

The Yale Review

☛ Ursula K. Le Guin
A Lecture on Utopias ☛
Stanley Cavell A Lecture on
Movies ☛ Octavio Paz
Poem ☛ Martin Green
Tolstoy, Keats, Shakespeare
☛ Timothy C. Weiskel
Rubbish and Racism
☛ Fiction Jincy Willett
Poetry W. Bishop, David
Citino, Grace Goldin, Peter
Cooley ☛ Reviews
Kingman Brewster, Joseph
La Palombara, Richard
Sieburth, Monroe Engel,
Barbara G. Rosencrantz,
Giles Gunn, John E. Mack,
B.H. Haggin

WINTER 1983

Mr. Weiskel is trained as an historian and as an anthropologist. He completed his B.A. at Yale University (*magna cum laude*) and undertook graduate work at Balliol College, Oxford and the École Pratique des Hautes Études (VI^e - Section) in Paris. He received his doctorate from Oxford University, where he studied as a Rhodes Scholar. Mr. Weiskel has received research grants from the Danforth Foundation, the National Endowment for the Humanities, the Social Science Research Council, the Andrew W. Mellon Foundation, the Woodrow Wilson Foundation, the Lilly Foundation, and the Rockefeller Foundation. He has taught African history, historical ecology, and ecological anthropology at Williams College, Yale and Harvard. Since 1987 Mr. Weiskel has been a Henry Luce Fellow at the Harvard Divinity School, where he has been working on environmental ethics.

Mr. Weiskel was an American Field Service exchange student in Syria (1963), a volunteer with Operation Crossroads Africa in the Ivory Coast (1965), and then West Africa Representative for that organization (1966-67). Since then he has returned to West Africa for field work among the Baule peoples of the central Ivory Coast. His publications include studies on the history and anthropology of the Ivory Coast Akan peoples, as well as several broader works on the ecological legacy of European colonialism and modern development strategies. In addition, Mr. Weiskel has designed microcomputer systems software to coordinate field, library, archive and electronic data to aid policy research, analysis and formulation.

TIMOTHY C. WEISKEL

Rubbish and Racism: Problems of Boundary in an Ecosystem

We had fed the heart on fantasies;
The heart's grown brutal from the fare.

W. B. Yeats, *Meditations in Time of Civil War*

In an age of mounting racial tensions and in the presence of an impending environmental crisis, it may seem irresponsible for anthropologists to fly off to remote corners of the world and continue their studies of people who, even if they do survive, will have no effect upon the world's major problems. As research money becomes scarce, government agencies and foundations appear to agree that such field work is a luxury they can ill afford. Anthropologists, of course, have always maintained that their research has been intimately bound up with the total human condition, and if their peoples have been remote and their theories esoteric, this has been so only in order to offer a fresh approach to the problems we all face daily. If anthropologists have been right, then they should have something to offer concerning two of the major crises which confront us: the growth of racism and the threat of irreversible environmental pollution.

Anthropologists have long been reluctant to address these issues because they feel that their traditional methodology has not equipped them to discuss "complex" societies. This is surely beside the point, however, for it is precisely through the insights anthropologists have derived from the study of relatively isolated societies that they can offer a new approach to the problems at hand. At the risk of being both premature and "trendy," it might be useful nonetheless to try at this point to sketch an anthropological approach, drawing upon specific field studies of "primitive" societies. In the light of this material, rubbish and racism can be seen as problems resulting from the Western world's resolution of an issue which all societies confront—the problem of establishing boundaries in an ecosystem.

Anthropologists have learned from the science of ecology that societies are not totally self-contained units but need instead to be

understood as elements in a larger functioning system, an ecosystem. Study of the ecosystem involves an examination of the relationships between living communities (plant, animal, or human) and their non-living environment. Ecosystems exist on different scales. A backyard garden and a tropical fish tank can be examined as ecosystems. Indeed anything which involves an interchange between different biotic communities and inorganic matter, from a drop of pond water to the entire biosphere, can be understood as an ecosystem.

The important point to remember in an ecological study is that its focus is upon the relations between elements in a system rather than upon the elements themselves. Thus, an ecologist is not concerned primarily with the anatomy of a caterpillar, but rather with the fact that the caterpillar ingests certain types of leaves, thereby temporarily altering the balance of the environment which surrounds it. The caterpillar as well as the leaf upon which it feeds are viewed as elements in a larger system. They are not seen as autonomous units—separate from one another—but rather as specific stages or, more appropriately, transitory processes in the flow of energy and matter. In this the leaf or caterpillar is said to occupy a “niche” in a larger ecosystem.

On a larger scale, entire biotic communities can be studied as elements of larger ecosystems. Then the question becomes not what a particular caterpillar does to a particular leaf, but what a community of caterpillars will do to a tree or indeed a forest, and further, what deforestation will do to the microflora of the soil. Human societies, like any other biotic community, can be studied in a similar fashion, and, as ecologists have pointed out, no matter how impressive their other achievements, human societies can do no more than occupy a particular “niche” in an overall ecosystem.

The central fact about ecosystems is that their structure is cyclical. Each element is merely a stage in an overall sequence of processes which has no identifiable end or beginning but repeats itself in a continuous cycle. Moreover, it is not clear from the study of the processes themselves just where one process in the system begins and another ends, or where they merge together. Nor is it apparent which series of processes should be grouped

together and bounded off from other processes that precede or follow them. Thus, within an ecosystem there are no intrinsic boundaries. Any boundaries ascribed to the system have been artificially imposed by the observer in the hope of making sense of the realities before him, and since those boundaries are conceptual fictions, their placement within an ecosystem is arbitrary.

Anthropologists have drawn attention to similar types of arbitrary boundary making and classification in other realms of human experience. The light spectrum has no natural divisions or color categories that are capable of being observed by the human eye, for example, but field work suggests that the number of colors which a given society sees will depend upon how they "cut up" the spectrum. Although Americans may see six primary colors, people of the Bassa culture in Liberia experience only two, while peoples of the Shona language group in Zimbabwe perceive four. The discovery of the phoneme in linguistics provides evidence of a similar process in the human experience of language. The phonemic system of any language is imposed arbitrarily as a kind of perceptual filter through which the acoustic experience of any individual in a given culture is required to pass in order to be decoded for its meaning. In the process a given continuum of sound is segmented into significant, recognizable units which are arranged mentally in intelligible patterns to provide meaning. Just what is significant or recognizable depends upon commonly learned, arbitrary conventions about sound patterns shared by those in the speech community. It is often the case that the phonemic systems of two different languages differ: while "r" and "l" represent two different soundtypes in English, they are experienced as one significant unit of sound in Japanese.

It is not necessary to go exclusively to cross-cultural situations to appreciate that boundaries are only conceptual fictions. In several pictures entitled "Metamorphose," the Dutch artist M. C. Escher transforms birds into fish and then into reptiles without the observer being able to ascribe satisfactory boundaries to any of these elements as autonomous entities. Some of the "unfinished" stone sculpture of Rodin presents the same conceptual problem. One can say that the sculpted head stands out from the marble surrounding

it, but only if one creates the fiction that the two are in some prior sense separate. When considered as a whole, however, it is equally true to say that a hunk of marble exists, part of which looks like a head.

The same point has been elaborated with even more puzzling examples. W. Ross Ashby, in a book entitled *Design for a Brain*, illustrates the problem of interrelated elements in a system:

As the organism and its environment are to be treated as a single system, the dividing line between "organism" and "environment" becomes partly conceptual, and to that extent arbitrary. Anatomically and physically, of course, there is usually a unique and obvious distinction between the two parts of a system; but if we view the system functionally, ignoring purely anatomical facts as irrelevant, the division of the system into "organism" and "environment" becomes vague. Thus if a mechanic with an artificial arm is trying to repair an engine, then the arm may be regarded either as part of the organism that is struggling with the engine, or as part of the machinery with which the man is struggling. . . . The chisel in a sculptor's hand can be regarded either as part of the complex bio-physical mechanism that is shaping the marble, or it can be regarded as part of the material which the nervous system is attempting to control.

Or consider a more mundane example. Everyone accepts without much amazement the fact that by eating food we are enabled to live; yet most of us stop for a moment's reflection when this same fact is affirmed by the expression: "you are what you eat." The expression tells us only what we understand as common sense and elementary biology, but something lingers as odd about it.

The problem, of course, is that we know the statement to be true, but we do not believe it; or more precisely, we do not *believe in* it. We know that what we ate yesterday is part of us now and will be separate from us at some point in the future, but none of us acts as if this were true. If we did, the sentence, "I am an oat" would make perfect sense to us. We hear this sentence as nonsense despite the fact that we all realize after a moment's reflection that in fact a part of the stuff we are made of at this moment in time was quite literally an oat. We need to think that invariable boundaries actually do exist which separate what we eat from what we are.

At the core of this problem is a paradox. While nature draws no boundaries between elements in an ecosystem, a human society,

which occupies a particular "niche" within the total system, has no meaning without them. Just where one draws a line between one part of the system and another may not be particularly important for an analyst of nature, but it is of vital importance to men in society.

Much of modern anthropology can be understood as an elaboration of this theme. The now-classic study by Emile Durkheim and Marcel Mauss, *Primitive Classification*, was one of the first works to focus upon the wide variety and complexity of classification systems among "primitive" peoples. More recently, Lévi-Strauss has argued compellingly that belief systems and myths are pre-eminently concerned with delineating, clarifying, and reinforcing boundaries. In addition to his works on primitive thought, Lévi-Strauss's three volumes of *Mythologiques* are a demonstration of the way in which mythical stories are in fact preoccupied with the problem of boundaries.

Other anthropologists have emphasized the same point. In her book, *Purity and Danger*, Mary Douglas explores problems of boundary formation and maintenance, drawing attention to the "positive" character of cultural concepts of pollution and taboo. As she puts it, "rituals of purity and impurity create unity in experience." They do this, she explains, by establishing boundaries, and by placing objects and actions in special categories. The ideas of pollution, rubbish, and dirt present themselves as "matter out of place." "As we know it, dirt is essentially disorder. There is no such thing as absolute dirt; it exists in the eye of the beholder. . . . Dirt offends against order. Eliminating it is not a negative movement, but a positive effort to organize the environment." Similarly, the work of the American anthropologist, Victor Turner, draws upon the ideas of Lévi-Strauss and the analytical concepts of Arnold van Gennep and concerns itself with the way in which all collective rituals are public declarations of the society's acceptable boundaries. The implications of these theoretical works receive elaboration in several important field monographs, including Peter Rivière's *Marriage Among the Trio*, Louis Faron's *Hawks of the Sun*, and David Maybury-Lewis's *Akwa-Shavante Society*. Taken as a whole the work of these authors amply illustrates the universal fact that

societies assign boundaries to separate themselves from their surrounding environment.

It is not sufficient, however, merely to ascribe boundaries. People need to believe that the boundaries they invent are actually explicit in reality itself, that they are "given" in nature. At the basis of society, then, is a confidence trick. We need to believe in the boundaries we draw within a boundariless system. We need to convince ourselves that the categories we assign to the things of nature are in fact self-evident in the "nature of things." This has always been the task of culture, and a large part of the process of "growing up" involves the effort to internalize cultural categories to the point where they become "second nature." This educative process is usually so successful that socialized individuals in any society normally confuse their categories for perceiving nature with nature itself, forgetting that at best their categories are merely representations—that is, "re-presentations"—of nature in conventionally coded forms.

In addition to marking itself off from its natural surroundings, any given society must also distinguish itself from surrounding communities. To put this another way, a society is not only concerned with distinguishing what is natural from what is cultural, but also who is *in* from who is *out*. Boundary maintenance in this realm is every bit as crucial to a society's self-definition as its conception of its own place in its environment.

Anthropological field work reveals, however, that in case after case, societies tend to fuse the two kinds of boundary-making activity and metaphorically extend the concepts of boundary in the nature/culture realm to apply to bounding problems in the inside/outside realm. Things of nature are understood as "outside," while things of culture are understood to be "inside"; and, conversely, people outside are said to be in the realm of "nature," while those inside are characteristically ascribed attributes of "culture." When we hear a statement like "you are a baboon," we all know that an anatomical description is not implied but that the speaker is likening us to something in the realm of nature, outside the boundary of acceptable *social* behavior.

Although the need to delineate both social and natural bound-

aries is a universal problem facing any society, not all societies solve it in the same way. The criteria that serve to judge which elements are to be part of nature as opposed to culture, or inside instead of outside, clearly vary from one society to the next, and it is part of the anthropologist's task to describe this variety. Behavior is sometimes a proximate indicator of underlying conceptual categories, and anthropologists frequently analyze behavior as a kind of "map" for deciphering the contours of these cultural bounding systems. Some societies, for example, approach running water with considerable reverence, for to them it is "alive," while other societies demonstrate no particular reverence for water in whatever form, and think it preposterous to suggest that water belongs in the category of living things. The earth itself is thought to be alive in some cultures, while for others it is merely an object to be worked upon and manipulated, devoid of any spiritual attributes. Clearly, the wide variety of behavior associated with the same type of phenomena in nature suggests one abiding conclusion: societies bound themselves in different ways.

If different societies bound themselves in a variety of ways at various times, though, what is it that determines a given society's choice of particular boundaries at any one point? Mary Douglas has argued that the definition a society has of its immediate environment is nothing more than a reflection of its social structure. As she points out, any conception of environment "exists as a structure of meaningful distinctions," and "the discriminating principles come from the social structure." She then adds that when the discriminate categories of any system are crossed or confused by matter out of place—that is to say, when something is said to be "polluted" or "polluting"—then the anxiety this creates is best understood as a deeper anxiety about the structure of the society itself. "If the study of pollution ideas teaches us anything it is that, taken too much at face value, fears about rules of nature tend to mask social rules." According to Douglas, then, we must learn to understand "each environment as a mark and support for a certain kind of society."

Raymond Williams adopts roughly the same kind of explanation for the historically variant meanings of the word "nature" in the English language. The meaning of the word changes, he argues, as

the social structure of the society changes. Thus, in the medieval world the concept of "Nature the absolute monarch" reflects the same rigid hierarchy that one would expect from a feudal social structure. By the seventeenth and eighteenth centuries, nature has been transformed into "a less grand, less imposing figure: in fact a constitutional lawyer." Under circumstances of rising competition involved in the industrial revolution, the concept underwent yet another metamorphosis. "From the underlying-image of the constitutional lawyer men moved to a different figure: the selective breeder; Nature the selective breeder."

The approach used by Douglas and Williams, however, has only limited value in providing an explanation of the bounding choices that societies make. In effect, explanations of this kind are little more than sophisticated tautologies, for if we follow Douglas's logic carefully we come to the conclusion that a society defines certain things to be outside its boundaries because of what is inside them.

It is possible to escape this kind of tautology by viewing the bounding phenomena of a given society as a function of the ecological niche it occupies. Cultural bounding systems have developed to provide societies with categories of meaning under widely differing ecological conditions. The question, then, as to why a society develops particular boundaries and not others is answered by saying that these boundaries have emerged as symbolic statements about the ecological niche that society has experienced over time.

Ethnographic examples can help make this clear. The Mbuti pygmies of Zaire, numbering approximately 40,000, live in the Ituri Forest, bordered by Uganda to the east and the Sudan to the north. They depend for their subsistence upon hunting wild game and gathering edible plants within the forest. Game tends to move away from permanent human settlements, and sources of edible wild plants are rapidly exhausted within the immediate environs of a settlement, so the Mbuti migrate as forest nomads in search of food. Colin Turnbull reports that:

After about a month, as a rule, the fruits of the forest have been gathered from all around the vicinity of the camp, and the game has been scared away to a greater distance than is comfortable for daily hunting. As the economy relies on day-to-day quest, the simplest thing is for the camp to

move to a totally new one, perhaps ten or twenty miles away, perhaps farther.

In such a subsistence system, it is the undisturbed forest that provides the richest resources for the Mbuti, and it is not surprising to find that in their symbolic representations the "deep forest" or the "dark forest" is portrayed as benevolent. Indeed the image of the benevolent forest is the most pervasive and powerful element of Mbuti symbolism. They call themselves "people of the forest," and every aspect of their system of belief seems to reflect the intimate identification they make between themselves and the forest. As one informant, named Moke, explained to Colin Turnbull:

The forest is a father and mother to us, he said, and like a father or mother it gives us everything we need—food, clothing, shelter, warmth . . . and affection. Normally everything goes well, because the forest is good to its children.

Even when things go poorly, the forest is not considered malevolent. Instead it is said to be "asleep."

When something big goes wrong, like illness or bad hunting or death, it must be because the forest is sleeping and not looking after its children. So what do we do? We wake it up. We wake it up by singing to it, and we do this because we want it to awaken happy.

The Mbuti do not regard the forest as hostile even when death occurs. Rather, the words of their song reflect the fundamental harmony they feel with the forest surrounding them. "There is darkness all around us; but if darkness is, and the darkness is of the forest, then the darkness must be good."

The Ituri Forest is also occupied by varying tribes of Bantu origin, including the Bira, the Lese, the Mangbetu, and the Mamvu-Mangutu. Although their physical surroundings are virtually identical to those of the Mbuti, their ways of exploiting the environment differ considerably, and as a result the type of niche they occupy in the ecosystem stands out in marked contrast. The subsistence economy of the Bantu groups relies upon swidden agriculture. The collective work of the group is directed toward cutting down forest growth, burning it off in order to form cultivatable fields, planting crops, and tending them until the time of harvest. The

planting process is repeated annually until one cleared plot of land becomes exhausted. When this occurs, the cultivators are obliged to shift their activity to a new area of undisturbed forest, leaving the exhausted land to recuperate in fallow. In the newly chosen forest area the process of cutting, burning, planting, tending, and harvesting begins again.

Unlike the Mbuti, the Bantu agriculturalists subsist by constantly battling the forest. Their swidden agriculture is thus based upon systematic predatory expansion into uncut forest, and as a result it encourages a warrior's attitude toward the environment. Nature is seen as something which exists outside the boundaries of the group and it needs to be subdued and exploited by man to be productive.

As the Bantu agriculturalists carve out their livelihood in continual opposition to the encroaching vegetation, it is not surprising that on a symbolic level the forest is feared and regarded as the source of all that is uncivilized and evil. As Turnbull observed of the Bantu groups, "the forest . . . is thought of by them as hostile for its refusal to support their modest crops while it nourishes the luxuriant vegetation of the forest and its immense, towering trees. The hostility is thought of as a conscious act on the part of the forest itself, and of the spirits which inhabit it." The ecological niche which is implied by swidden agriculture can be seen, then, to give rise to a system of conceptual bounding which differentiates the Bantu peoples significantly from the Mbuti who occupy roughly the same habitat.

Swidden agriculturalists throughout the world bound culture off from nature in much the same way as the Bantu. Nature is seen as alien and potentially hostile, and the proper relationship toward it is assumed to be one of conquest, subjugation, exploitation, and abandonment. The Trio of South America practice swidden agriculture, and, as Peter Rivière reports, their whole symbolic system is an elaboration of this underlying dichotomy.

Perhaps the most important distinction which the Trio make is that between forest and village. The village is the world of humans, a sanctuary in which animals kept as pets, even those which are normally hunted, will not be eaten if accidentally killed. The forest is the world of spirits and strangers, and uncertainty. But these two worlds are not separate and

independent; the jungle forever encroaches on the village, and the Trio by cutting and burning his field is not merely performing an essential agricultural activity, since these acts symbolize for him a far greater battle.

A similar attitude prevails on the outer islands of Indonesia where swidden agriculture persists, and it is grounded, as Clifford Geertz points out, in "an historically rooted conviction that there are always other forests to conquer, a warrior's view of natural resources as plunder to be exploited."

Since, as we have seen, the metaphors of one realm of experience are easily mapped upon another, a culture's underlying perception of its eco-niche is of crucial importance for the way in which it sets about bounding itself in social space as well. Not surprisingly, there can be remarkable homologies of perception and behavior in these different realms of cultural experience. Thus, societies that maintain antagonistic and domineering relationships with their physical environment are likely to apply metaphors of antagonism and domination in their social relations with outside groups. The homology runs: nature is to culture as "savagery" is to "civilization."

The result is that any society with a pronounced sense of "mastery" over nature is likely to contain within it the seeds of racist thinking in social relations as well. In the sentence, "The world around us was nature's savage domain," the word "savage" describes an attribute of outer "nature" as opposed to inner "culture," but the noun form of the word can easily be used to stand for those people who are "outside" as opposed to "inside" an acceptable social boundary: "All around us there were savages." The nature/culture and outside/inside dichotomies begin to become coterminous, and in this process of fusion, both distinctions become instances of an overarching savage/civilized dichotomy, the very basis of racist thought.

Evidence from swidden agricultural societies makes this clearer. Anthropologists have long observed that the relationships between those considered inside such societies and those outside tend to be antagonistic. Those outside are suspected of sorcery, witchcraft, and every sort of conceivable subversion. Furthermore, such evil doings are taken as evidence that these peoples are depraved by nature. Their continued existence as an "outside" group is in itself

a threat to one's own group existence. Hence, as with the physical environment, the only proper relationship toward those who are outside is one of conquest and subjugation in an effort to impose upon them the civilization of which they have been deprived. The aggressively superior attitude of swidden agriculturalists such as the Ibo of Nigeria has long been noted, and such attitudes can be seen as the logical extension of the way in which they bound themselves in a particular niche of an overall ecosystem.

In a similar fashion, swidden agriculturalists create rubbish problems by the way in which they separate themselves from their environment. The agricultural system itself has often been described somewhat summarily as "slash-and-burn" agriculture, and although such a description glosses over the subtlety such peoples often demonstrate in understanding their environment, nevertheless there is an element of truth in the phrase. Agricultural systems of this type are constantly on the move, leaving a trail of debris and depleted resources behind them. Lives are spent in cutting down virgin forests, exploiting the exposed soils until they are exhausted, and then moving on to repeat the process elsewhere. Whole villages are sometimes abandoned, as well as the farm plots. Swidden agricultural settlements are often ringed by a small band of territory where garbage, household debris, and fecal matter are deposited by individual villagers. This area can become a source of infection for the village as a whole. When this occurs, the villagers may regard the village as infested with malevolent spirits and decide to abandon it entirely, beginning afresh elsewhere.

Such a pattern of movement fosters a perspective on the environment as arranged along a linear continuum from raw materials on the one hand to rubbish on the other. For people in societies that occupy this type of eco-niche there are two significant categories for things within the external environment. There are those things which have yet to be mastered and exploited by culture, and there are the others that, after having been culturally transformed, are spit out or excreted. The cultural imperative in these societies is to move toward and engulf the raw material on the one hand, and to deposit and move away from the rubbish on the other.

Problems of rubbish and racism may be the inevitable outcome

of swidden agricultural societies, based as they are upon systematic predatory expansion, but alternative modes of bounding are found among peoples whose ecological niche does not enable them to develop an antagonistic stance toward nature. The Mbuti, as we saw earlier, depend upon a delicately balanced symbiotic relationship with the forest, totally unlike the raw-materials-to-rubbish continuum which sustains the shifting cultivator. And the sedentary agriculturalist or peasant, to consider yet another example, occupies an ecological niche which differs from both the hunting and gathering of the Mbuti and the swidden cultivator, even though individual elements seem similar.

The peasant, like the swidden cultivator, derives his subsistence from agricultural production, but unlike the swidden agriculturalist, his production depends upon a delicately balanced symbiosis with a *fixed* piece of land over time. In this latter respect, his conceptual relationship toward the natural world is much more akin to that of the Mbuti than to that of the swidden cultivator. He cannot afford the imagery of an inherently antagonistic nature that needs to be perpetually conquered, exploited, and abandoned. Since he cannot move to new lands when old ones become exhausted, he can survive only by replenishing nature as he exploits it. Irrigation systems, terrace building, fertilizer distribution, and crop and field rotation are all techniques used by the peasant at one time or another to compensate nature for what he extracts. In this sense, both man and the land are cooperative elements in one interrelated nature, rather than two distinct realms pitted against one another in perpetual antagonism. Man provides for nature, and nature, in turn, provides for man.

This sedentary symbiosis inscribes itself in the symbolic systems of peasant peoples. They often consider themselves "people of the land" and express their relationship to the cultivated earth in much the same personal terms as the Mbuti do to the forest. Natural forces are frequently personified as deities, and these deities are in turn arranged in a variety of hierarchies. As farming is subject to combinations of natural forces, man himself is understood to be subordinate to the gods who control these forces. The appropriate attitude of man toward the gods is one of submissive

humility, and the relationship is continuously recalled through the enactment of ritual appeasement or propitiation.

These rites are not mechanical operations to bring about rain or stop floods or the like; rather, they are dramatic reiterations of an appropriate symbolic order. Man is subordinate, and it is his duty to cultivate the land. The gods are superior, and it is their duty to produce the rain. The concept of duty is inherent in such a hierarchically arranged system of cosmic roles and it pervades all aspects of the individual's understanding. One has a duty to undertake his assigned role in the larger cosmic system. This is expressed quite completely among peasants in India as "dharma." Dharma is variously translated into English as "duty," "role," or "the moral order," but it literally means "the supporter." If one is acting appropriately, one is said to be following dharma or acting in support of the entire moral order.

The cyclical rhythms of the agricultural process receive particular symbolic statement among the world's peasants. Calendars developed among sedentary agriculturalists to mark the passing of the yearly cycle are based either on solar or lunar movements. Rituals regularly reenact the processes of sowing, reaping and sowing once again. Scholars like Mircea Eliade have even suggested that the concept of an afterlife is the extension into the human sphere of experience which peasants witness annually in the renewal of life. One need not accept all of Eliade's evidence or reasoning, but it still appears to be the case that sedentary agricultural societies quite consistently develop concepts of an afterlife, some of which are quite elaborate indeed. In such systems, one's whole life is symbolically a cycle, for as one reaches death, one is "born again."

In the realm of social relations, sedentary agriculturalists mediate the inside/outside dilemma through systems of ritualized hierarchy. The peasant's entire life, and even his afterlife, is comprehensible to him only in terms of a hierarchy. One's position in the total hierarchy is usually given at birth; and while it is true that one can change from status to status, this can only be done when one is symbolically born again, either through a prescribed ritual or through reincarnation. The Indian caste system with its attendant

beliefs of reincarnation illustrates this clearly. One is born into a given caste and must live out one's earthly life in that hierarchical position. Upon death, however, one is symbolically reborn, and one can change caste, either rising or falling in the human hierarchy, or one can become some other kind of being altogether.

Taken as a total system, then, the caste system is not rigid. Rather it represents over time a constantly oscillating symbolic expression of the cyclical relationship of man and the natural world expressed at any one time in the principle of hierarchy. To equate the caste system of India with racism is from this perspective clearly ridiculous. Racism is a feature only of societies which bound themselves off from nature. In societies in which nature and culture are not opposed, social differences are phrased in the metaphor appropriate to a system of cyclical interchange—which is to say, hierarchy. Since the total system is recognized as a cyclical one, the boundaries which exist between castes are in no way like the boundary which delineates the savage from the civilized in a system of perpetual predatory expansion. In this sense, racism and the caste system belong, quite literally, to different worlds of discourse.

Considering the matter from this perspective, we can see that the Western world and America in particular are faced with more than merely technical problems in dealing with rubbish and racism. The historical experience of modern Europe and America has been shaped by the same type of ecological niche as swidden agriculturalists. As a result a whole system of self-understanding has developed around fantasies involving nature vs. culture and savagery vs. civilization.

Historians have long affirmed the importance of the frontier in American history, and some have even held it to be responsible for the development of a uniquely American character. The first and by now classic statement of the "frontier thesis" came at a meeting of the American Historical Association in Chicago during July 1893 when Frederick Jackson Turner delivered his famous speech:

Up to our own day American history has been in a large degree the history of the colonization of the Great West. The existence of an area of free land, its continuous recession and the advance of American settlement

westward, explain American development. . . . From the conditions of frontier life came intellectual traits of profound importance. . . . The result is that to the frontier the American intellect owes its striking characteristics. That coarseness and strength combined with acuteness and inquisitiveness; that practical, inventive turn of mind, quick to find expedients; that masterful grasp of material things, lacking in the artistic but powerful to effect great ends; that restless nervous energy; that dominant individualism, working for good and for evil, and withal that buoyancy and exuberance which comes with freedom—these are traits of the frontier, or traits called out elsewhere because of the frontier.

Turner himself was never very explicit about how it was that the frontier actually accomplished these phenomenal feats, but he never really thought that to be his task. The frontier for Turner was a kind of mystic vision in which he believed fervently. And so did other Americans: the Turner thesis managed to articulate things they seem to have felt deeply, and it provided a coherent framework for their own historical experience.

Critics in the twentieth century finally did attack the Turner thesis, but their criticisms are best understood as correctives, adjustments, extensions, or amplifications rather than contradictions of Turner's basic observations. Perhaps the most substantial and most widely accepted corrective is the one offered by David Potter in his book *People of Plenty: Economic Abundance and the American Character*. Potter felt that Turner was too carried away with the mystic quality of his vision to identify what elements of the frontier experience were the most powerful in determining the American character. For Potter the frontier *contained* the key to the American achievement—abundance. It was not the frontier itself, but the abundance which it represented in the early American experience that accounted for the American character.

In short, abundance is partly a physical and partly a cultural manifestation. For America, from the eighteenth to the twentieth century, the frontier was the focus of abundance physically because the land was virgin and culturally because the Anglo-Americans of the time were particularly apt at exploiting the new country.

Since abundance was a function of both the environment *and* the technology applied to it, the source of American greatness did not

evaporate when the physical frontier disappeared. Instead, an expanding industrial world became the new source of abundance, the new frontier:

... though physically the frontier remained the site of virgin land, cultural changes gave the people an aptitude for exploiting new industrial potentialities and thus drew the focus of abundance away from the frontier. But this change of focus itself perpetuated and reinforced the habits of fluidity, of mobility, of change, of the expectation of progress, which have been regarded as distinctive frontier traits.

According to Potter, then, the industrial revolution is not a break with the expanding agrarian tradition in America, but rather an extension of it. Turner's thesis and Potter's corrective seem to complement more than contradict one another. This is important to understand because formally an expanding industrial system occupies the same kind of ecosystem niche as an expanding agricultural system. Both depend for their self-understanding upon an immutable distinction between nature and culture, and both are constructed schematically like a linear conveyor belt, with raw materials entering on one end and rubbish being deposited at the other. Rubbish, in this light, is most adequately understood not as an incidental technical problem for the Western world, but rather as a built-in feature of the society itself; and its abolition might pose considerable conceptual problems. It may well be that rubbish has to be eliminated, but in order to do so, America will have to undertake an entire restructuring of its historically derived categories of meaning.

The difficulty is, quite simply, that there are no "externalities" in a global ecosystem. This is a fact that both swidden agriculturalists and Western industrial societies may prefer to ignore, but they can only do so at their own peril, for we are rapidly approaching circumstances globally where there are no new lands to "slash and burn" and no more room to retreat from the waste of our own making.

Nowhere is this more apparent than in our continuous generation of toxic chemical and nuclear waste. The strategies devised for coping with this noxious material are not unlike those of swidden agriculturalists who cast their rubbish on heaps at the village edge.

Sooner or later, these piles of waste matter can be detrimental to public health, and the assumption in that case is that the whole area must simply be abandoned to revert to "nature." Nature itself is thus clearly envisaged as outside the realm of human activity, acting as a receptacle for human waste. In the case of nuclear material where very long times are required before wastes lose their lethal character, there have even been serious suggestions that the problem should be solved by jettisoning the radioactive material into space—the earth's ultimate rubbish bin! It is a sad irony that despite the most advanced technical achievements in analyzing the global situation, American culture seems nonetheless incapable of recognizing the inherently cyclical nature of an ecosystem. In this sense America has become the victim of conceptual fictions that seemed plausible during its own history of predatory expansion but now leave it tragically out of touch with the problem of rubbish in a global ecosystem.

American history would seem to indicate that the development of racism is similarly a counterpart of the process of predatory expansion. Turner unwittingly suggested as much when he observed that "the frontier is the outer edge of the wave—the meeting point between savagery and civilization." In a work entitled *Savagism and Civilization: A Study of the Indian and the American Mind*, Roy Harvey Pearce has traced the historical image of the Indian, and he indicates that the image of the Indian as a savage emerges from a history of conflict.

When frontier New Englanders suffered at the hands of Indians they inevitably interpreted their sufferings as God's warning to New England through Satan. . . . Thus for those who lived in the frontier settlements to the west and south and to the north in Maine, it came to be, simply enough, destroy or be destroyed; this was yet another skirmish in man's Holy War against Satan, now on a new-world battlefield.

There is no doubt that white Americans believed in such imagery, nor was it confined to the American Indian. Attitudes toward black peoples were often merely extensions of racist categories white Americans had derived from other experience, as a speech of Senator Thomas Hart Benton in 1846 makes abundantly clear:

It would seem that the white race alone received the divine command to subdue and replenish the earth. . . . For my part, I cannot murmur at what seems to be the effect of divine law. I cannot repine that this capitol has replaced the wigwam—the Christian people, replaced the savages—white matrons the red squaws—that such men as Washington, Franklin, and Jefferson have taken the place of Powhattan, Opechenecanough and other red men howsoever respectable they may have been as savages. Civilization, or extinction, has been the fate of all people who have found themselves in the track of the advancing Whites, and civilization, always the preference of the Whites, has been pressed as an object, while extinction has followed as a consequence of resistance. The Black and the Red Races have often felt their ameliorating influence.

Racism does not disappear with the end of the physical frontier, for, as Potter has indicated, the frontier experience transforms itself almost without interruption into the structures of expanding industrialization. Although racism may originate as a solution to an inside/outside dichotomy within a system of predatory agrarian expansion, it survives—and may indeed flourish—in a society based upon industrial expansion, since the transformation from one type of society to the other involves no fundamental change in the kind of niche exploited within the ecosystem. Racism, every bit as much as rubbish, is a built-in feature of Western society, and in a similar way its elimination would involve a fundamental overhauling of Western categories of self-understanding. It is not sufficient to conceive of either of these as passing or peripheral problems in an otherwise impressive societal achievement. They are at the core of our culture.

There are some who see evidence of change in Western attitudes on these two subjects. Indeed our technological achievements may be leading us to the type of cyclical understandings characteristic of a peasant society. The self-contained spacecraft, for example, is an attempt to reproduce an artificial ecosystem, in which the carbon dioxide, body heat, and waste products of the astronauts will be recycled to provide oxygen, food, and water. Moreover, the "untidy" styles characteristic of some youth seem to indicate a healthy experimentation with artificial boundaries. Michael Thompson has even gone so far as to say that these events are indices of what he calls "The Death of Rubbish." I hope that he

is right, and I look forward to seeing someone announce the death of racism with similar confidence.

For the time being, however, it is hard to find much evidence for the trend Thompson thinks he can discern. Most of the imagery of the Western world and particularly America still seems to be grounded in predatory expansion. President Kennedy won the election in 1960 on the promise of a "New Frontier," and President Johnson found it useful to describe his welfare programs to the electorate as a "War on Poverty." It may well be true that a few young people are experimenting in a hopeful way with boundaries, but radical youth, with its talk of struggles, revolutions, and wars against the "pig," has certainly not transcended the nature/culture and savage/civilized dichotomies; they have only put new antagonists in the old categories.

As for the spacecraft dream, I fear that the precepts that it should teach us will escape our grasp. The technical problems of recycling may one day be solved, but I can already hear our technicians and politicians congratulating themselves, without a hint of irony, on the fact that this will open up "new frontiers of space."

An advertising slogan of a science-fiction magazine phrased basically the same idea somewhat more poignantly: "The meek shall inherit the earth. The rest of us will go to the stars." There was a time in our not-too-distant past when this might have seemed funny, but now it is profoundly disquieting, for already there are those whose attention is focused on the frontiers of space as if they hold some sort of answer to the unresolved problems of boundary in our ecosystem here below. They don't, of course, and it is this kind of thinking that is the substance of the problem, not the means to its solution. Frontier imagery leaves us with no way of coping with the dilemmas before us. If overcoming the problems of rubbish and racism is our goal, then changing our minds is the first step.