, he has been called “the academic’s chaplain” so emphatic is the religious quality in his work (Medlemann 1967, 47).

However, this religiousness is understood in the broadest sense and in no way is any particular creed. Eiseley may acknowledge roots in Christianity, but he clearly claims no formal religious position: “I am not formally religious. But I am deeply aware that life has a spiritual dimension that is not ultimately reduceable to physical terms. In our civilization Christ is the symbol of this spiritual dimension of Man—the being with the impulse to choose, to choose well, to love” (Eiseley 1968, 51-53). “I believe in Christ in every man who dies to contribute to a life beyond his life. I believe in Christ in all who defend the individual from the iron boot of the extending collective state. I believe in Christ when I believe man has, unknowingly, cast up great evolutionary portents—capacities and powers of which . . . few men have knowledge” (Eiseley 1962b, 46). “I who profess no religion find the whole of my life a mysterious pilgrimage” (Eiseley 1975, 141).

However, especially for those who are not well-acquainted with Eiseley’s writing, it is important to point out that he was not trained and did not function as a minister, as did, for example Ralph Waldo Emerson. In fact, Eiseley was primarily identified as a scientist, a trained anthropologist (B.S., University of Nebraska; M.S. and Ph.D., University of Pennsylvania) who spent most of his professional life as a faculty member or administrator in the sciences. Like many active anthropologists, Eiseley participated in archeological digs and published his discoveries in professional journals. He also wrote numerous essays for periodicals such as *The Scientific American*, and one of his books *Darwin’s Century* (1961) is a prize winning history of the idea of evolution.

In addition to science, however, Eiseley exercised his other bent. Early in his student career at the University of Nebraska he wrote poetry and fiction and later played a major role in the editing of the *Prairie Schooner*, then a new literary journal. His poetry appear in other magazines as well. Apparently throughout his life he continued to write, although not always to publish, poetry. Later, four books of poetry would bear his name, one to be published posthumously.

Thus Eiseley was both scientist and poet, and trained to know well the stance and skill of each discipline. It is this hybrid of approaches to the world, the mix of subjective intuitive judgment of the artist and the objective verifiable accuracy of the scientist that so characterizes his writing. It is the hybrid stance that interests and excites many readers. It is also the foot in both camps that, in our confused contemporary

age, gave him the helpful perspective that is of significance here and that has religious importance.

Eiseley's religious view is not credal; it is extraordinarily more expansive. It seems close to Milton Yinger's definition of religion as a "system of beliefs and practices by means of which a group of people struggles with [the] . . . ultimate problems of human life" (Yinger 1957, 9). Or possibly it fulfills Bernard Murchland's description of a religious experience as "that locus where all the strands of one's experience come together, where all the dimensions of the particular fields of reality that is disclosed to us converge. Religion is what centers life in the sense of giving it both continuity and direction. Its function is to join biological urges with the deliverance of imagination for the maximal welfare of personhood" (Murchland 1972, 143).

In view of such broad definitions, what specifically is the content and style of Eiseley's writing that seem to reveal the religious dimension of his work? A religious content is suggested by his sense of the mysterious, the sacred, the numinous, by his awareness of the wholeness in the universe and his connectedness and responsibility to other life, and by his faith in a universal power and its healing qualities. It is also suggested by his apparent special knowledge and experience of reality, his use of solitariness, and his mystic attunement to the miraculous in nature. A religious style characterized by his permeating use of symbol, his remarkably poetic language, and his unique application of the essay form will be discussed later.

THE RELIGIOUS CONTENT OF EISELEY'S THOUGHT

In discussing the characteristics of the content of Eiseley's essays that seem to suggest a religious dimension, emphasis must be placed on Eiseley's perception of the divine in his universe. Abundant citations can be made to indicate that Eiseley unquestionably believed in a manifest power that runs the universe. This may be understood as God in the traditional sense of western civilization; once he labeled it as did Thomas Hardy, "The Great Face Behind" (Eiseley 1959, 210). Or Eiseley's view may be thought consistent with Emerson's concept of the over-soul: the truths of this existence are revealed from within humankind in relation to the wider environment. For Emerson religious experiences "are varying forms of that shudder of awe and delight with which the individual soul always mingles with the universal soul." This act is revelation and "a disclosure of the soul," accompanied by "perceptions of absolute law" (Emerson 1971). Walt Whitman gave a similar view in "Song of Myself": "I hear and behold God in every object, yet understand God not in the least. . ." (Whitman 1975, 121). This also is Eiseley's universe: "I like to look at life in its complex variety as being

more representative of the image of God than the conception of Him as simply operating through us" (Glasgow 1970, 90).

The great power that permeates the universe is perhaps most obvious when Eiseley writes as an evolutionist. The evolutionary theme is rife in his writing and provides one of the major examples of how Eiseley conveys his perception of a power throughout the universe, especially in living forms. It is the subject of *Darwin's Century*, one of his scholarly works. To Eiseley evolution is a process that represents the immensity of energy and control in the universe. The idea of evolution allows expression of his perception of a supremacy of permeating universal law characterized by endlessness and timelessness.

Eiseley's phrase *The Man Who Saw Through Time*, the title for his book on Francis Bacon, even more aptly describes himself (Eiseley 1973). Through Eiseley's unique perception of time, functioning for him as a road for the vehicle of eternal change in the universe, he communicates his appreciation for the absolute nature of the universe, his sense of the divine. Bob Lancaster, writer and friend of Eiseley, believes this unique awareness and perception of time, especially evident in discussions of evolution, to be Eiseley's most significant contribution (Lancaster 1982). Seward Hiltner in an introduction to Eiseley's "Man: The Lethal Factor" says: "What continues to strike us most of all is [Eiseley's] illumination of time: the similarity and the difference between the scientific, the humanistic or poetic, and the religious conceptions of time and of its meaning to man" (Hiltner 1965, 15).

Not only does Eiseley believe in time as one of the permeating qualities of an immanent power, he also believes that knowledge of this power, and living in accord with it, leads to health. Nature has a healing power that we modern humans sorely need to be once more happy, adjusted, and well. If religion involves the reestablishment of a broken relationship between humans and God, then Eiseley is urging us to wake up to act, to love earth, to do something to bring us back into accord with natural laws and power. After all "The green world is [humankind's] sacred center," Eiseley says (Eiseley 1970, 1). In this sense Eiseley is urging a new birth of religiousness, in fact a "revival." But all this hinges on the belief and acceptance of a greater power.

In this interpretation is Eiseley's suggestion as to what humankind must realize: our problems are a result of losing sight of the necessity to be caring, to fit with the natural turnings of the universe. We need to recognize this dire and suicidal course and then choose a different, more righteous path. Eiseley warns that we need to be careful that this more appropriate path is not just an intellectual decision but one also based on intuition. He says that for the future to be enduring it must be a product not just of the experimental method or of outward

knowledge alone, but of compassion and inward seeing. Eiseley writes: “[Humanity] suffers from a nostalgia for which there is no remedy upon earth except as it is to be found in the enlightenment of the spirit—some ability to have a perceptive rather than exploitive relationship with his fellow creature” (Eiseley 1970, 146).

With this Eiseley appears to stand at odds with modern science, even though he is a scientist. Of course, it is also true that this stance gives his words special weight. Eiseley says we should rely on truth derived from an intuitive subjective sense of reality juxtaposed with the objective realities of existence disclosed by contemporary science. Some scientists never forgave Eiseley for this position; he was constantly warding off their attacks. For example, anthropologist J. Buettner-Janusch judged Eiseley’s *The Firmament of Time* “a series of moral parables on a somewhat higher level than those found in the repertory of a fundamentalist preacher” (1963, 693-94).

At the same time it is Eiseley’s hybrid position that brings us his greatest contribution. Because of it he can offer a way for civilized, scientific humans to redeem themselves, indeed, to be rescued, saved. This is the major message offered in most of his significant essays. Since the message is essentially a way to live better, a means to be saved, it is a religious message.

Eiseley’s basic religious message is enhanced by other aspects of the content of his essays. For example out of his belief in a universal power comes a sense of wholeness or unity in existence. The evolutionary theme contributes vastly to his sense of unity. Eiseley says, “Man has the capacity to love, not just his own species, but life in all its shapes and forms. This empathy with all the interknit life is the highest spiritual expression I know” (Eiseley 1968). He identifies easily with manifestations of the greater power—becomes one with a Nebraskan river, with a mouse under a chair, or with a flock of birds. J. Medleman describes the incident that made Eiseley tardy to his office one day: he had to comfort a fallen horse until help came (Medleman 1967, 50). He so identified with hopping frogs, he “became” one (Eiseley 1978b, 106-15).

Such easy identity with other manifestations of nature is a tendency not uncommon to other sensitive naturalists such as Emerson, “I feel the centipede in me—cayman, carp, eagle and fox. I am moved by strange sympathies. . .” (Emerson 1964, 200). According to H. J. Paton “if the finite individual is to become whole, he must somehow . . . become one with the whole—the ultimate beyond which there is nothing else. . . Such seems to be the minimum claim of developed religion” (1955, 62, 65). Certainly one way to the whole is to identify with the “divinity” in other manifestations of the divine. When this is applied to humans as a part of nature, can we not more clearly under-

stand the significance of Jesus' reply to the question, Who is my neighbor? Anyone in need was his answer. Can we not better appreciate Christian theology's claim that Christ bears the sins of all mankind, or the vow of the Mahayana Buddhist Bodhisattva who postpones his own entrance into Nirvana and remains in the world of suffering until he can assist all beings through the universe in realizing Enlightenment?

Another aspect of Eiseley's work that derives from his acceptance of a universal power is his sense of awe at the mysterious, the never-to-be-totally-understood manifestations of the universal power. Indeed for Eiseley, "In the world, there is nothing that can explain the world" (1975, 238).

The lack of complete explanation, the admission of constant mystery and awe, is essential to a religious stance. Albert Einstein said, "[The mysterious] is the source of all true art and science. The insight into the mystery of life, coupled though it be with fear, has also given rise to religion. To know that what is impenetrable to us really exists . . . is at the center of true religiousness. In this sense I belong in the ranks of devoutly religious men" (Untermeyer 1955, 540-41). For Rudolph Otto such an experience of the *mysterium tremendum*, including the experience of awful majesty and absolute unapproachability, was the "numinous," a sense or realization irreducible to another kind of experience (1943, 20).

Eiseley spoke and wrote knowingly about the feelings familiar to Einstein and Otto. In an interview with Robert Glasgow, Eiseley said: "There is a terrifying aspect of the infinity of the universe, but there also comes to one—as he looks at the tiniest organism—. . . an ability to sense in the world and through its particular objects—people, the landscape, a sunset or whatever—a feeling of awe, some feeling between more perceptive men and the universe with its lurking potential, its power" (Glasgow 1970, 92). Throughout Eiseley's essays can be found examples of this viewpoint, from his sense of the miraculous when enveloped in a flock of birds in the Badlands to his hurling of starfish back into the sea. In *The Firmament of Time* he says, "For many of us the Biblical bush still burns, and there is a deep mystery in the heart of a simple seed" (Eiseley 1978a, 8).

Eiseley's recounting of his experience of the sacred often and in many places reinforces his religious message. He suggests to the reader that a religious experience is afoot by seeming to have some of the characteristics of a religious spokesperson, even of a mystic seer or prophet. One of Webster's definitions of *prophet* seems to fit Eiseley well: "one gifted with more than ordinary spiritual and moral insight."

Suggestions of Eiseley as prophet in this sense can be discerned in several ways, such as in a mystical quality identified by some. Eiseley

himself admits, "I have had the word mystic applied to me because I have not been able to shut out wonder occasionally when I looked at the world" (Eiseley 1962, 44). However, a copy of a manuscript written by an admiring reader that examines Eiseley as a mystic still lies unpublished in the Eiseley files in the University of Pennsylvania Library Archives, partly because Eiseley did not feel fully comfortable with the appellation of mystic.

Yet some critics feel it appropriate. Ben Howard, when reviewing a book of Eiseley's poems *The Innocent Assassins*, says, Eiseley's power "is a talent nurtured by a lifetime of meditations on the earth's relics; but it is grounded one suspects in a mystic's intuitive perceptions" (Howard 1975, 44). In this observation Howard appears to be accepting one aspect of William James's four-part definition of mysticism: ineffability, or inexpressability of experience (James 1936, 371-72). Eiseley's experiences as recorded in his writing seem to satisfy James's other three criteria too: a noetic quality, or consisting of important revealed knowledge; transiency, or sudden temporariness of the experience; and passivity, or an unwilling occurrence of the events. So whether or not Eiseley accepts the title of mystic, some of his writing appears to have mystical qualities.

Another characteristic of Eiseley's experience that suggests he functions as a religious seer and prophet is his recognition of the value of isolation to facilitate obtaining knowledge about the world. Eiseley himself says:

It is commonplace of all religious thought, even the most primitive, that the man seeking visions and insight must go apart from his fellows and live for a time in the wilderness. If he is of the proper sort, he will return with a message. It may not be a message from the god he set out to seek, but even if he has failed in that particular, he will have had a vision or seen a marvel, and these are always worth listening to and thinking about. . . . One must seek then what only the solitary approach can give—a natural revelation (Eiseley 1959, 163-64).

Elsewhere Eiseley claims, "sometimes the rare, the beautiful can only emerge and survive in isolation. In a similar manner, some degree of withdrawal seems to nurture man's creative power" (Eiseley 1962a, 29). Such words are reminiscent of the first verse of Emerson's *Apology*:

Think me not unkind and rude
That I walk in grove and glen
I go to the god of the wood
To fetch his word to men (Emerson 1971, 119).

Immediately Alfred North Whitehead's definition of religion comes to mind, that "religion is what the individual does with his own solitariness" (Whitehead 1926, 16).

Eiseley's coveting of isolation and privacy in his everyday life was well known. He spent a great deal of time by himself despite a busy univer-

sity career including administration. He usually travelled alone and evidenced a solitariness at professional meetings. Also, because of insomnia, he wrote most of his material solitarily in the heart of night.

Clearly, from Eiseley's comments on solitariness, to be alone was necessary. While he never reveals all the benefits that accrued to him when he was by himself, we do know that it gave him a readiness to perceive the unusual, and subtle, and the revealing in nature. This to him is the miraculous. He frequently uses the word for his experiences, as if he has been given a private showing, even revelation, of some secret in the universe. Eiseley says, "I know that the word *miraculous* is regarded dubiously in scientific circles because of past quarrels with theologians. . . . [but] a little taste for the miraculous will do us no harm." Like a divine, Eiseley easily convinces us that the miraculous is everywhere and that we should accept it.

THE RELIGIOUS QUALITY IN EISELEY'S STYLE

In addition to Eiseley's acceptance of the miraculous and other aspects of the content of his writing that tend to suggest religiousness, which I maintain help communicate his major message of "salvation," several stylistic characteristics of Eiseley's writing also appear to support his intent. These include the nature of Eiseley's essay type—the *concealed essay* as he labeled it—the poetic language of his essays, and the use of symbol and dramatic contrast.

While never tully explaining why he calls his essays *concealed essays*, he does record in his autobiography, *All the Strange Hours*, that this form is where "personal anecdote was allowed to gently bring under observation thoughts of a more purely scientific nature" (Eiseley 1975, 177). In *The Immense Journey*, his first collection of essays, he says, "these essays . . . are offered . . . as a somewhat unconventional record of the prowling of one mind which has sought to explore, to understand, and to enjoy the miracles of the world, both in and out of science. . . . I do not pretend to set down . . . a true, or even a consistent model of the universe" (Eiseley 1959, 12-13). Whatever Eiseley intends, his label suggests a private experience shared but never completely communicated.

Perhaps the best insight into Eiseley's intention in his concealed essay is suggested by J. Magee. Magee calls "crypto-religious" any activity in our society that is basically religious, as evidenced by a motivation toward an "ultimate concern," but that is disguised in secular dress (Magee 1967, 23-24). I suggest that the primary effect of Eiseley's concealed essay is to promote a religious search to rediscover and update fundamental values in our contemporary society, and that his essay content and style lead subtly toward this goal. If so, then to

suggest Eiseley's essays are crypto-religious is probably fair. In this sense the concealed essay may be a most appropriate title since Eiseley's major contribution, however unintentional and broad, seems to be religious.

The essays suggest a religious quality also to critic Peter Conrad, but in a different sense. Conrad does not worry over the term *concealed essay* but does claim the essays are "renegade Romantic poems" with an element of the miraculous. He believes the essays capture the essence of the romantic lyric, which is "to discover in an anecdotal encounter an intimation of immortality. The romantic lyric is a miniaturization and secularization of miracle, a glimpse of grace vanishing through nature" (Conrad 1979, 332). Certainly Eiseley in his concealed essay suggests a capable minister on Sunday morning: "Let me tell you about a miracle that I experienced. . . ."

However, it may be that here lies the real meaning of *concealed essay*. Whereas a minister usually cannot help but draw a moral from the specific experience, Eiseley is never so blatant. Not that a lesson cannot or is not to be drawn; it is just that Eiseley resists doing it. He allows the reader to draw his own conclusions or moral lessons. For example, when Eiseley climbs down a ladder from the street light where a spider is industriously spinning a web despite the impending winter cold, he considers a possible lesson; but then he writes: "It was better, I decided, for the emissaries returning from the wilderness, even if they were merely descending from a stepladder, to record their marvel, not to derive its meaning. In that way it would go echoing on through the minds of men, each grasping at that beyond out of which the miracles emerge. . . ." (Eiseley 1959, 178).

Such tacit religious or moral use of his concealed essay is supported forcefully by his masterful and poetic use of language. Eiseley once said that words are more penetrating probes into the nature of the universe than any instrument used in the laboratory. No description can capture Eiseley's writing talent. The beauty of his sentences are best appreciated when read aloud. The numerous awards for literary merit testify to how the literary critics appreciated his writing.²

Although it is difficult to state succinctly why Eiseley's words are so effective, at least one characteristic is readily obvious—his poetic choice and use of words. Some say that more poetry is found in his essays than in his poems. Probably this would not be strongly argued, nor would the generally accepted feeling that Eiseley's way of using words is extraordinarily powerful and serves to heighten the reader's experience. Consequently, the awesome, mysterious, and sacred is sensed as well as read. Readers are brought to an intense experience emotionally through sharing in what may even be a sound scientific, objective

observation. In the act of reading, Eiseley's readers are led to convergence of intellect and feeling.

Eiseley also uses two other devices to achieve this goal—symbol and dramatic contrast. Throughout the essays he uses vivid evocative symbolic language. At times, especially in essays apparently produced late in his life, numerous symbols in complicated interaction occur. A representative example of this complexity can be seen in "The Star Thrower," an essay that uses the sea, the rainbow, the eye, and light and dark in a complex interplay to convey messages at more levels than probably any reader can discern (Eiseley 1978c, 169-85). Even Eiseley when writing, being so much the artist, may not have been aware of the total complex interplay.

Some of his symbols are consistently powerful and are frequently and over-ridingly used to accomplish his intent. One such symbol, found throughout his writing from book title to innumerable metaphorical sentences, is that of the journey. This symbol can be interpreted on many levels: E. F. Carlisle accurately perceived it as representing the search for meaning in science (1977, 111-29); according to N. L. Dawson, it represents Eiseley's own lifelong search for religious meaning (1979, 351-52). But wherever this symbol is found and however it is used in the essays, its power in heightening the sense and comprehension of the written message is undeniable.

Another device that assists the convergence of intellect and feeling is dramatic contrast. The effect of this device, because of instant intrigue and drama, is to pull the reader irresistably into the writing and to heighten the reader's comprehension and emotional response. Such dual contrasts characterized Eiseley's life: he was the son of an eloquent actor father and a deaf mother, and he had talent and interest in both poetry and in science. The contrasts appear frequently in his essays: the two-faced farmer on the charging hayrack that represents "the double face of mankind" (Eiseley 1973, 113-16), the low-flying terrified crow lost in fog that Eiseley believed perceived him as an "air-walking man" (Eiseley 1959, 167-69), the life-affirming singing of the forest birds following the murder of a nestling by a crow (Eiseley 1959, 173-75). In fact, the concealed essay itself depends on the striking personal anecdote contrasted with accompanying, more generalized speculation and discussion.

Thus it is with the techniques described above that Loren Eiseley's essays convey a major message to the contemporary reader bedeviled by disillusionment, because of the inability of science and technology to bring humanity closer than ever in history to a kind of utopic existence. Out of the growing disillusionment with science and technology in the 1950s arose in the 1960s a need for a message, a new guide, a rediscov-

ery of values to assuage the fear and anxiety derived from the indecision of what course now to take and what belief now to hold dear. Into this void Eiseley as scientist offered an age old message: Return to the natural world from which we arose, live in accord with its laws, attune ourselves to see and hear, listen to our intuition as to what path should now be sought in full view of the objective realities of a scientific age. Such a decision means relinquishing our belief in any objective rational perception of the universe that excludes the artful, the beautiful, the sensual, and the intuitive. In other words, we must begin again to trust that which by itself cannot be verified by science, and perhaps never will; intuitive insight into human experience is also valid, especially when it holds hands with scientific knowledge.

Eiseley's message is essentially religious because he points the way for humanity's hope and salvation, a promise of an enduring future that is based on a care, indeed on a love, for our universe and for each other. Says Eiseley: "Man is always partly of the future; he has the power to take himself beyond the nature that he knows. Long ago creatures with sticks and simple stones began a journey toward ourselves. If there had not been among them a little pittance of honor and of love, small, perhaps small indeed, we would not be here now. We must once more gather up that pittance . . . and press forward" (Eiseley 1962b, 45).

NOTES

1. "The Two Cultures" by civil servant and novelist C. P. Snow was a lecture presented at the University of Cambridge. It was published in 1959 as *The Two Cultures and the Scientific Revolution*. In 1962 F. R. Leavis, literary critic and professor of English at Cambridge, attempted to discredit Snow's ideas in a lecture at Cambridge later published as *Two Cultures? The Significance of C. P. Snow*. Great public interest in Snow's original paper continued, as did the controversy between him and Leavis. In 1964 Snow issued *The Two Cultures: And a Second Look*, a continuation of the controversy. This was followed by Snow's "The Case of Leavis and the Serious Case" in 1970.

2. Eiseley's awards for his writing include the following: Athenaeum of Philadelphia Literary Award for *Darwin's Century*, 1959; Science Award from Phi Beta Kappa for *Darwin's Century*, 1959; Page One Award from the Newspaper Guild of Philadelphia for literary work, 1960; Burroughs Medal from the American Museum of Natural History for *The Firmament of Time*, 1961; Le Comte du Nouy Award from the American Foundation for *The Firmament of Time*, 1961; award in literature at the Philadelphia Arts Festival, 1962; Philadelphia Art Alliance Award for distinguished achievement in literature, 1967; Athenaeum of Philadelphia Literary Award for *The Night Country*, 1973; Christopher Award for *All the Strange Hours*, 1976; National Award of Distinction from the Graduate School of Education Alumni Association, University of Pennsylvania, 1976.

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