The Plight

Thirty years ago the wilderness of Scotland looked inviolate to me and I would have been content to give my life to the creation of oases of delight in the heart of Glasgow or dream of a marriage of man and nature in new cities and towns. My boyhood sense of the rest of the world suggested that it was even wilder than Scotland. There were still explorers in those days and missionaries enough to build a stamp collection from their solicitations. The plight that moved me then was little enough compared to today. Then there was no threat of an atomic holocaust and no fear of radiation hazard. The population problem was one of declining birthrates and Mussolini exhorted and coerced Italian mothers to greater efforts while Presidents of France deplored an effete generation. DDT and Dieldrin were not yet festering thoughts; penicillin and streptomycin were not yet hopes. Man's inhumanity to man was commonplace in distant lands but had not achieved the pinnacle of depravity which at Belsen and Dachau a civilized nation was to achieve. Poverty and oppression were real and pervasive, and war was imminent enough so that I could conclude at seventeen that I had better be ready as a trained soldier by 1939.

Yet while the city was grim indeed, the countryside could be reached by foot, by bicycle or even for the few pennies that led to a tram terminus and the gateway to wild lands where no law of trespass constrained.

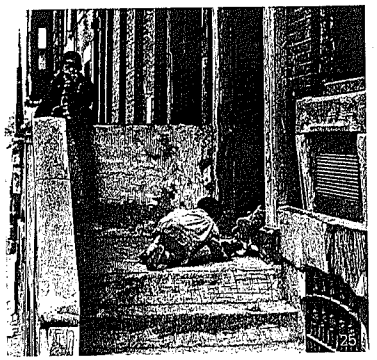
The country is not a remedy for the industrial city, but it does offer surcease and some balm to the spirit. Indeed, during the Depression there were many young men who would not submit to the indignity of the dole or its queues and who chose to live off the land, selling their strength where they could for food and poaching when they could not, sleeping in the bracken or a shepherd's bothy in good weather, living in hostels and public libraries in winter. They found independence, came to know the land and live from it, and sustained their spirit.

So, when first I encountered the problem of the place of nature in man's world it was not a beleaguered nature, but merely the local deprivation that was the industrial city. Scotland was wild enough, protected by those great conservators, poverty and inaccessibility. But this has changed dramatically in the intervening decades, so that today in Europe and the United States a great erosion has been accomplished which has diminished nature—not only in the countryside at large, but within the enlarging cities and, not least, in man as a natural being.

There are large numbers of urban poor for whom the countryside is known only as the backdrop to westerns or television advertisements. Paul Goodman speaks of poor children who would not eat carrots pulled from the ground because they were dirty, terror-stricken at the sight of a cow, who screamed in fear during a thunderstorm. The Army regularly absorbs young men who have not the faintest conception of living off the land, who know nothing of nature and its processes. In classical times the barbarians in fields and forest could only say "bar bar" like sheep; today their barbaric, sheepish descendants are asphalt men.

Clearly the problem of man and nature is not one of providing a decorative background for the human play, or even ameliorating the grim city: it is the necessity of sustaining nature as source of life, milieu, teacher, sanctum, challenge and, most of all, of rediscovering nature's corollary of the unknown in the self, the source of meaning.

There are still great realms of empty ocean, deserts reaching to the curvature of the earth, silent, ancient forests and rocky coasts, glaciers and volcanoes, but what will we do with them? There are rich contented farms, and idyllic villages, strong barns and white-steepled churches, tree-lined streets and covered bridges, but these are residues of another time. There are, too, the silhouettes of all the Manhattans, great and



small, the gleaming golden windows of corporate images—expressionless prisms suddenly menaced by another of our creations, the supersonic transport whose sonic boom may reduce this image to a sea of shattered glass.

But what do we say now, with our acts in city and countryside? While I first addressed this question to Scotland in my youth, today the world directs the same question to the United States. What is our performance and example? What are the visible testaments to the American mercantile creed—the hamburger stand, gas station, diner, the ubiquitous billboards, sagging wires, the parking lot, car cemetery and that most complete conjunction of land rapacity and human disillusion, the subdivision. It is all but impossible to avoid the highway out of town, for here, arrayed in all its glory, is the quintessence of vulgarity, bedecked to give the maximum visibility to the least of our accomplishments.

And what of the cities? Think of the imprisoning gray areas that encircle the center. From here the sad suburb is an unrealizable dream. Call them no-place although they have many names. Race and hate, disease, poverty, rancor and despair, urine and spit live here in the shadows. United in poverty and ugliness, their symbol is the abandoned carcasses of automobiles, broken glass, alleys of rubbish and garbage. Crime consorts with disease, group fights group, the only emancipation is the parked car.

What of the heart of the city, where the gleaming towers rise from the dirty skirts of poverty? Is it like midtown Manhattan where twenty per cent of the population was found to be indistinguishable from the patients in mental hospitals?* Both stimulus and stress live here with the bitch goddess success. As you look at the faceless prisms do you recognize the home of *anomie?*

Can you find the river that first made the

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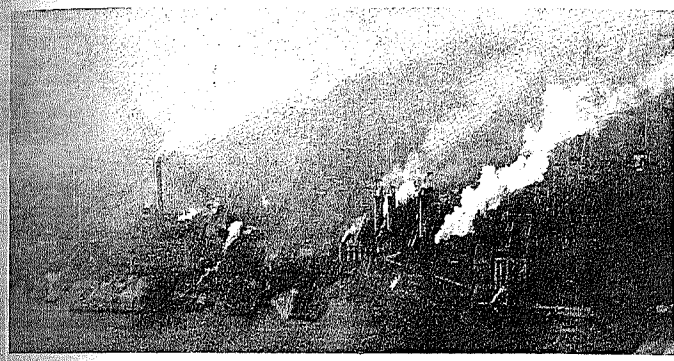

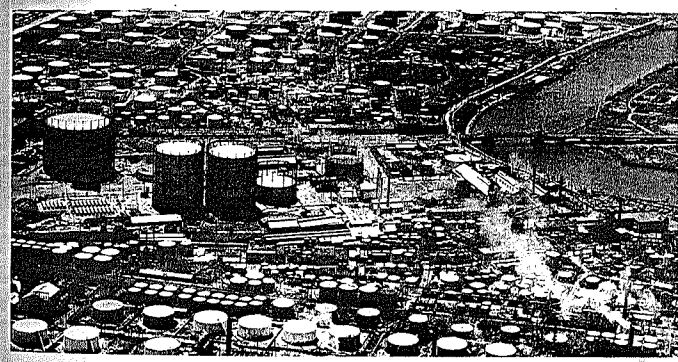

city? Look behind the unkempt industry, cross the grassy railroad tracks and you will find the rotting piers and there is the great river, scummy and brown, wastes and sewage bobbing easily up and down with the tide, endlessly renewed.

If you fly to the city by day you will see it first as a smudge of smoke on the horizon. As you approach, the outlines of its towers will be revealed as soft silhouettes in the hazardous haze. Nearer you will perceive conspicuous plumes which, you learn, belong to the proudest names in industry. Our products are household words but it is clear that our industries are not yet housebroken.

Drive from the airport through the gas storage tanks and the interminable series. Consider how dangerous the their cynical spume, observe their Refine they may, but refined the

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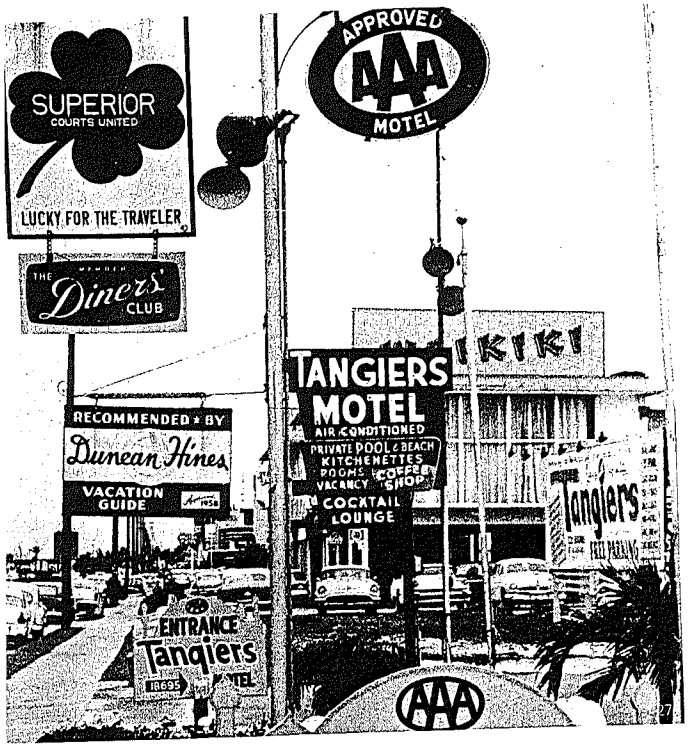

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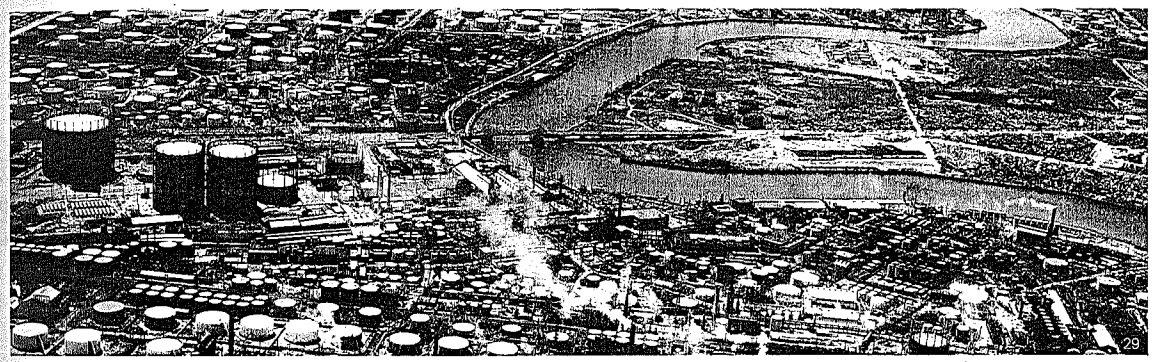

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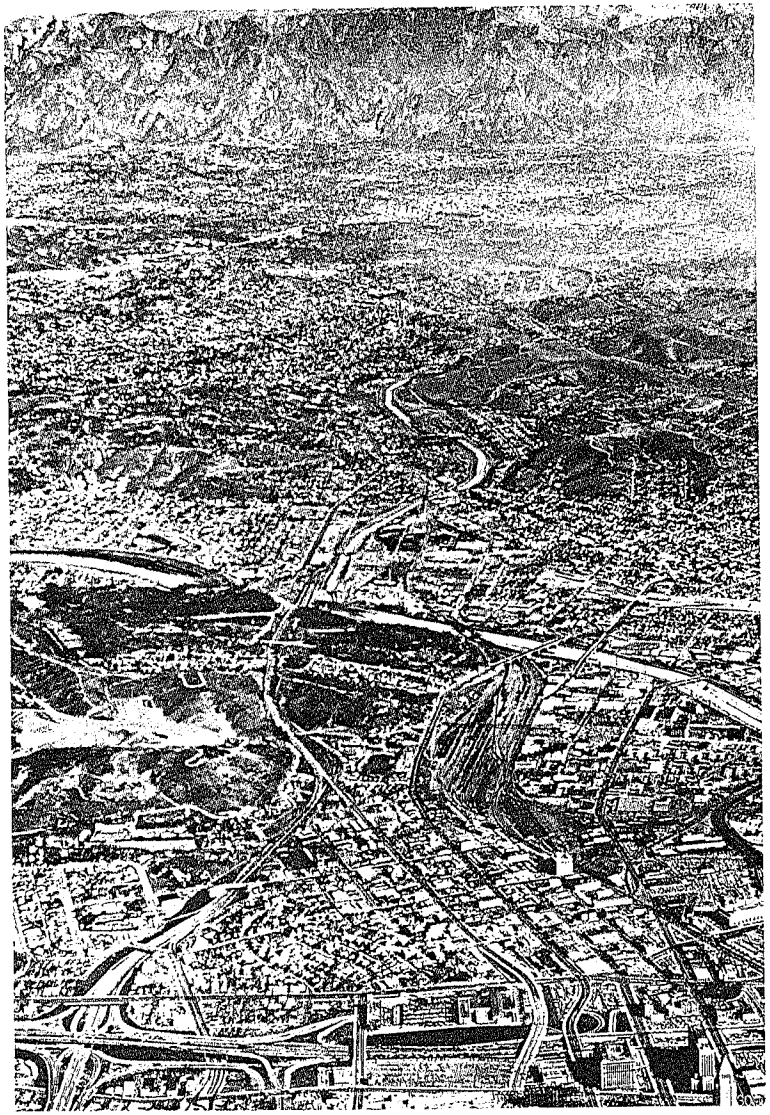
You will drive on an expressway, a clumsy concrete form, untouched by either humanity or art, testament to the sad illusion that there can be a solution for the unbridled automobile. It is ironic that this greatest public investment in cities has also financed their conquest. See the scars of the battle in the remorseless carving, the dismembered neighborhoods, the despoiled parks. Manufacturers are producing automobiles faster than babies are being born. Think of the depredations yet to be accomplished by myopic highway builders to accommodate these toxic vehicles. You have plenty of time to consider in the long peak hour pauses of spasmodic driving in the blue gas corridors.

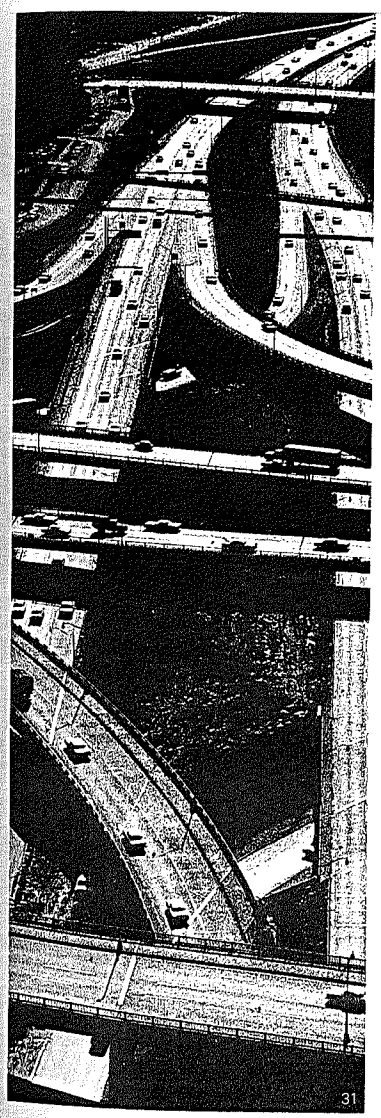
You leave the city and turn towards the countryside. But can you find it? To do so you will follow the paths of those who tried before you. Many stayed to build. But those who did so first are now deeply embedded in the fabric of the city. So as you go you transect the rings of the thwarted and disillusioned who are encapsulated in the city as nature endlessly eludes pursuit.



You can tell when you have reached the edge of the countryside for there are many emblems—the cadavers of old trees piled in untidy heaps at the edge of the razed deserts, the magnificent machines for land despoliation, for felling forests, filling marshes, culverting streams, and sterilizing farmland, making thick brown sediments of the creeks.

Is this the countryside, the green belt—or rather the greed belt, where the farmer sells land rather than crops, where the developer takes the public resource of the city's hinterland and subdivides to create a private profit and a public cost? Certainly here is the area where public powers are weakest—either absent or elastic—where the future costs of streets, sidewalks and sewers, schools, police and fire protection are unspoken. Here are the meek mulcted, the refugees thwarted.

Rural land persists around the metropolis, not because we have managed the land more wisely but because it is larger, more resistant to man's smear, more resilient. Nature regenerates faster in the country than in the city where the marks of men are well-nigh irreversible. But it still wears the imprint of man's toil. DDT is in the arctic ice, in the ocean deeps, in the rivers and on the land, atomic wastes rest on the Continental Shelf, many creatures are forever extinguished, the primeval forests have all but gone and only the uninitiated imagine that these third and fourth growth stands are more than shadows of their forebears. Although we can still see great fat farms, their once deep soils, a geological resource, are thinner now, and we might well know that farming is another kind of mining, dissipating the substance of aeons of summers and multitudes of life. The Mississippi is engorged with five cubic miles of soil each year, a mammoth prodigality in a starving world. Lake Erie is on the verge of becoming septic, New York City suffers from water shortages while the Hudson flows foully past, salt water encroaches in the Delaware, floods alternate with drought, the fruits of two centuries of



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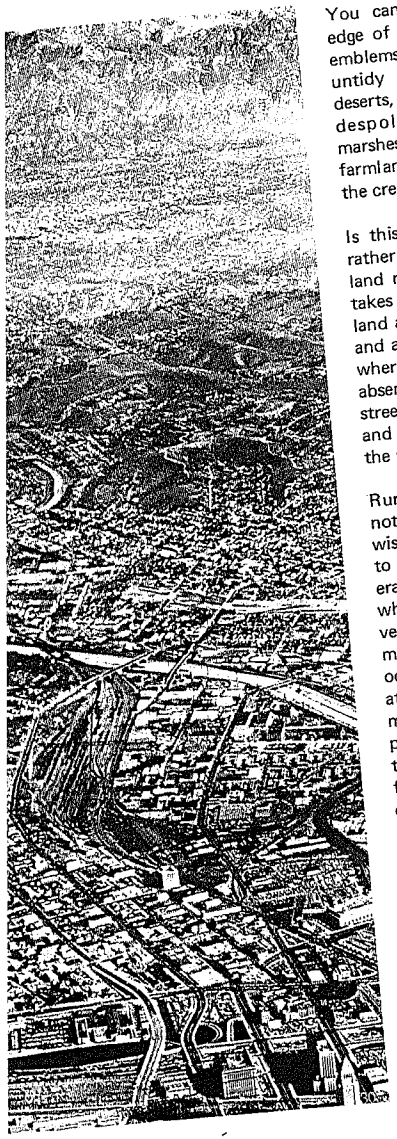

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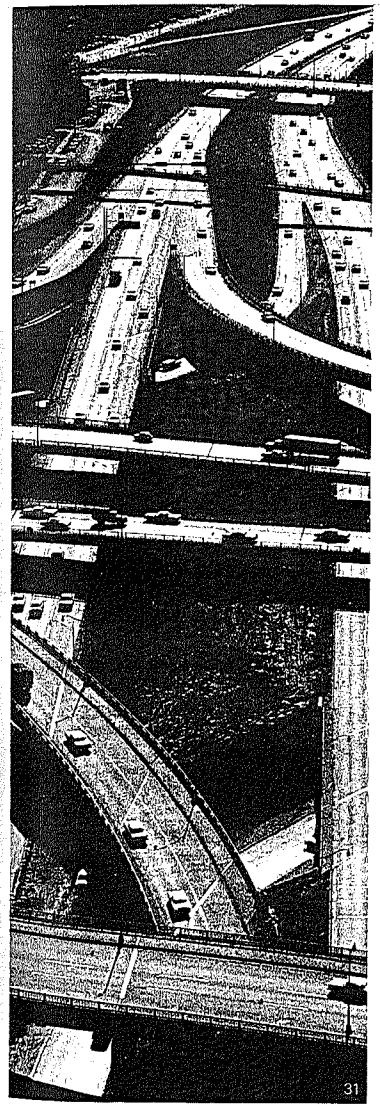


The maps all show the continent to be green wild landscapes save for the sepia cities huddled on lakes and seaboards, but look from a plane as it crosses the continent and makes an idiocy of distance, see the wild green sectioned as rigorously as the city. In the great plains nature persists only in the meandering stream and the flood plain forest, a meaningful geometry in the Mondriaan patterns of unknowing men.

It matters not if you choose to proceed to the next city or return to the first. You can confirm an urban destination from the increased shrillness of the neon shills, the diminished horizon, the loss of nature's companions until you are alone, with men, in the heart of the city, God's Junkyard—or should it be called Bedlam, for cacophony lives here. It is the expression of the inalienable right to create ugliness and disorder for private greed, the maximum expression of man's inhumanity to man. And so our cities grow, coalescing into a continental necklace of megalopoles, dead gray tissue encircling the nation.

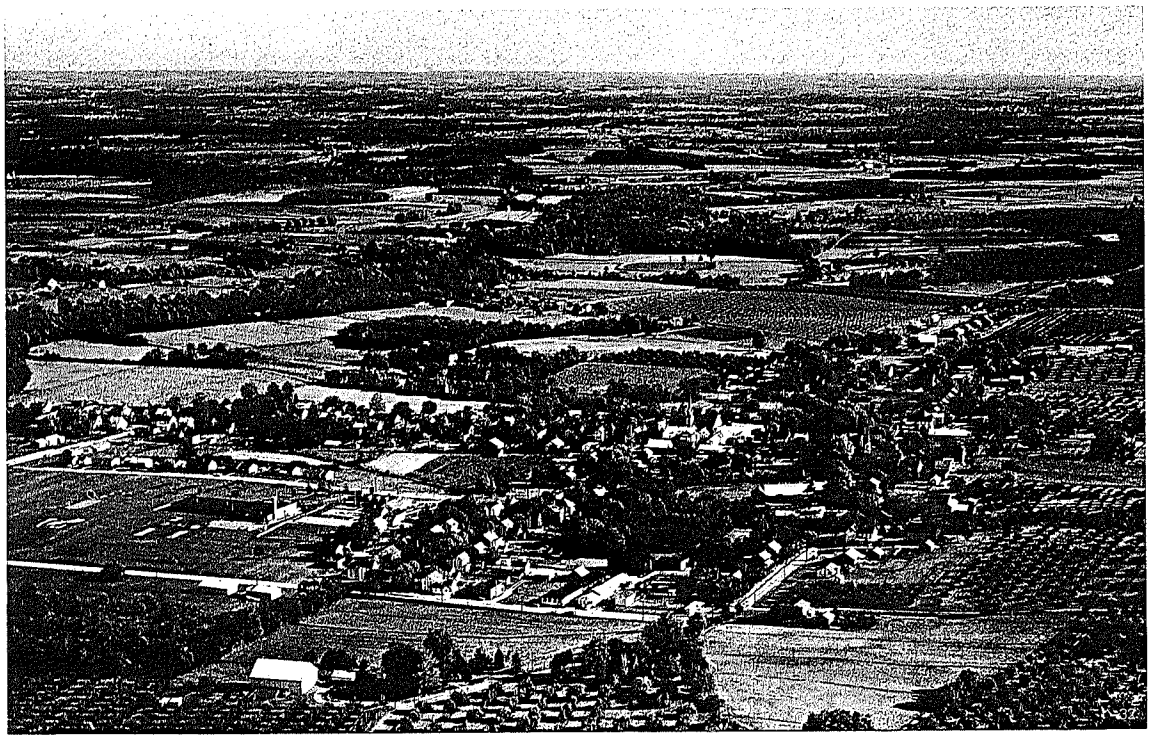
Surely the indictment is too severe—there must be redeeming buildings, spaces, places, landscapes. Of course there are—random chance alone would have ensured some successful accidents. But there are also positive affirmations, yet it is important to recognize that many of these are bequests from earlier times. Independence, Carpenter and Faneuil Hall symbolize the small but precious heritage of the 18th century: the great State Houses, city halls, museums, concert halls, city universities and churches, the great urban park systems, were products of the last century. Here in these older areas you will find humane, generous suburbs where spacious men built their concern into houses and spaces so that dignity and peace, safety and quiet live there, shaded by old trees, warmed by neighborliness.

You may also see hints of a new vitality and new forms in the cities, promising resurgence. You may even have found, although I have not, an expressway that gives structure to a city, or, as I have, a parkway that both reveals and enhances the landscape. There are farmlands in good heart; there are landowners—few it is true—who have decided that growth is inevitable, but that it need not lead to despoliation but to enlargement. New towns are being constructed and concepts of regional planning are beginning to emerge. There is an increased awareness for the need to manage resources and even a title for this concern—The New Conservation. There is a widening certainty that the Gross National Product does not measure health or happiness, dignity, compassion, beauty or delight, and that these are, if not all inalienable rights, at least most worthy aspirations.

But these are rare among the countless city slums and scabrous towns, pathetic subdivisions, derelict industries, raped land, befouled rivers and filthy air.

At the time of the founding of the republic—and for millennia before—the city had been considered the inevitable residence for the urbane, civilized and polite. Indeed all of these names *say* city. It was as widely believed that rich countries and empires were inevitably built upon the wealth of the land. The original cities and towns of the American 18th century were admirable—Charleston and Savannah, Williamsburg, Boston, Philadelphia, New Orleans. The land was rich and beautiful, canons of taste espoused the 18th-century forms of architecture and town building, a wonder of humanity and elegance.

How then did our plight come to be and what can be done about it? It is a long story which must be told briefly and, for that reason, it is necessary to use a broad brush and paint with coarse strokes. This method



inevitably offends for it omits qualifying statements, employs broad generalities and often extrapolates from too slender evidence. Yet the basic question is so broad that one need not be concerned with niceties. The United States is the stage on which great populations have achieved emancipation from oppression, slavery, peonage and serfdom, where a heterogeneity of peoples has become one and where an unparalleled wealth has been widely distributed. These are the jewels of the American diadem. But the setting, the environment of this most successful social revolution, is a major indictment against the United States and a threat to her success and continued evolution.

Our failure is that of the Western World and lies in prevailing values. Show me a man-oriented society in which it is believed that reality exists only because man can perceive it, that the cosmos is a structure erected to support man on its pinnacle, that man exclusively is divine and given dominion over all things, indeed that God is made in the image of man, and I will predict the nature of its cities and their landscapes. I need not look far for we have seen them—the hot-dog stands, the neon shill, the ticky-tacky houses, dysgenic city and mined landscapes. This is the image of the anthropomorphic, anthropocentric man; he seeks not unity with nature but conquest. Yet unity he finally finds, but only when his arrogance and ignorance are stilled and he lies dead under the greensward. We need this unity to survive.

Among us it is widely believed that the world consists solely of a dialogue between men, or men and God, while nature is a faintly decorative backdrop to the human play. If nature receives attention, then it is only for the purpose of conquest, or even better, exploitation—for the latter not only accomplishes the first objective, but provides a financial reward for the conqueror.

We have but one explicit model of the world and that is built upon economics. The present face of the land of the free is its clearest testimony, even as the Gross National Product is the proof of its success. Money is our measure, convenience is its cohort, the short term is its span, and the devil may take the hindmost is the morality.

Perhaps there is a time and place for everything; and, with wars and revolutions, with the opening and development of continents, the major purposes of exploration and settlement override all lesser concerns and one concludes in favor of the enterprises while regretting the wastages and losses which are incurred in these extreme events. But if this was once acceptable as the inevitable way, that time has passed.

The pioneers, the builders of railroads and canals, the great industrialists who built the foundations for future growth were hard-driven, single-minded men. Like soldiers and revolutionaries, they destroyed much in disdain and in ignorance, but there are fruits from their energies and we share them today. Their successors, the merchants, are a different breed, more obsequious and insidious. The shock of the assassination of a President stilled for only one day their wheedling and coercive blandishments for our money. It is their ethos, with our consent, that sustains the slumlord and the land rapist, the polluters of rivers and atmosphere. In the name of profit they preempt the seashore and sterilize the landscape, fell the great forests, fill the protective marshes, build cynically in the flood plain. It is the claim of convenience for commerce—or its illusion—that drives the expressway through neighborhoods, homes and priceless parks, a taximeter of indifferent greed. Only the merchant's creed can justify the slum as a sound investment or offer tomato stakes as the highest utility for the priceless and irreplaceable redwoods.

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The economists, with a few exceptions, are the merchants' minions and together they ask with the most barefaced effrontery that we accommodate our value system to theirs. Neither love nor compassion, health nor beauty, dignity nor freedom, grace nor delight are important unless they can be priced. If they are non-price benefits or costs they are relegated to inconsequence. The economic model proceeds inexorably towards its self-fulfillment of more and more despoliation, uglification and inhibition to life, all in the name of progress—yet, paradoxically, the components which the model excludes are the most important human ambitions and accomplishments and the requirements for survival.

The origins of societies and of exchange go back to an early world when man was a minor inconsequence in the face of an overwhelming nature. He bartered his surpluses of food and hides, cattle, sheep and goats and valued scarcities, gold and silver, myrrh and frankincense. But the indispensable elements of life and survival were beyond his ken and control: they could not and did not enter his value system save imperfectly, through religious views. Nor have they yet. But in the intervening millennia the valuations attributed to commodities have increased in range and precision and the understanding of the operation of the limited sphere of economics has increased dramatically. This imperfect view of the world as commodity fails to evaluate and incorporate physical and biological processes: we have lost the empirical knowledge of our ancestors. We are now unable to attribute value to indispensable natural processes, but we have developed an astonishing precision for ephemera.

It is obvious that such an institutionalized myopic prejudice will exclude the realities of the biophysical world. Its very man-centeredness ensures that those processes, essential to man's evolution and survival, will be excluded from consideration and from evaluation. We have no thought in the interminable dialogues among men for the sustaining sun, the moon and tides, the oceans and hydrologic cycle, the inclined axis of the earth and the seasons. As a society we neither know nor value the chemical elements and compounds that constitute life, and their cycles, the importance of the photosynthetic plant, the essential decomposers, the ecosystems, their constituent organisms, their roles and cooperative mechanisms, the prodigality of life forms, or even that greatest of values, the genetic pool with which we confront the future.

Yet we may soon learn. Consider the moon. It apparently lacks an atmosphere and oceans and the great inheritance of life forms which we enjoy. The costs of "terra-farming" this naked, hostile planet to that benign condition which can support life as abundantly as does the earth are considered of such a magnitude as to be inconceivable. Colonies on the moon will thus have to be small envelopes enclosing some of the essential commonplaces of earth transported as priceless and indispensable commodities. The man on the moon will know the value of these things.

But surely we need not await the confrontation with the inhospitable moon to learn a lesson so rudimentary, so well known to our ancient ancestors and as familiar to the simple societies of the world today.

Economic determinism as an imperfect evaluation of the biophysical world is only one of the consequences of our inheritance. An even more serious deficiency is the attitude towards nature and man which developed from the same source and of which our economic model is only one manifestation. The early men who were our ancestors wielded much the same scale of power over nature which Australian aboriginals do today. They were generally pantheists, animatists or animists. They tried to understand the phenomenal world and through behavior, placation and sacrifice, diminish adversity and increase beneficence. This early empiricism remains a *modus vivendi* for many tribal peoples, notably the Amer-

ican Indian—and conspicuously the Pueblo—today.

Whatever the earliest roots of the western attitude to nature it is clear that they were confirmed in Judaism. The emergence of monotheism had as its corollary the rejection of nature; the affirmation of Jehovah, the God in whose image man was made, was also a declaration of war on nature.

The great western religions born of monotheism have been the major source of our moral attitudes. It is from them that we have developed the preoccupation with the uniqueness of man, with justice and compassion. On the subject of man-nature, however, the Biblical creation story of the first chapter of Genesis, the source of the most generally accepted description of man's role and powers, not only fails to correspond to reality as we observe it, but in its insistence upon dominion and subjugation of nature, encourages the most exploitative and destructive instincts in man rather than those that are deferential and creative. Indeed, if one seeks license for those who would increase radioactivity, create canals and harbors with atomic bombs, employ poisons without constraint, or give consent to the bulldozer mentality, there could be no better injunction than this text. Here can be found the sanction and injunction to conquer nature—the enemy, the threat to Jehovah.

The creation story in Judaism was absorbed unchanged into Christianity. It emphasized the exclusive divinity of man, his God-given dominion over all things and licensed him to subdue the earth. While Abraham Heschel, Gustave Weigel, and Paul Tillich, speaking for Judaism and Christianity, reject the literality of this view and insist that it is an allegory, it is abundantly clear that it is the literal belief that has and does permeate the western view of nature and man. When this is understood, the conquest, the depredations and the despoliation are comprehensible, as is the imperfect value system.

From early, faintly ridiculous beginnings when a few inconsequential men proclaimed their absolute supremacy to an unhearing and uncaring world, this theme has grown. It had only a modest place in classical Greece, where it was tempered by a parallel pantheism. It enlarged during the Roman tenure but was also subject to the same constraints. When the Millennium passed without punishment it grew more confident. In the Humanism of the Renaissance it made a gigantic leap and it is somewhat poignant that the poverty of the Mediterranean today is a product of the land mismanagement that occurred during this great inflation of the human ego and the increase of man's powers over nature. The 18th century was a period of pause—the Naturalist view emerged—but it barely arrested the anthropomorphic, anthropocentric surge that swelled in the 19th century and is our full-blown inheritance today.

The Inquisition was so outraged by doubt cast upon the primacy of man and his planet that Galileo was required to rescind his certainty that the earth revolved around the sun. This same insistence upon human divinity takes hard the evidence of man's animal ancestry or indeed the history of evolution. It looks as if it will resist the evidence that man's pre-hominid ancestors might well have been feral killers whose evolutionary success can be attributed to this capacity.

If the highest values in a culture insist that man must subdue the earth and that this is his moral duty, it is certain that he will in time acquire the powers to accomplish that injunction. It is not that man has produced evidence for his exclusive divinity, but only that he has developed those powers that permit the fulfillment of his aggressive destructive dreams. He now can extirpate great realms of life: he is the single agent of evolutionary regression.

In times long past, when man represented no significant power to change nature, it mattered little to the world what views he held. Today, when he has emerged as potentially the most destructive force in nature and its greatest exploiter, it matters very much indeed. One looks to see whether with the acquisition of knowledge and powers the western attitudes to nature and to man in nature have changed. But for all of modern science it is still pre-Copernican man whom we confront. He retains the same implicit view of exclusive divinity, man apart from nature, dominant, exhorted to subdue the earth—be he Jew, Christian or agnostic.

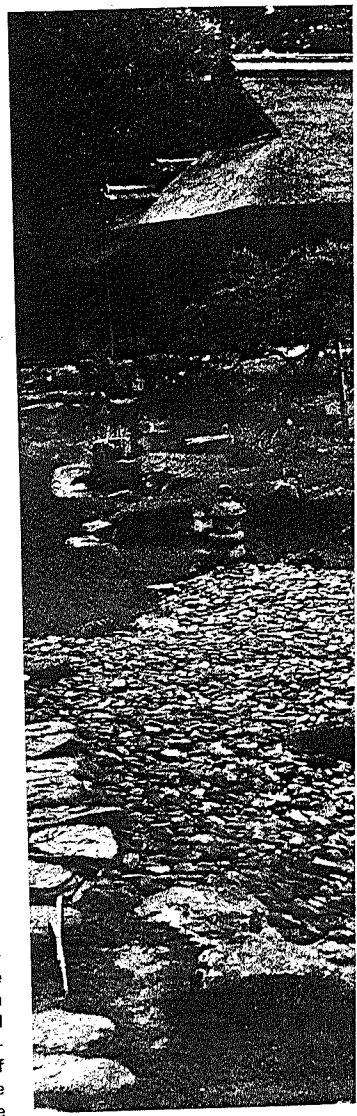
Yet surely this is an ancient deformity, an old bile of vengeance that we can no longer tolerate. This view neither approximates reality nor does it help us towards our objectives of survival and evolution. One longs for a world psychiatrist who could assure the patient that expressions of his cultural inferiority are no longer necessary or appropriate. Man is now emancipated, he can stand erect among the creatures. His ancient vengeance, a product of his resentment at an earlier insignificance, is obsolete. The exercise of his great destructive powers are less worthy of adulation than creative skills, but they are enough for the moment to assuage the yearnings for primacy so long denied. From his position of destructive eminence he can now look to his mute partners and determine who they are, what they are, what they do, and realistically appraise the system within which he lives—his role, his dependencies—and reconstitute a cosmography that better accords with the world he experiences and which sustains him.

For me the indictment of city, suburb, and countryside becomes comprehensible in terms of the attitudes to nature that society has and does espouse. These environmental degradations are the inevitable consequence of such views. It is not incongruous but inevitable that the most beautiful landscapes and the richest farmlands should be less highly valued than the most scabrous slum and loathsome roadside stand. Inevitably an anthropocentric society will choose tomato stakes as a higher utility than the priceless and irreplaceable redwoods they have supplanted.

Where you find a people who believe that man and nature are indivisible, and that survival and health are contingent upon an understanding of nature and her processes, these societies will be very different from ours, as will be their towns, cities and landscapes. The hydraulic civilizations, the good farmer through time, the vernacular city builders have all displayed this acuity. But it is in the traditional society of Japan that the full integration of this view is revealed. That people, as we know, has absorbed a little of the best of the West and much of the worst while relinquishing accomplishments that we have not yet attained and can only envy.

In that culture there was sustained an agriculture at once incredibly productive and beautiful, testimony to an astonishing acuity to nature. This perception is reflected in a language rich in descriptive power in which the nuances of natural processes, the tilth of the soil, the dryness of wind, the burgeoning seed, are all precisely describable. The poetry of this culture is rich and succinct, the graphic arts reveal the landscape as the icon. Architecture, village and town building use natural materials directly with stirring power, but it is garden making that is the unequaled art form of this society. The garden is the metaphysical symbol of society in Tao, Shinto and Zen—man in nature.

Yet this view is not enough: man has fared less well than nature here. The jewel of the western tradition is the insistence upon the uniqueness of the individual and the preoccupation with justice and compassion. The Japanese medieval feudal view has been casual to the individual human life and rights. The western assumption of superiority has been achieved at the expense of nature. The oriental harmony of man-nature has been achieved at the expense of the



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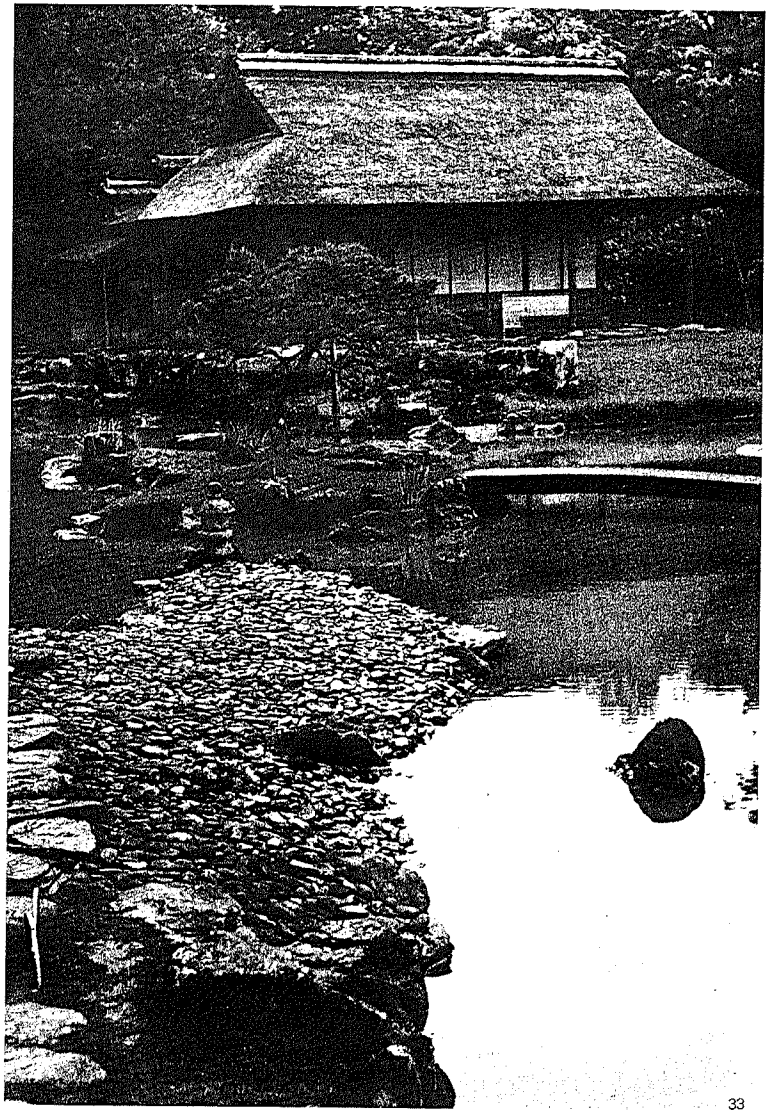

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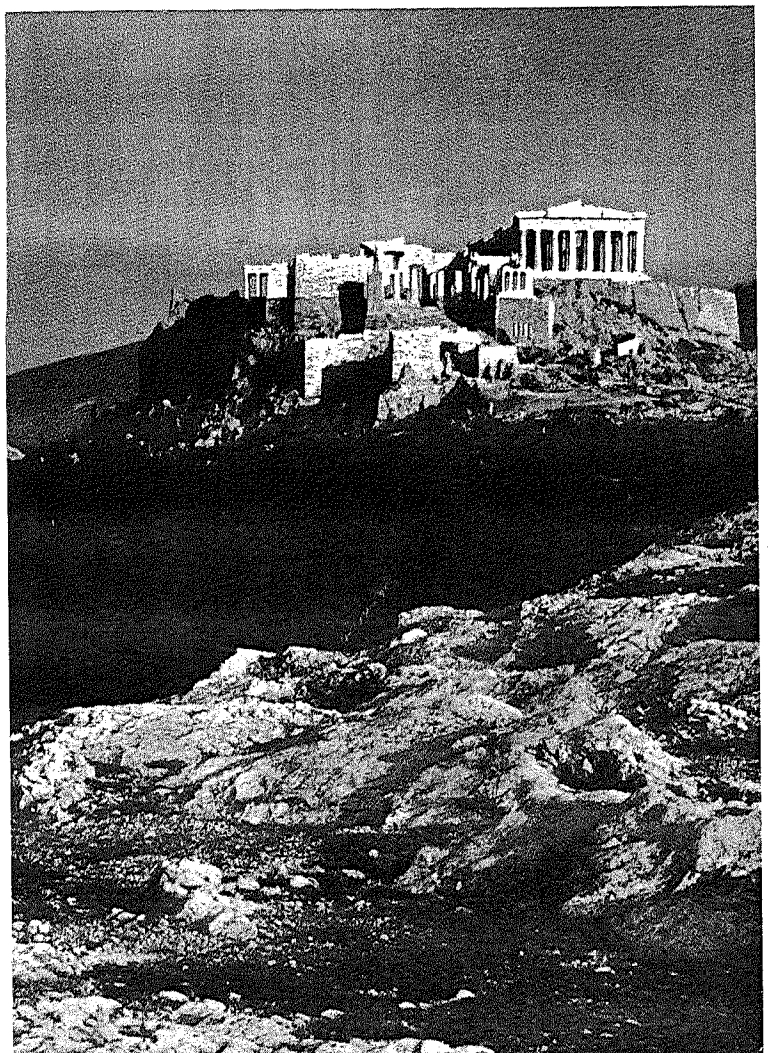
IMPERIAL KATSURA PALACE GARDEN



THE ACROPOLIS

individuality of man. Surely a united duality can be achieved by accounting for man as a unique individual rather than as a species, man in nature.

Let us by all means honor the attribution of dignity, even divinity, to man. But do we need to destroy nature to justify man—or even to obtain God's undivided attention? We can only be enlarged by accepting the reality of history and seeing ourselves in a non-human past, our survival contingent upon non-human processes. The acceptance of this view is not only necessary for the emancipation of western man, it is essential for the survival of all men.

If the Orient is the storehouse of the art of naturalism, it is the West that is the repository of anthropocentric art. It is a great if narrow inheritance, a glorious wealth of music and painting, sculpture and architecture. The Acropolis and Saint Peter, Autun and Beauvais, Chartres and Chambord, Ely and Peterborough—all speak of the divinity of man. But when the same views are extended and used as the structure for urban form, their illusory basis is revealed. The cathedral as the stage for a dialogue between man and God is admirable as a metaphysical symbol. When the supremacy of man is expressed in the form of the city, one seeks the evidence to support this superiority and finds only an assertion. Moreover, the insistence upon the divinity of man over nature has as its companion the insistence in the divine supremacy of some man over all men. It requires a special innocence to delight in the monumental accomplishments of the Renaissance cities, notably Rome and Paris, without appreciating that the generating impulses were more authoritarian than humanitarian—authoritarian towards nature and man.

If we lower the eyes from the wonderful, strident but innocent assertions of man's supremacy, we can find another tradition, more pervasive than the island monuments, little responsive to the grand procession of architectural styles. This is the vernacular tradition. The empiricist may not know first principles, but he has observed relations between events—he is not a victim of dogma. The farmer is the prototype. He prospers only insofar as he understands the land and by his management maintains its bounty. So too with the man who builds. If he is perceptive to the processes of nature, to materials and to forms, his creations will be appropriate to the place; they will satisfy the needs of social process and shelter, be expressive and endure. As indeed they have, in the hill towns of Italy, the island architecture of Greece, the medieval communities of France and the Low Countries and, not least, the villages of England and New England.

Two widely divergent views have been discussed, the raucous anthropocentrism which insists upon the exclusive divinity of man, his role of dominion and subjugation on one hand, and the oriental view of man submerged in nature on the other. Each view has distinct advantages, both have adaptive value. Are the benefits of each mutually exclusive? I think not; but in order to achieve the best of both worlds it is necessary to retreat from polar extremes. There is indisputable evidence that man exists in nature; but it is important to recognize the uniqueness of the individual and thus his especial opportunities and responsibilities.

If the adaptation of the western view towards this more encompassing attitude required the West to accept Tao, Shinto or Zen, there would be little hope for any transformation. However, we have seen that the vernacular of the West has many similarities to the products of oriental pantheism. There is another great bridge, the 18th-century English landscape tradition. This movement originated in the poets and writers of the period, from whom developed the conception of a harmony of man and nature. The landscape image was derived from the painters of the Campagna—Claude Lorraine, Salvator Rosa and Poussin. It was confirmed in a new aesthetic by th
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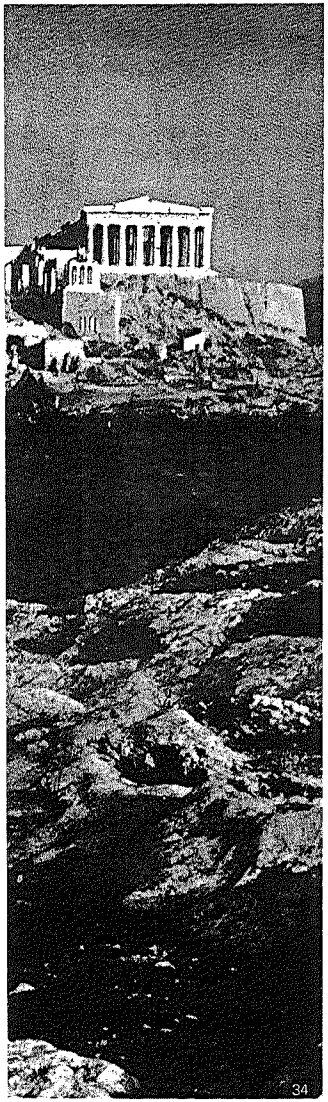

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Surely the minimum requirement today for any attitude to man-nature is that it approximate reality. One could reasonably expect that if such a view prevailed, not only would it affect the value system, but also the expressions accomplished by society.

Where else can we turn for an accurate model of the world and ourselves but to science? We can accept that scientific knowledge is incomplete and will forever be so, but it is the best we have and it has that great merit, which religions lack, of being self-correcting. Moreover, if we wish to understand the phenomenal world, then we will reasonably direct our questions to those scientists who are concerned with this realm—the natural scientists. More precisely, when our preoccupation is with the interaction of organisms and environment—and I can think of no better description for our concern—then we must turn to ecologists, for that is their competence.

We will agree that science is not the only mode of perception—that the poet, painter, playwright and author can often reveal in metaphor that which science is unable to demonstrate. But, if we seek a workman's creed which approximates reality and can be used as a model of the world and ourselves, then science does provide the best evidence.

From the ecological view one can see that, since life is only transmitted by life, then, by living, each one of us is physically linked to the origins of life and thus—literally, not metaphorically—to all life. Moreover, since life originated from matter then, by living, man is physically united back through the evolution of matter to the primeval hydrogen. The planet Earth has been the one home for all of its processes and all of its myriad inhabitants since the beginning of time, from hydrogen to men. Only the bathing sunlight changes. Our phenomenal world contains our origins, our history, our milieu; it is our home. It is in this sense that ecology (derived from *oikos*) is the science of the home.

George Wald once wrote facetiously that "it would be a poor thing to be an atom in a Universe without physicists. And physicists are made of atoms. A physicist is the atom's way of knowing about atoms."* Who knows what atoms yearn to be, but we are their progeny. It would be just as sad to be an organism in a universe without ecologists, who are themselves organisms. May not the ecologist be the atom's way of learning about organisms—and ours?

The ecological view requires that we look upon the world, listen and learn. The place, creatures and men were, have been, are now and are in the process of becoming. We and they are here now, co-tenants of the phenomenal world, united in its origins and destiny.

As we contemplate the squalid city and the pathetic subdivision, suitcase agriculture and the cynical industrialist, the insidious merchant, and the product of all these in the necklace of megalopoles around the continent, their entrails coalescing, we fervently hope that there is another way. There is. The ecological view is the essential component in the search for the face of the land of the free and the home of the brave. This work seeks to persuade to that effect. It consists of borrowings from the thoughts and dreams of other men, forged into a workman's code—an ecological manual for the good steward who aspires to art.

*George Wald in ***The Fitness of the Environment,*** by Lawrence J. Henderson, Beacon Press, Boston, Massachusetts, 1958, p. xxiv.