

PLANTS AND HUMAN LIFE

THE good books are written by men and women who are contenders for some view of the meaning of human life. Sometimes they make use of history as the source of evidence in support of their objective, since history may disclose the drive of human motives behind the actions of determined and aspiring individuals. Sometimes biography seems to supply clearer evidence of why people behave as they do. Other writers may pursue introspective research, finding in intuitive purposes the chief reason for the pursuit of high human ends, and lack of such purposes for the confusion which besets the world. Then there are scholars in particular areas of learning who see in their branches of research a way of orienting thought of benefit to the world and who draw back from the extreme specialization of workers in their field to look at this segment of experience in broad terms, in order to grasp its general significance. This approach was adopted by Edgar Anderson, a distinguished botanist who taught at the University of California in Berkeley, and toward the end of his career wrote his now well-known book, *Plants, Man and Life*, first published in 1952 and reprinted in 1959 by the University of California Press.

Although a botanist, Anderson wrote a book of history—you could call it a history of weeds, of plants largely neglected by botanical specialists. He wrote it, he explained in his preface, for people with "deep-seated curiosity; good, disciplined minds; broad interests; but little technical understanding of plants." But the book he wrote, he added, "was *not* the book my publishers set out to get."

They had accurately detected a ground swell of interest in the story of plants by which man lives; an interesting digest of what botany knows about the subject should have a ready sale. I presented them instead with a detailed exposition of what even the authorities did not know. Various simple facts which

bore on the problem had not even been gathered! Important technical information of new kinds was piling up rapidly, but no one was scanning the whole wide field to see how everything might fit together.

At first the editors tried to keep me on track. . . . Fortunately for my book, the firm went through a violent crisis having nothing to do with me personally. Far graver problems took nearly all my sponsors' attention. Eventually they were most cooperative in publishing *Plants, Man and Life*, the obverse of the book they originally planned.

So Anderson wrote the book he wanted to write and in time received ample fan mail from the sort of people he wrote it for. And there were plenty of specialists in his field, as well as anthropologists, who read the book when it first came out in 1952, and wanted their students to read it, which justified the second edition. What was so interesting about the book? Well, for one thing, the reader learns how the archaeologist of plant life discovers some of the facts about the ancient history of plants. It happens that pollen grains, produced in great quantity, have a glassy, plastic cover which resists decay.

It is this microscopic armor on pollen grains produced by the millions of millions which allows us to use them as an index of the past. As the wind blows them about, they fall as an invisible rain over the land. On lakes they settle gently to the ooze at the bottom. Some of them land on peat bogs where turfy mosses are growing upwards year by year, forming ever thicker layers of peat. By boring down into peat bogs or into the beds of ancient lakes we can bring back to the laboratory narrow columns of ancient peat and muck, still adhering, layer by layer, in the sequence in which originally deposited. In amongst the soil are the ancient pollen grains which shifted down from the sky year by year, decade by decade, century by century. Washing out the pollen grains from the soil particles, identifying them under the microscope, and charting the numbers and proportions of the various kinds is laborious. It is one of those time consuming routine chores which are the backbone of science. It gives a precise local record of

vegetation going back into the glacial period, a record which can be cross-checked with geological data and with archaeological excavations. At the best sites good evidence from glacial terraces can be combined with the evidence from the pollen and with the position in a cultural sequence of the Bronze Age pottery and utensils which became buried in the peat.

Edgar Anderson helps us to understand the oddities which travelers or tourists may have noticed but not been able to explain.

In many of our Western states one drives for hour after hour and sometimes for day after day between long lines of wild sunflowers which, all untended, border the highways. In Idaho, in Wyoming, in the Dakotas, in Kansas and Nebraska, one frequently sees this double line of golden yellow leading ahead all the way to the distant horizon. . . . What is there about man which makes him unconsciously adopt such plants as the sunflower? What is there about sunflowers which permits them to succeed along highways or in railroad yards or on dump heaps, but keeps them away from many native grasslands?

It is not until one sits down to work out precise answers to such questions that he realizes that unconsciously as well as deliberately man carries whole floras about the globe with him, that he now lives surrounded by transported landscapes, that our commonest everyday plants have been transformed by their long associations with us so that many roadsides and dooryard plants are artifacts. An artifact, by definition, is something produced by man, something which we would not have had if man had not come into being. That is what many of our weeds and crops really are. Though man did not wittingly produce all of them, some are as much dependent upon him, as much a result of his cultures, as a temple or a vase or an automobile.

Anderson speaks in particular of the California landscape.

One of the loveliest moments in the California season is when the pervading spring green is just being succeeded by the yellow of summer and fall. The gold spreads along the hilltops first, where the soil is driest. For a week or so the hills are parti-colored, golden along the ridges and outjutting flanks, fading into fresh green at the bottom of the slopes. A few more days and the rolling hills are a yellow-brown, a shining golden yellow which catches the

light and for eight months is a bright foil to the dull black-green live oaks.

The bulk of the plants in these coastal grasslands are not originally Californian. Many of them have been there since before the days of the Forty-Niners, but they trace back to another part of the world with a similar climate and a much older civilization. They are Mediterranean weeds and grasses that started moving in with the earliest Spaniards and swept over the landscape, at times almost obliterating the original vegetation. The native grasses still persist here and there; most of the beautiful wild flowers are native but the bulk of the vegetational mantle is a gift, or a curse, perhaps both a gift and a curse, from the ancient civilizations around the Mediterranean sea. The plants which are growing unasked and unwanted on the edge of Santa Barbara are the same kind of plants the Greeks walked through when they laid siege to Troy. Many of the weeds which spring up untended in the wastelands where movie sets are stored are the weeds which cover the ruins of Carthage and which American soldiers camped in and fought in during the North African campaign.

How did these Mediterranean weeds get to California in such numbers? . . . It is not hard to make a reasonable guess. As soon as livestock were brought in, the weeds traveled in the hay and in the seeds of field crops. Probably the introduction began with the very earliest Spanish visitors. . . Fennel, radish, wild oak, all of these plants are Mediterraneans. In those countries they mostly grow pretty much as they do in California, at the edges of towns, on modern dumps and ancient ruins, around Greek temples and in the barbed-wire enclosures of concentration camps. Where did they come from? They have been with man too long for any quick answer. They were old when Troy was new. Some of them are certainly Asiatic, some African, many of them mongrels in the strictest technical sense. Theirs is a long and complicated story, a story just now beginning to be unraveled but about which we already know enough to state, without fear of successful contradiction, that the history of weeds is the history of man.

The habits and interests of scientists attracted the attention of Edgar Anderson because he saw their effects on the patterns of research. He remarked:

Science for all its integration of fact and theory is a strange kind of anarchy. There is little over-all

planning. Discoveries are made not because there is a crying need for knowledge in that area but because someone has a fascinating new technique and young men become intoxicated with the new field of exploration which has been opened up and dash off into it. There are fads in science. A problem which looks humdrum gets passed up for one in which scientists are currently interested. Eventually someone goes back to the neglected subject with a new set of ideas. That is just now be ginning to happen with the study of cultivated plants.

Anderson writes and quotes from Oakes Ames, under whom he studied in his student years at Harvard. Of Ames he said:

He was one of the few people in this country to take a really intelligent interest in cultivated plants and in his later years he published a small book, *Economic Annuals and Human Cultures*, which is just now beginning to find an appreciative audience. If a scientist is one jump ahead of his fellows in his thinking he is usually their acknowledged leader; if he is two jumps ahead he is thought to be eccentric and rather screwball but sometimes receives belated recognition in his old age. If he is three jumps ahead he is ignored, though posterity many eventually get around to appreciating his evidence as it did with Gregor Mendel. Ames was well ahead of his time in some of his ideas. That he and his austere avoidance of anything which might approach proselytizing have kept him from the wide recognition he deserved.

Speaking in his book of the thousands of years during which our important cultivated annuals became separated from their wild ancestors, he notes that there are species so cared for and made dependent upon man that their primitive ancestors remain wholly unknown. The tremendous antiquity of such plants led Ames to say:

Far be it from the botanist to dispute the theories based on sound anthropological evidence of man's origin or arrival in America. No doubt the migrations and discoveries surmised by anthropologists all took place, as did the recorded discoveries of Magellan, De Soto, Hudson, and others. Nevertheless, the hypothesis based on the evidence presented by the enumeration of economic annuals shows that it would have been impossible for wandering tribes, starting from Bering Strait, to travel more than five thousand miles to tropical South America, and to discover there the ancestors of a

number of useful American plants, and within a period of two or even ten thousand years develop them to the state of perfection they had attained as proved by the prehistoric remains of 1000 B.C. When observed by the first European explorers in 1492, all of these economic species had been diversified and greatly ameliorated, and some of them had been rendered adaptable to every climate from south of the equator to Canada. They had been spread over vast areas of North and South America; they had been rendered dependent on man; they had been so deeply rooted in tribal history that their origin was attributed to the gods. This is too great a task to assign a primitive people in the time allotted. . . .

Biological evidence indicated that man, evolving with his food plants, developed horticulture and agriculture in both hemispheres at a time which may well have reached far back into the Pleistocene.

Anderson comments: "It is too bad Professor Ames might not have lived a little longer to see the tide of scientific opinion turning in his favor."

So far, this discussion has been of a book by a writer who wanted to get across to his readers some basic ideas not commonly dealt with by specialists. He tells in his preface how he went about it.

When I started to write this book, I was given the good advice: "Don't write for an imaginary public. Think of some actual person as your reader; write for him." I knew the kind of man I wanted to interest. Ever since my late teens I had been explaining botany to visitors at various botanical gardens. . . .

Whom to choose as the perfect example? Pandit Nehru of India came to mind, so I kept him in my thoughts throughout the writing. It was years after the book appeared before I knew it really appeals to such readers. In stacks of fan mail the long, intelligent letters were from a dean of research in medical school; the engineer of a transcontinental train; the quiet, astute wife of a leading scientist; the research department head of an international food grain business; a telephone company executive; and so on. . . . One or two of its basic ideas caught on and are now almost old-fashioned. Others of them are being developed among students who call themselves ethnobotanists. In another decade (perhaps with one of his students) one may bring out at last a balanced, accurate, completely revised edition. I hope so.

One of the men who inspired Edgar Anderson and helped him along was Carl O. Sauer, one of the founders of the Geography Department of the University of California in Berkeley. A critic and publisher, Bob Callahan, spoke of the way Sauer worked as an historical geographer, giving primary attention to the impact of human culture on the natural landscape:

He would look at a given landscape, say the prairie plains for example, and say it couldn't have always been this way, these plains look to me like the result of human fires. Sauer built like Sherlock Holmes from individual stems of grass until he was able to make educated guesses on what the earlier landscapes must have looked like. . . . He documented, with a very sympathetic intelligence, the fact that 95% of all the major food crops in the world were domesticated in prehistoric times. And the sophistication of the native intelligence that created this cornucopia is still astounding. All we have done is technologically sophisticate the reproduction systems from that time. We haven't really created anything new.

One learns about North American history from reading Sauer. For one thing, the crops the native Americans knew how to grow enabled the European colonists to survive. Maize, beans, and squash all came to Europe through the colonies. The potato came from Peru, and "the only reason people in Ireland survived during the Great Famine was because Americans sent them corn." Sauer wrote a splendid book for children (ten and older) on the bioregions of America, *Man in Nature*, restored to paperback print by Callahan's Turtle Island Press in the 1970s. Anderson found help and direction in Sauer's work, and Callahan learned about Anderson by reading Sauer. Callahan says:

He [Anderson] was a botanist who became enchanted with an historical vision, the vision of origins. He was a botanist who realized that botany alone might provide historical clues to understanding the past. Botanical survivals might well last long after the time that wooden houses, and initial cultures, and originating languages had all since disappeared. Anderson was also interested in plant migrations which brought him into the field in which Carl Sauer was already working.

We have already quoted from Ames the passage refuting the claim that the Western inhabitants of North America all came via the Bering Strait, and one might ask, well, where *did* the inhabitants of the Americas come from? Perhaps some of them came by sea from Asia, as Thor Heyerdahl made his Kon-Tiki voyage to demonstrate, and another, wider possibility was suggested by Ignatius Donnelly in his book, *Atlantis, The Antediluvian World*, in which he too made use of botanical evidence, along with cultural and archaeological remains linking the peoples of the New World with Africa and Europe.

In his book for children, *Man in Nature*, Sauer does what we have always felt should be done with history books for students, young or old. He goes to the sources and introduces the reader to the first or best tellers about the past. When he comes to the conquest of Mexico by Cortez, he lets Bernal Diaz describe the great market the Spanish found in the City of Mexico. The old soldier who was with Cortez relates:

. . . we were astounded at the number of people and the things it held, and at the good order, for we had never seen such a thing before. Each kind of goods was kept by itself and had its fixed price marked out. Let us begin with the dealers in gold, silver, precious stones, feathers, and mantles. Next there were traders who sold great pieces of cloth and cotton and twisted thread and there were some who sold cocoa. There were those who sold coarse cloth and ropes and sandals all made from the same plant, and sweet cooked roots . . . Then every sort of pottery in a thousand different forms from great water jars to little jugs . . . I am forgetting those who sell salt, and those who make stone knives. . . axes of brass and copper and tin, and gourds and gaily painted jars made of wood. The things are so many and of such different kinds and the great market place was so crowded with people, that one would not have been able to see and ask about it all in two days.

Sauer remarks that there are no markets like this in Mexico today, but "there are still markets in many Mexican towns where one can see many of the things made just as the Spaniards first saw them more than four hundred years ago."

REVIEW

BEHIND THE INSTITUTIONAL FORMS

THERE are some books—a few—which should remain in print or available to interested readers for at least a generation, or for the foreseeable future, by reason of the light they throw on contemporary life. One of these books is A.H. Maslow's *Religions, Values, and Peak-Experiences*, which was first published in 1964 by Ohio State University Press, and later issued in paperback by Viking. This work not only chronicled but contributed to recent changes in religious attitudes, and pointed the way to a radical broadening of the scientific approach to questions about the meaning of human life. For these reasons this text has become a key study of the transitions and directions of the modern mind and should have a place as a modern classic in all serious educational undertakings.

Here we shall give attention to the book's early pages, where Maslow endeavors to free the reader's mind from the grooves of habit formed by conventional views of both religion and science. It is Maslow's intent to alter science into a discipline which provides plenty of room for what amounts to religious inquiry and to suggest the form of self-validating evidence for human beings.

In his introduction he begins by recalling the attack of a patriotic women's organization on the Supreme Court's decision to ban prayer in the public schools. The Court, the ladies claimed, had attempted to destroy "religious values." Maslow strongly disagreed. He said:

I want to demonstrate that spiritual values have naturalistic meaning, that they are not the exclusive possession of organized churches, that they do not need supernatural concepts to validate them, that they are well within the jurisdiction of a suitably enlarged science, and that, therefore, they are the general responsibility of *all* mankind. If all of this is so, then we shall have to re-evaluate the possible place of spiritual and moral values in education. For, if these values are not exclusively identified with churches, then teaching values in the schools need not breach the wall between church and state.

Outlawing prayer in the public schools, he maintained, was not "a rejection of spiritual values," but an action in their defense. He was here dissenting from a familiar idea:

That is to say, very many people in our society apparently see organized religion as *the* locus, *the* source, *the* custodian and guardian and teacher of the spiritual life. Its methods, its style of teaching, its content are widely and officially accepted as *the* path, by many as the *only* path, to the life of righteousness, of purity and virtue, of justice and goodness, etc.

He adds in a note:

As a matter of fact, this identity is so profoundly built into the English language that it is almost impossible to speak of the "spiritual life" (a distasteful phrase to a scientist, and especially to a psychologist) without using the vocabulary of traditional religion. There just isn't any other satisfactory language yet. A trip to the thesaurus will demonstrate this very quickly. This makes an almost insoluble problem for the writer who intent on demonstrating that the common base of all religions is human, natural, empirical, and that so-called spiritual values are also naturally derivable. But I have available only a theistic language for this "scientific" job

Returning in his text to his main point—that for many people only the declarations of organized groups are authoritative—he continues:

This is also true, paradoxically enough, for many orthodoxly positivistic scientists, philosophers, and other intellectuals. Pious positivists as a group accept the same strict dichotomizing of facts and values that the professional religionists do. Since they exclude values from the realm of science and from the realm of exact, rational, positivistic knowledge, all values are turned over by default to non-scientists and to non-rationalists (i.e., to "non-knowers") to deal with. Values can be arbitrarily affirmed by fiat only, they think, like a taste or preference or a belief which cannot be scientifically validated, proven, confirmed or disconfirmed. Therefore, it appears that such scientists and such philosophers really have no argument either for or against the churches; even though, as a group, they are not very likely to respect the churches. . . .

This is the temper, Maslow suggests, that has spread throughout the academic world, affecting all the teachers.

And so today, a very large proportion of our artists, novelists, dramatists, critics, literary and historical scholars are disheartened or pessimistic or despairing, and a fair proportion are nihilistic or cynical (in the sense of believing that no "good life" is possible and that the so-called higher values are all a fake and a swindle).

Certainly the young student coming to the study of the arts and the humanities will find therein no inspiring certainties. What criterion of selection does he have between let us say, Tolstoy and Kafka, between Renoir and DeKooning, or between Brahms and Cage? And which well-known artists or writers today are trying to teach, to inspire, to conduce to virtue? Which of them could even use this word "virtue" without gagging? Upon which of them can an "idealistic" young man model himself?

The thing to be particularly noticed here is that Maslow has shown that the scientifically inclined thinker is as guilty of blind partisanship as the religious bigot. One could add that while religious abuses of the faith of the great mass of humans led in the eighteenth century to the rise of atheism, which eventuated for many in the rejection of any sort of religious conviction and contempt even for metaphysics and serious thought about meaning, the resulting materialism, which matured during the first half of the twentieth century, has in turn brought about cynicism and despair. Yet Maslow was also the champion of the scientific spirit and at the same time of serious spiritual inquiry. What does this mean? We should note that his criticism of religion is directed, not at inner human longings for a higher life, but at the institutional forms, beliefs, and dogmas adopted by the churches: and likewise, his demand for broadening and reform in science was only directed against the organizational claims of the spokesmen of positivism and unbelief, while pointing to the need for study of the inner field of experience and religious aspiration in the spirit of scientific impartiality.

The synthesizing reality which underlies this analysis by Maslow is the peak-experience, which he found to be possible for all humans, although not all recognize or realize this. It is the

experience of feeling oneself to be at unity with all life and being, in ecstatic co-existence with all that is. Maslow was persuaded that the high religions of history came into being as the result of a "private, lonely, personal illumination, revelation or ecstasy of some acutely sensitive prophet or seer." He then adds:

But it has recently begun to appear that these "revelations" or mystical illuminations can be subsumed under the head of "peak-experiences" or "ecstasies" or "transcendent" experiences which are now being investigated by many psychologists. That is to say, it is very likely, indeed almost certain, that these older reports, phrased in terms of supernatural revelation, were, in fact, perfectly natural, human peak-experiences of the kind that can easily be examined today, which, however, were phrased in terms of whatever conceptual, cultural, and linguistic framework the particular seer had available in his time. . . . To understand this better, we must differentiate the prophets in general from the organizers or legalists in general as (abstracted) types. . . . The characteristic prophet is a lonely man who has discovered his truth about the world, the cosmos, ethics, God, and his own identity from within, from his own personal experiences, from what he would consider to be a revelation. . . .

Characteristically the abstraction type of the legalist-ecclesiastic is the conserving organization man, an officer and arm of the organization, who is loyal to the structure of the organization which has been built up on the basis of the prophet's original revelation in order to make the revelation available to the masses. From everything we know about organizations, we may very well expect that people will become loyal to it, as well as to the original prophet and to his vision. I may go so far as to say that characteristically (and I mean not only the religious organizations but also parallel organizations like the Communist Party or like revolutionary groups) these organizations can be seen as a kind of punch card or IBM version of an original revelation or mystical experience or peak-experience to make it suitable for group use and for administrative convenience. . . . This cleavage between the mystics and the legalists, if I may call them that, remains at best a kind of mutual tolerance, but it has happened in some churches that the rulers of the organization actually made a heresy out of the mystic experiences and persecuted the mystics themselves. This may be an old story in the history of religion but I must point

out that it is also an old story in other fields. . . . A similar split can be detected in psychology, and, I am quite sure, in other fields as well, perhaps in *all* human enterprises.

One more quotation will conclude our return to this book. Writing about the dangers of organization to the meaning of higher or mystical experiences, Maslow says:

It has sometimes seemed to me as I interviewed "nontheistic religious people" that they had more religious (or transcendent) experiences than conventionally religious people. . . . Partly this may have been because they were more often "serious" about values, ethics, life-philosophies, because they have had to struggle away from conventional beliefs and have had to create a system of faith for themselves individually. . . . Of course, it would not occur to the more "serious" people who are non-theists to put the label "religious experiences" on what they were feeling or to use such words as "holy," "pious," "sacred," or the like. By my usage, however, they are often having "core-religious experiences" when they report having peak-experiences. In this sense, a sensitive, creative working artist I know who calls himself an agnostic could be said to be having many "religious experiences," and I am sure he would agree with me if I asked him about it.

This is enough of Maslow's thinking to reveal its provocative as well as its liberating character.

COMMENTARY

UPS AND DOWNS OF WORDS

IN a book we keep handy for ready reference, *Studies in Words*, by C .S. Lewis (Cambridge University Press, 1960), there is a passage on what the author calls "verbiage" that we try to read over at least once a year. While the book is addressed to students, it is still more important for writers, who have, one could say, more responsibility. In this passage the writer says:

Verbiage, the murder of a word, happens in many ways. Inflation is one of the commonest; those who taught us to say *awfully* for "very," *tremendous* for "great," *sadism* for "cruelty," and *unthinkable* for "undesirable" were verbiagers. Another way is verbiage, by which I here mean the use of a word as a promise to pay which is never going to be kept. The use of *significant* as if it were an absolute, and with no intention of ever telling us what the thing is significant of, is an example. So is *diametrically* when it is used merely to put *opposite* into the superlative. Men often commit verbiage because they want to snatch a word as a party banner, to appropriate its "selling quality." . . .

But the greatest cause of verbiage is the fact that most people are obviously far more anxious to express their approval and disapproval of things than to describe them. Hence the tendency of words to become less descriptive and more evaluative; then to become evaluative, while still retaining some hint of the sort of goodness or badness implied; and to end up by being purely evaluative—useless synonyms for *good* or for *bad*. . . .

I am not suggesting that we can by an archaizing purism repair any of the losses that have already occurred. It may not, however, be entirely useless to resolve that we ourselves will never commit verbiage. If modern critical usage seems to be imitating a process which might finally make *adolescent* and *contemporary* mere synonyms for *bad* and *good*—and stranger things have happened—we should banish them from our vocabulary.

Later in the book Mr. Lewis adds to this account:

Unless followed by the word "education" *liberal* has now lost this meaning [knowledge which "stands on its own pretensions"]. For that loss, so damaging to the whole of our cultural outlook, we must thank

those who made it the name, first of a political, and then of a theological, party. The same irresponsible rapacity, the desire to appropriate a word for its "selling power," has often done linguistic mischief. It is not easy now to say at all in English what the word *conservative* would have said if it had not been "cornered" by politicians. *Evangelical*, *intellectual*, *rationalist*, and *temperance* have been destroyed in the same way. Sometimes the arrogation is so outrageous that it fails; the Quakers have not killed the word *friends*. And sometimes so many different people grab at the coveted word for so many different groups or factions that, while it is spoiled for its original purpose, none of the grabbers achieve secure possession. *Humanist* is an example; it will probably end by being a term of eulogy as vague as *gentleman*.

In his last chapter Mr. Lewis addresses himself to critics:

When we write criticism we have to be continually on guard. . . . If we honestly believe a work to be very bad we cannot help hating it. The function of criticism, however, is "to get ourselves out of the way and let humanity decide"; not to discharge our hatred but to expose the grounds for it; not to vilify faults but to diagnose and exhibit them. Unfortunately to express our hatred and to revenge ourselves is easier and more agreeable. Hence there is a tendency to select our pejorative epithets with a view not to their accuracy but to their power of hurting. If writing which was intended to be comic has set our teeth on edge, how easily the adjectives *arch* or *facetious* trickle out of the pen! But if we do not know exactly what we mean by them, if we are not prepared to say how comic work which errs by *archness* and *facetiousness* differs from comic work which errs in any other way, it is to be feared that we are really using them not to inform the reader but to annoy the author—*arch* or *facetious* being among the most effective "smear words" of our period. In the same way work which obviously aspires and claims to be mature, if the critic dislikes it, will be called *adolescent*; not because the critic has really seen that its faults are those of adolescence but because he has seen that adolescence is the last thing the author wishes or expects to be accused of.

Studies in Words is filled with illustrations of the offenses the writer describes. Reading it will surely make a writer more careful, more *conscientious* in his choice of words.

What else is the book about?

It tells how the meanings of words change over centuries of use, and how ambiguities enter the common language. The words examined in this way are Nature, Sad, Wit, Free, Sense, Simple, and Conscience and Conscious. The reader, if he happens to use words a great deal, and to wonder about their meanings, will be delighted to find explanation of many things that have puzzled him.

Another achievement of the book is to make the reader suspicious of dictionary definitions, which seems all to the good.

CHILDREN ... and Ourselves A LOST TREASURE

IN the *American Scholar* for this summer, Diane Ravitch, who teaches history and education at Teachers College, Columbia University, in New York, gives the results of her investigation of the study of history in the early elementary grades in the United States public schools—kindergarten through the third grade. She found that though the states make the decisions, there is actually a national curriculum for the K-3 cycle.

In kindergarten, first grade, second grade, and third grade, the social studies curriculum is overwhelmingly sociological and economic. These four years are organized around the study of the social relationships within the home, the school, the neighborhood, and the local community. Behind this curriculum is a welter of dubious assumptions. Immersion in the sociology and economics of the child's own world is supposed to build the child's self-esteem (because she studies herself and her own family), socialize her as a member of the community, prepare her to participate in political activities, and develop her awareness of economic interdependence (by learning that the farmer grows wheat for bread, which is processed by someone else, baked by someone else, and delivered to the neighborhood grocery store by someone else). None of these assumptions has ever been empirically tested; very likely it would be impossible to do so, other than to note that most elite private schools have a curriculum for these grades that reaches beyond the child's immediate experience to the study of mythology, other cultures, and biographies of significant people.

But in the public schools—the curriculum of "me, my family, my school, my community" dominates the early grades in American public education.

This "scope and sequence" defines the social studies of the first four grades. It contains no mythology, legends, biography, hero tales, or great events in the life of this nation or any other. It is tot sociology. . . .

So widespread is this pattern in American public schools that one might assume that this particular sequence represents the accumulated wisdom of

generations of educational research. Teachers believe that this sequence is there because it has always been there. Those professionally responsible for developing curricula believe that this pattern rests on a foundation of cognitive and developmental research. In fact, these assumptions are not true. The present pattern in the early primary grades has not always been there; and it is not derived from research into child development or cognitive psychology. As far as I can tell, it is there because none has questioned why it is there. It persists today because it is the status quo, the traditional approach; it survives because of a circular assumption that it wouldn't be there unless there was a very good reason for it to be there. While other parts of the social studies curriculum have been debated and revised over the past generation, the early grades have escaped scrutiny.

Diane Ravitch speaks of the influence of progressive educators such as William Kilpatrick, Harold Rugg, and John Dewey who sought to make elementary curricula "more dynamic, more realistically connected to the social, economic, and political problems of the nation." She turns to the work of Paul Hanna, who originated a curriculum for the state of Virginia "organized around what Hanna called 'unitary life experiences' rather than such traditional subject matter as history, civics, and geography."

The emphasis throughout the Virginia curriculum was on "major social functions," such as production, distribution, consumption, conservation, transportation and communication, exploration and settlement, education, recreation, extension of freedom, aesthetic expression, and religious expression. Grade one was devoted to "home and school life—individual adjustment to the immediate environment"; grade two was devoted to "community life—adaptations to neighborhood relationships"; grade three was "adaptations of life to environmental forces of nature—typical communities living under contrasting conditions of topography, climate, etc."; and grade four was "adaptations of life to advancing physical frontiers—the story of man's terrestrial exploration and settlement."

The new social studies curriculum eventually came to be known as "expanding environments," or "expanding horizons," or "expanding communities of men" (Hanna's favored term).

This conception, Diane Ravitch says, was an idea whose time had come.

By the 1940s, the expanding environments approach to the early elementary grades had been adopted in almost every state and school district. It is today the universal curriculum of the elementary school.

Then she says:

It is important to recall that the expanding environments approach was established not as a result of the findings of cognitive or developmental psychology, but as a result of specific social and political values. The psychological claims on its behalf have never been tested; in *The Uses of Enchantment*, Bruno Bettelheim challenged the psychological premises of the Expanding Environments approach. Bettelheim contends that classic folktales and fairy tales and hero stories help children live better with their existential anxieties and dilemmas; further, they help children gain a surer and more confident sense of themselves by enabling them to identify with heroes who have struggled against life's difficulties and emerged victorious. The realism of most elementary readers, Bettelheim argues, is banal, and stories about everyday reality lack the power to address children's deepest emotional and psychological needs. The psychological function of fantasy, myth, fairy tale, and hero stories is vital, Bettelheim contends, for children in contemporary society.

Diane Ravitch is obviously on Bettelheim's side of this argument. She says:

Until expanding environments managed to push historical materials out of the social studies curriculum, children in the early grades in most public schools learned about primitive peoples, heroes, myths, biographies, poems, national holidays, fairy tales, legends. The story of Robinson Crusoe and the study of Indian life were particular favorites. Stories about explorers, pioneer life, American heroes (especially Washington and Lincoln), and famous events were staples of the first three grades. The line between historical literature and general literature was virtually nonexistent. Teacher guides emphasized the importance of telling stories to the children in the teacher's own voice. Most children read (or listened to) the Greek and Roman myths and folklore from "the oriental nations," "the Teutonic peoples," and elsewhere. The third grade in the public schools of Philadelphia studied "heroes of

legend and history," including "Joseph, Moses; David; Ulysses; Alexander; Horatius; Cincinnatus; Sigfried; Arthur; Roland; Alfred the Great; Richard the Lion Hearted; Robert Bruce; William Tell; Joan of Arc; Peter the Great; Florence Nightingale."

The proof of the pudding . . . is that children *enjoy* it; they learn painlessly when their lively minds and their sense of romance and adventures are engaged. . . .

Today, children in most American public schools do not read fairy tales, myths, folklore, legends, sagas, historical adventure stories, or biographies of great men and women unless the teacher introduces them during reading period. However, we know from recent studies of reading instruction that current reading methods depend almost entirely on basal readers, a species of textbook containing simple stories about ordinary children, families, and neighborhoods. With rare exceptions, the basal readers do not contain rich historical and literary content.

Diane Ravitch says at the end of her article:

There is nothing inevitable or irreversible about the present state of affairs. It ought to be the rule, rather than the exception, that young children listen to, read, act out, and discuss fairy tales, myths, legends, folklore, heroic adventures, legends, biographies, and history stories. The teachers who bring "real books" into the classroom should be typical, not mavericks. But attention must be paid by an intelligent, informed, and persistent public, or the democratic culture that we claim to prize will be beyond our reach.

FRONTIERS

Musings About The Family Farm

IN the Summer, Fall, and Winter 1986 issues of the quarterly *Land Stewardship Letter* (issued by the Stewardship Project, Stillwater, Minn.) the editors published in three parts an address given by Wendell Berry early that year in St. Paul—"A Defense of the Family Farm." In it at the beginning he remarked that "one remembers uneasily that there has been a public clamor in defense of the family farm throughout all the years of its decline—that, in fact, during all the years of its decline the family farm has had virtually no professed enemies, but that some of its worst enemies have been its professed friends." He then proceeds to a working definition of the family farm as "a farm small enough to be farmed by a family, and one that is farmed by a family—perhaps with a small amount of hired help." It is not a farm that is owned by a family and worked by other people. "The family farm is one that is properly cared for by its family."

He goes on, making other distinctions and qualifications, then saying:

The idea of the family farm, as I have just defined it, is conformable in every way to the idea of good farming: farming that does not destroy either farmland or farm people. The two ideas may, in fact, be inseparable. If family farming and good farming are as nearly synonymous as I suspect they are, that is because of a law that is well understood, still, by most farmers, but that has been ignored in the colleges and offices and corporations of agriculture for thirty-five or forty years. The law reads something like this: land that is in human use must be lovingly used; it requires intimate knowledge, attention, and care.

Gradually, as one reads this address, one begins to realize that Berry is not talking so much about actual farming as about the kind of humans it takes to farm well. He is talking about the quality of the people who naturally become good farmers, what they feel responsible for, how they treat one another, the kind of communities they evolve and work to sustain. As he puts it:

There is one more justification, among many, that I want to talk about: namely, that the small farm of a good farmer, like the small shop of a good craftsman, gives work a quality and a dignity that is dangerous for human work to go without. Work without quality and without dignity is a danger to the worker and to the nation. If using ten workers to make one pin results in the production of many more pins than the ten workers could produce individually, that is undeniably an improvement in production, and perhaps uniformity is a virtue in pins. But in the process ten workers have been demeaned; they have been denied the economic use of their minds; their work has become thoughtless and skill-less. Robert Heilbroner says that such "division of labor reduces the activity of labor to dismembered gestures."

Eric Gill; the English artist and craftsman, called this dismemberment of labor "a crucial distinction between *making* and *doing*," and regarded mere "doing" as "the degradation of the mind." Berry comments:

The degradation of the mind, of course, cannot be without consequences. One obvious consequence is the degradation of products. When workers' minds are degraded by loss of responsibility for what is being made, they cannot use judgment; they have no use for their critical faculties; they have no occasions for the exercise of workmanship, of workmanly pride. And the consumer is likewise degraded; the consumer is simply denied the opportunity for qualitative choice. That is why we must now buy our clothes and immediately resew the buttons. It is why our expensive purchases quickly become junk.

We now see why agriculture is chosen by Berry to write about as the means of the restoration of culture in the United States.

The small family farm is one of the last places—they are getting rarer every day—where men and women, and girls and boys too, can answer that call to be an artist, to learn to give love to the work of their hands. It is one of the last places where the maker—and some farmers still do talk about "making the crops"—is responsible from start to finish for the thing made. This will perhaps be thought a spiritual value, but is not for that reason an impractical or uneconomic one. In fact, from the exercise of this responsibility, this giving of love to the work of the hands, the farmer, the farm, the consumer, and the nation, all stand to gain in the most practical ways: they gain the means of life; they gain the goodness of

food; they gain longevity and dependability of the sources of food, both natural and cultural. The proper answer to the spiritual calling becomes, in turn, the proper fulfillment of physical need.

Berry is not only perceptive; he is also tough-minded. Turning to our present condition, he asks why, with all these splendid justifications and far-reaching responsibilities, the family farm should be failing, in a decline that has lasted for some fifty years. He says:

I have spent years trying to answer this question, and I am sure of some of the answers, but I am also sure that the complete answer has to do with who and what we are as a people; the fault lies in our identity, and therefore will be hard for us to see.

But we must try to see, and the best place to begin, maybe, is with the fact that the family farm is not the only good thing that is failing among us. The family farm is failing because it belongs to an order of values and a kind of life that are failing. We can only find it wonderful, when we put our minds to it, that many people now seem willing to mount an emergency effort to "save the family farm" who have not yet thought to save the family or the community, or the neighborhood schools or the small local businesses, or the domestic arts of household and homestead, or cultural and moral tradition—all of which are also failing, and on all of which the survival of the family farm depends.

There is much more in this article on the amoral assumptions of the industrial society, and toward the end Berry says, in behalf of his contentions: "What is being proposed, in short, is that farmers find their way out of the gyp-joint known as the industrial economy."