A Fair Shake for Everything on Earth

THE RIGHTS OF NATURE

A History of Environmental Ethics. By Roderick Frazier Nash. 290 pp. Madison: University of Wisconsin Press. \$27.50.

By Philip Shabecoff

O animals have rights? Do trees? Do humans have an obligation to behave ethically to rivers? To rocks? Viruses? The entire planet?

As this millennium draws to a close, these are not merely provocative questions for abstract philosophical debate but, as Roderick Frazier Nash points out in "The Rights of Nature," issues of intense interest to theologians, lawyers, legislators and even scientists. Radical environmentalists, particularly in the United States, are already demanding that legal and ethical protection be extended to all of nature, and a few of them have demonstrated a willingness to fight,

As described by Mr. Nash, the circle encompassing the ethical rules governing individual and social behavior has expanded slowly and irregularly throughout history. Starting by granting rights to themselves, humans gradually enlarged the circle to include the family, the tribe, the nation and, in theory if not in practice, the entire community of Homo sapiens. When Thomas Jefferson wrote that that all men were created equal and endowed with certain inalienable rights, it was understood he was talking only about white males.

break the law and even die in support of this conviction.

Philip Shabecoff covers environmental issues as a correspondent in the Washington bureau of The New York Times. He is writing a book about the environmental movement in the United States.

Since the American Revolution, however, the right to ethical treatment has been extended, at least by law and social consensus, to include women and ethnic minorities.

The next page in this history — the extension of ethical and legal rights to animals, plants and the rest of the natural world — is now being written, Mr. Nash believes. For a growing number of people, throughout the world but particularly in the United States, the belief is taking root, he writes, "that nature, or parts of it, has intrinsic worth which humans ought to respect."

"From this perspective," Mr. Nash continues, "one can regard environmental ethics as marking out the farthest limits of American liberalism. The emergence of this idea that the human-nature relationship should be treated as a moral issue conditioned or restrained by ethics is one of the most extraordinary developments in recent intellectual history."

The idea that nature has rights and is entitled to ethical consideration is not a new one. Some Eastern religions define humans as only part of a great chain of being. Baruch Spinoza contended in the 17th century that everything in nature was part of a substance created by God. But in the Judeo-Christian tradition of the West, man was created to master nature, not to be part of it. Where there was an I-Thou relationship between human beings and God and among human beings, there was an I-It relationship between man and nature.

However, as environmentalism has evolved as a social movement in recent years, Mr. Nash says, the concept of liberating nature from persecution by humanity has gained adherents. Federal law, he notes, provides legal protection to animals and plants through the Endangered Species Act and the Marine Mammals Protection Act. The Endangered Species statute even affords legal rights to *places* by protecting the habitats of species threatened by extinction. The Wilderness Act, passed 25 years ago, also preserves wilderness areas from permanent intrusion by human beings.

Mr. Nash points to the increasingly aggressive positions of so-called deep environmentalists and other radicals who insist that nature has intrinsic and inalienable rights that have nothing to do with its value to people. Some of these radicals have thrown themselves before bulldozers to protect virgin forests and chained themselves to rocks on a river bank to prevent the river from being dammed. Other radicals have committed acts of "ecosabotage," such as driving spikes into trees destined for lumberjacks, to protest the destruction of nature.

Mr. Nash, a professor of history and environmental studies at the University of California, Santa Barbara, is the author of "Wilderness and the American Mind," considered by many to be a classic study of how the wild frontier shaped the national character. "The Rights of Nature" is so smoothly written that one almost does not notice the breadth of scholarship that went into this original and important work of environmental history.

OR the most part, Mr. Nash takes no position on questions of ethical duties owed the natural world. Only in an epilogue, in which he compares the radical environmentalists to the abolitionists of the early part of the 19th century, does he indicate where his sympathies lie. Just as the antislavery radicals were scorned for insisting that slaves were human beings with rights, today's radical environmentalists are laughed at for suggesting that nature is "the latest minority deserving a place in the sun of the American liberal tradition," he says. But with the groundwork now laid for "mass participation in ethically impelled environmentalism," Mr. Nash believes, there is a real possibility of serious confrontation with those who profit from exploitation of the environment.

"If this situation, with its intellectual and political similarities to antebellum America, promises once again to endanger domestic tranquility," Mr. Nash warns, "it is not the fault of history."

8/12

When a change is as good as a nightmare

One of the techniques of brainwashing is to subject a person to a rush of quick changes. A hot bath, then a cold bath, a drastic change of food, light followed by darkness, noise by silence, and the torturer has an infinitely suggestible victim, an unhinged human being. We are going through something of the sort today and I believe that the rate of change being forced on us is more than we can take. If we are a listless, inefficient nation it is not because we are a lazy bunch of fuddyduddies clinging to nineteenth Century methods but because we have been subjected to a speed and quantity of change which are beyond human endurance.

Go out to the greengrocer and it has become a boutique. Take a road you could have driven blindfold a year ago and it has become a lunar landscape. Take out your purse and it is full of your redesigned railway station in two seconds. Tower blocks, lonely and terrifying, piercing human security.

the sky. Black faces every where, and foreign voices. Half the streets you knew torn down. Couples copulating on the cinema screen, in colour. New telephone numbers and postal codes. Beef costing nearly £1 a pound. Now the EEC. The total

is stupefying.

Of course many of these changes are easily acceptable. The whole of life is a matter of adaptation. You adapt when you go outdoors from indoors, from town to country, from summer to winter, when you meet new people or (more radical) move your house or change your job. The capacity to adapt varies with different people and if we moved at the pace of the most rigid—say, the man who throws the soup at his wife if dinner is five minutes late-we would never progress at all.

But change can go so far that nobody can adapt to it, which I suspect is happening now. Three sorts of change are particularly difficult to take. There are the changes which may be good in strange coins. Buy a ticket at themselves but come too thick and too fast. There are the and a man pushing a piece of changes which nobody wants but automated furniture takes two are imposed by pipsqueaks in minutes to produce the ticket authority. And there are the he used to pull out of the shelf territorial changes, which strike most deeply at the heart of

Anne Scott-James

The first sort is a natural re-should be sent to the galleys. Employment Tax and Mr Barber scraps it and brings in Valueadded Tax, leaving the accountants gasping and the whole fiscal system clogged. In the same way, a pile up of legislation on education and child welfare, nearly all of it good in itself, has left teachers, doctors and social workers literally dazed. A voung and brilliant specialist in child behaviour, already thrown out of gear by the reorganization of the government of London and by the Children and Young Persons Act and with Health Service reforms in the pipeline, said to me: "If one more thing changes, I'll be needing help, not giving it." And you do not have to be a Fascist beast to believe that the raising of the school leaving age to 16 has come too soon to be manage-

The changes which nobody wants and are bad in themselves are much more frustrating. Anybody who ordains change, "for convenience" administrative

sult of the party system. Mr What genius designed the new Callaghan brings in Selective halfpenny, a coin so small that you have to take your gloves off to get it out of your purse? What self-satisfied jack-in-office reformed the telephone directory so that the names are no longer in alphabetical order? (I expect he got an honour for it.) What monster invented builtin obsolescence, so that you can never buy the same model of car twice, or even replace a favourite kettle? Who really wanted the New English Bible? I think it was V. S. Pritchett who aptly described its stodgy prose as "the language of bureaucracy". It is the fact that the change is imposed that infuriates. If somebody wants to design a tissue-paper trouser suit or to breed a pink daffodil, good luck to him, because you don't have to buy it. But you do have to use the phone book and the coins.

> torial changes, and it would be no bad thing if the use of bulldozers were to be banned for a year while we all drew breath. stretching

One is warned against drawing towards the security of the past. animals and humans, but if rats and birds and insects and even fishes love their territory dearly. it is not unreasonable to suppose that a human being suffers shock if he is taken forcibly from his own bit of space, or if his surroundings are made too impersonal and strange.

Some sociologists, such as Professor Terence Morris of London University, think that "the pressure toward continuous change ". particularly of the physical environment, falls hardest on the adolescent. It is tough on anyone of any age to find his view suddenly blotted out by a flyover or his local shop submerged in an underpass, not least on the young, and I am never surprised when children from high rise flats throw filth over the modern sculpture which the architects have thoughtfully placed at the entrance. "Do you want to keep the slums?" has never seemed to me a fair question. There must, dear God, be something in between slums and concrete massifs.

Perhaps my protest against Harshest of all are the territhe pace of change is a purely middle aged reaction, but I don't think so. The young, too (and I find this touching) are loving fingers

too close an analogy between A best selling present in all the smart shops at Christmas was pot-pourri, not as a gift from old lady unto old lady, but from one trendy girl to another. Herb pillows, lavender bags, facsimiles of Victorian books, and all things homey and crafty from scented candles to replicas of eighteenth-century beechwood lemon squeezers were favourite presents with the young Chel-

> The passion for old cottages is a similar cry of the soul for continuity. Recently a nearderelict thatched cottage in the country was bought by a young couple for £25,000 on the same day that a terraced house in London in good condition changed hands for only £22,000. And it was a girl of 21 who exclaimed to me in anguish: "They've ruined Harrods!" when they took away the central bank and the leather armchairs and replaced them with an American-style beauty shop.

> I don't claim that Harrods' armchairs were a bastion of the nation: but if all the old familiar furniture goes out of the wiadow we may become too disorientated for real progress to

he possible.

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Seattle Post-Intelligencer

A6 S Thurs., Sept. 6, 1979

McNeil Island Proposal Rejected

P-I News Services

OLYMPIA — Washington Gov. Dixy Lee Ray has official word on what she has been telling critics for a long time: the federal government is unwilling to take state prisoners at McNeil Island Penttentiary.

The two House speakers,

Will Mother Earth Eventually Strike Back?

By Robert Musel

LONDON — (UPI) — If mankind insists on antagonizing it, the planet Earth will be the most dangerous and determined opponent ever to face the human race.

Dr. Kit Pedler, a distinguished researcher, believes this statement to be true. He is one of a number of scientists who follow the hypothesis of Dr. James Lovelock that the Earth is not a neutral and impassive stage for a myriad of living things, but a "hiving" entity with the equivalent of senses, intelligence and memory and the capacity to act.

Attack the thin green rind of life that envelops it and the Earth, fully capable of recognizing and repairing damage done to itself, will strike back.

Pedler considers the "Gaia Hypothesis" — Gaia was the Earth-mother goddess of the ancient Greeks — that the Earth is a life form committed to perpetuate itself, to be "the most important single scientific work of recent time."

Lovelock and his followers have published a

number of works on the theory. Pedler's contribution is a book, "The Quest for Gaia," which contends that if humans insist on living by processes that damage the Earth and its essential environment, we may be seeing the last few generations of our race.

It is, he says, not to late to learn to live comfortably together as man and Earth did before the industrial era without going back to stone age techniques. The key is heat — "the ultimate pollutant" that Gaia cannot tolerate. Mankind is

producing so much waste heat to preserve the life style it considers essential that there is bound to be an irreconcilable conflict.

There can be only one winner, Pedler warns.

Pedler concedes it is difficult at first to grasp the idea of an intelligent Earth. The Lovelock hypothesis holds that both living and non-living systems on the planet are combined to form the main anatomical framework of the Earth "organism." It argues that life took hold here not just because physical conditions were suitable but by itself actively modifying the non-living environment.

Thus the relationship between all the living and non-living parts of the Earth organism are a complex of self-stabilizing systems with the inbuilt goal of keeping planetary conditions at an optimum for the maintenance of life.

"There are no senses, muscles or nerves in Gaia in the human anatomical sense," Pedler says. "But there are lines of communication and systems which act in a similar way."

U.S. Indians Ask Refugee Status in Canada

VANCOUVER, B.C. — (AP) — American Indian Movement activists have applied for refugee status in Canada after being told they were ineligible for political asylum.

John Trudell, a leader of the Indian movement, said Tuesday the group hoped Canadians would accept the Indian activists as they accepted Vietnam war resisters.

The United States is not among the countries

whose citizens are eligible for for political asylum in Canada, said immigration official Walter Jennings. However, anyone can apply for refugee status.

"They have to comply with U.N. (refugee) requirements, which include fear of persecution or fear for liberty if they return home," he said.

Canadian immigration officials refused to discuss the case, but one said, "It is hard to be-

lieve there is political discrimination in the U.S."

Trudell and Darrell Butler have filed applications that are to be reviewed by an Ottawa-based committee, including officials of the federal External Affairs Ministry and Immigration Department and a Canadian U.N. representative who acts as an official observer.

Their visitors' visas were extended to Oct. 5 pending a decision on the applications.

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PATERFAMILIAS — Christopher Lasch, author of "Haven in a Heartless World," a book on history of the family as a social unit, poses in front of Avon, N.Y., home with daughter Kate (left), son Chris and wife, Nell.

Familial decline laid to advent of 'helpers'

By TERRY KIRKPATRICK ROCHESTER, N.Y.

(AP) — So your marriage is falling apart and you can't get a grasp on your

You're not alone. The family in general is coming unglued, according to one social historian, and you can blame it on the experts.

Christopher Lasch decries the rise in this century of the "helping professions" — the flock of teachers, doctors, psychologists, counselors, social workers and juvenile court officers who, claiming expertise, have assumed the family's main function: raising children.

The problem, the University of Rochester professor says, has its roots at the turn of the century. The divorce rate was rising then, and the birth rate among the up-per classes was falling. Women were seeking new roles for themselves, and traditional morality was being derided. But something else was afoot:

Sociologists, previous-ly content with debating how the family began in the first place, started studying contemporary families and their roles.

A consensus emerged, Lasch says. It reserved for the family the role as a haven from the cruel outside world but simultaneously justified the transfer of its other roles healing, educating,
 protecting — to the helping professions.

Hence Lasch's book, "Haven in a Heartless World," is subtitled "The Family Besieged."

As a result of this ero-sion of the family's functions, parents, lacking confidence in themselves and confused over whose advice to follow, hesitate to get deeply involved in their children's upbring-ing. Their children, then, are shaped primarily by advertisers, peers and professionals.
"Children are being

shaped by experiences over which parents have very little control," Lasch

'In addition, parents are increasingly uncertain about what it is they want to transmit to their children or how to bring about certain results. They are necessarily dependent on expert advice."

'Once you define parents as consumers of advice you've already defined a dependent relationship, so it doesn't do much good to tell parents, in effect, to become more knowledgeable in their consumption.

"The only solution is to persuade people they're actually able to solve their own problems. But that's a painfully slow business and implies the need for very sweeping social changes."

When the industrial

revolution overcame the feudal system, a similar pattern emerged. Work was taken from the home and put in a factory. Then knowledge work, of craftsmanship, was taken from workers and given to managers and engineers.

"So you've got a kind of contradictory development. If it becomes impossible to define one's identity with one's work, the whole burden meaning is placed on activities outside of work. It becomes necessary to seek satisfactions in family life.

"At the same time, the family is deprived of the means to provide that satisfaction because of its continuing invasion.'



by Joan Didion

Life June 5, 70

A generation not for barricades

I am talking here about being a child of my time. When I think about Berkeley I think about an afternoon early in my sophomore year there, a bright autumn Saturday in 1953. I was lying on a leather couch in a fraternity (there had been a luncheon for the alumni, my date had gone on to the game, I do not now recall why I had stayed behind), lying there alone reading a book by Lionel Trilling and listening to a middle-aged man pick out on a piano in need of tuning the melodic line to Blue Room. All that afternoon he sat at the piano and all that afternoon he played Blue Room and he never got it right. I can hear and see it still, the wrong note in "We will thrive on/Keep alive on," the sunlight falling through the big windows, the man picking up his drink and beginning again and telling me, without ever saying a word, something I had not known before about bad marriages and wasted time and looking backward. That such an afternoon would now seem implausible in every detail—the very notion of having had a "date" for a football luncheon now seems to me so exotic as to be almost czarist—suggests the extent to which that abstract called "the revolution" has already taken place, the degree to which the world in which so many of us grew up no longer exists.

The difference between going to college when I did and going to college in 1970 has been on my mind quite a bit these past weeks, weeks in which not only Berkeley, where I went, and UCLA, where I once taught, but dozens of other campuses were shut down, incipient battlegrounds, the borders sealed. To think of Berkeley as it was in the 1950s is not to think of barricades and reconstituted classes. "Reconstitution" would have sounded to us then like Newspeak, and barricades are never personal.

We were all very personal then, sometimes relentlessly so, and, at that point where we either act or do not act, most of us are still. I suppose I am talking about precisely that: the ambiguity of belonging to a generation distrustful of political highs, the historical irrelevancy of growing up convinced that the heart of darkness lay not in some error of social organization but in man's own blood. If man was bound to err, then any social organization was bound to be in error. It was a premise which still seems to me accurate enough, but one which robbed us early of a certain capacity for surprise.

At Berkeley in the 1950s no one was surprised by anything at all, a donnée which tended to render discourse less than spirited, and debate nonexistent. The world was by definition imperfect, and so of course was the university. There was some talk even then about IBM cards, but on balance the notion that free education for tens of thousands of people might involve automation did not seem unreasonable. We took it for granted that the Board of Regents would sometimes act wrongly. We simply avoided those students rumored to be FBI informers. We were that generation called "silent," but we were silent neither, as some thought, because we shared the period's official optimism nor, as others thought, because we feared its official repression. We were silent because the exhilaration of social action seemed to many of us just one more way of escaping the personal, of masking for a while that dread of the meaningless which was man's fate.

o have assumed that particular fate so early was the peculiarity of my generation. I think now that we were the last generation to identify with adults. That most of us have found adulthood just as morally ambiguous as we expected it to be falls perhaps into the category of prophecies self-fulfilled: I am simply not sure. I am telling you only how it was. The mood of Berkeley in those years was one of mild but chronic "depression," against which I remember certain small things that seemed to me somehow explications, dazzling in their clarity, of the world I was about to enter: I remember a woman planting daffodils in the rain one day when I was walking in the hills. I remember a teacher who drank too much one night and revealed his fright and bitterness. I remember my real joy at discovering for the first

time how language worked, at discovering, for example, that the central line of Joseph Conrad's *Heart of Darkness* was in parentheses. All such images were personal, and the personal was all that most of us expected to find. We would make a separate peace. We would do graduate work in Middle English, we would go abroad. We would make some money and live on a ranch. We would survive outside history, in a kind of *idée fixe* referred to always, during the years I spent at Berkeley, as some-little-town-with-a-decent-beach.

As it worked out I did not find or even look for the little town with the decent beach. I sat in the large bare apartment in which I lived my junior and senior years (I had lived a while in a sorority, and had left it, typically, not over any "issue" but because I, the implacable "I," did not like living with 60 people) and I read Camus and Orwell and Henry James and I watched a flowering plum come in and out of blossom and at night, most nights, I walked outside and looked up to where the cyclotron and the bevatron glowed on the dark hillside, unspeakable mysteries which engaged me, in the style of my time, only personally. Later I got out of Berkeley and went to New York and later I got out of New York and came to Los Angeles. What I have made for myself is personal, but it is not exactly peace. Only one person I knew at Berkeley later discovered an ideology, dealt himself into history, cut himself loose from both his own dread and his own time. A few of the people I knew at Berkeley killed themselves not long after. Another attempted suicide in Mexico and then, in a recovery which seemed in many ways a more advanced derangement, came home and joined the Bank of America's three-year executive-training program. Most of us live less theatrically, but remain the survivors of a peculiar and inward time. If I could believe that going to a barricade would affect man's fate in the slightest I would go to that barricade, and quite often L wish that I could, but it would be less. than honest to say that I expect to happen upon such a happy ending.

LETTERS TO THE EDITORS

KENT STATE

Sirs: "Senseless and brutal murder" at Kent State ("Four Deaths at Noon," May 15)? Nonsense! Rather, it was a valuable object lesson to homegrown advocates of anarchy and revolution, regardless of age.

This issue also carried a review of a book you describe as "... this spring's runaway campus best-seller": Jerry Rubin's Do It! Here is an interesting verbatim quote from that little gem: "If there had been no Vietnam war, we would have invented one. If the Vietnam war ends, we'll find another war. Uncle Ho is a yippie agent."

So, Life, who were the villains at Kent State?

PHILIP A. SCHLOSS JR.

Alexandria, Va.

Sirs: In your fearless battle for the rights of the dissenters, can you not even grant those National Guardsmen a liberty as basic as that of dissent? I still assume that an accused man is innocent of a crime, whether it be larceny or murder, until proven guilty.

J. A. WOTKA

St. Louis, Mo.

Sirs: I am looking at the pictures and reading all your fine prose about the four students murdered at Kent. "A-minus average," "a real mind," "an honor student,"—this will mean nothing to the people who believe all dissident students should be shot. It is useless-those of us who care about life and real freedom hear the implication that these were "good, decent kids"; the construction workers in New York and the guardsmen in Ohio don't care. I can no more comprehend their values than they can mine. It astounds and saddens me that our government pursues so many policies which only exacerbate these diversities.

KAREN MOLL

Berkeley, Calif.

Sirs: The four Kent State students were tragically killed because they were a part, however passive, of a riotous mob which repeatedly refused to disperse upon the direct orders of a legally constituted authority. To say that they were killed for "dissent" is to violate outrageously every logicality of cause and effect. One might just as well declare that a Marxist, shot while robbing a gas station of money with which to further his cause, was killed for his political beliefs.

RALPH MILLERTON

Memphis, Tenn.

Sirs: Certainly it was a tragic and senseless event, especially if the innocent were killed . . . but the real senseless part of the entire affair was the lawlessness of some 3,000 students out of 20,000 at Kent State, hell-bent on having their own way regardless of the consequences.

I was taught that if you violate the law, you must be willing to pay the

price. It is against the law to riot . . it is against the law to smash windows and burn buildings, whether on or off campus. I for one applaud the police and National Guard at Kent State or anywhere else in this country for their efforts to maintain law and order. for without it, "we ain't got nothing" except the law of the jungle.

GLEN BOYD

San Diego, Calif.

Sirs: All I know is any time a mob -red or white or black-is after me I am going to defend myself to the best of my ability.

You go to college for an education, not to defy all authority. I never had a chance to even finish grade school. Those fools are throwing their lives away.

D. W. SMITH

Denver, Colo.

Sirs: Your article was excellent, mainly because it contained the words, thoughts and photos of the students. As a mother, K.S.U. alumna and firm believer in nonviolence, I can't help but sympathize with our frustrated young. Too young to vote—old enough to die for a cause we can't condone. How sad that this society blacks out their voices and forces some to turn to violence in order to be heard.

JUDI JENNINGS

Wickliffe, Ohio

Sirs: How did we get so many brilliant children who know all the answers before they're 21? I am weary of them and their posturing. They are causing more pain to this country than all the wars of history.

ALICE MERRILL

Plainfield, N. J.

Sirs: As a mother of a rioting college student, I feel sick about the deaths of these students. I sympathize with the Millers and other parents who lost children. After all, there, but for the grace

of God, lies my son.

I also feel sick that mobs of young people feel they are wiser and more experienced about running the world than the adults who are doing it. I am appalled that people are listening to and being influenced by these (I quote the Millers) "kids" who have had "little

The dollars that were saved to give my son an education would have been better spent educating some other 'kid" who is wise enough to know that a broad education plus broader experience plus a little maturity will add up to a firm, solid, rational, foundation for contributing to life and its necessary changes.

DOROTHY P. CLANCY

Bethesda, Md.

Sirs: The very fact that every major campus in America is a breeding ground for dissent and violence, lawlessness and mob rule is proof enough that youth and education (the brand we have today) are not the saviors of our country.

GEORGE L. BECKELHIEMER Camas, Wash.

CRISIS FOR NIXON

Sirs: In this analysis of President Nixon's "crisis of leadership" (May 15) Mr. Hugh Sidey writes that Lincoln was a man of "inner calm, forbearance, tolerance," etc. The truth is that Lincoln, as President Nixon, was severely criticized by the media of the day for being a "butcher without feelings" for the 400,000 fallen youth of the Civil War. Lincoln, as Nixon, had to stand up to the pressure of defeatism. Had he succumbed to the pressures of the peace movement of that day (the so-called Copperheads), the shrines built to his memory would not have been built.

The fact that President Nixon called the youthful vandals who destroyed academic papers at Stanford University "bums" has been highlighted as a lack of tolerance. Lincoln actually closed down pro-Southern newspapers (as the Chicago Times) because they were destroying his war leadership. Lincoln even deported his major political rival and peace advocate C. L. Vallandigham in order to maintain the morale of the nation and win the war.

The President alone is responsible to the people for the national welfare and security of the nation. His critics might well withhold snap judgments and easy solutions. A little more assent and less dissent might be in order to allow presidential leadership to function.

F. H. SCHAPSMEIER Wisconsin State University Oshkosh, Wis.

YALE

Sirs: John K. Jessup's "Yale Proves Dissent Doesn't Have to Turn Out That Way" (May 15) is one of the more constructive reports coming out of that week's journalism. It depicts wise and capable leadership on the part of Yale's Kingman Brewster under difficult conditions. Mixing responsible firmness with human understanding and translating it into positive results is what is called for at the national level.

MILTON W. BOLLMAN

Evanston, Ill.

SUN CITY

Sirs: I read with much amusement Paul O'Neil's glowing tribute to the local "geriatric ghetto" called Sun City ("For the Retired, a World All Their Own," May 15). True, there aren't many in sight, but Sun Citians have been known to drive into Phoenix just to see what kids look like. We think that the setup is, humanly speaking, quite lopsided—oldsters with oldsters.

TOM R. REYNOLDS

Phoenix, Ariz.

Sirs: Paul O'Neil's article is a highly entertaining and amusing caricature. As

for my wife and me and our friends and acquaintances, we feel that the homes, the people, the planting-city and individual—the opportunity for extraordinary variety of recreational and vocational pursuits, present a way of getting the most out of the precious days we still have in the bank.

CLAIR V. FRY

Sun City, Ariz.

Sirs: In the U.S.A. today, there is no place for the older citizens. This country has become enslaved to "Youth." This is all that is valued, sought after, enhanced and desired. We all contributed, while we were in a position to do so, to make this country great. The younger generation is now proceeding to tear it down. They are not offering to rebuild a better U.S. They are not sacrificing their comfort and desires. We did. We worked, planned and saved for our later years in the hope we could live a pleasant, contented life. Is this too much to ask? Must we be maligned and held up to ridicule because Sun City has become our Mecca?

TERRY J. WOODCOCK

Sun City, Ariz.

LLOYD AND BEAU BRIDGES

Sirs: We were very pleased with Joan Barthel's warm and sensitive piece about our family ("Of Fathers, Sons and Love," May 15).

I was doing the dishes at the time our daughter administered the "ring-on-astring test" over the pregnant tummy of Joan, so was not aware they got their symbols crossed. The ring made a circle and Joan got her girl, though my daughter told her to expect a boy! I thought it might be worthwhile to set this important "old-wives" fact straight, in case any expectant mamas were planning to make the test!

DOROTHY BRIDGES

Westwood, Calif.

Sirs: How wonderful! An article about Lloyd Bridges. He's my favorite actor.

LOUISE M. STEFANIC

Rahway, N. J.

Sirs: Many years ago when Beau was a small child, we were friends and neighbors of Bud (Lloyd) and Dorothy

They were wonderful parents and their love included every child around them. I don't know what perfect parents are supposed to be, but to me they symbolized just that.

The Bridges family was never poor. There was too much beauty and love around them for that.

MINETTE MAGER

El Monte, Calif.

Sirs: How could Casey, Beau or Juli possibly feel more happiness and love if their skin were a different color? Such a remarkably touching story that was!

MR. & MRS. ART KELLEY

Phoenix, Ariz.

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THE LIFE OF BENJAMIN BANNEKER

by Silvio A. Bedini

Scribners, 434 pp., \$14.95

Reviewed by Benjamin Quarles

Silvio A. Bedini, deputy director of the National Museum of History and Technology of the Smithsonian Institution, has written a leisurely paced. carefully researched biography of a black scientist who was born free in Maryland in 1731 and who won a wide reputation only after his semiretirement from tobacco farming in late middle age. Benjamin Banneker was fifty-eight when, encouraged by a neighboring mill owner named George Ellicott, he turned his attention from raising crops to mathematics and astronomy. Two years later, in 1791, George's brother, Andrew, invited Banneker to assist him in making a government-sponsored land survey of what was then known as the Federal Territory and is now the District of Columbia. Before setting out on the task of measuring the capital designed by Major Pierre Charles L'Enfant, Banneker had begun work on an almanac. When the self-educated scientist returned to this project three months later, he had learned, Mr. Bedini writes, "much about the use of instruments for making astronomical observations" and "the need for orderliness and accuracy in the making and maintenance of mathematical calculations." These skills, added to Banneker's being the sole Negro scientist in the America of his time, were to stand him in good stead among publishers. Firms in three different cities were eager to bring out his first almanac, which appeared late in 1791. The initial printing, which sold "in great numbers," was quickly followed by second and third editions. Banneker's almanacs—he went on to write five more—made him a figure of considerable note in the new nation.

Banneker's white maternal grandmother, Molly Welsh, was deported from England on the charge of stealing milk; in America, after serving out her term of indenture, she leased or bought a small farm, and married one of her slaves, a man who claimed to be the son of an African chieftain. It was Molly who taught the young Ben how to read and write. Later he attended a one-room school where, Mr. Bedini informs us, "several white children and two or three black children . . . received instruction together." A classmate of Ben's observed of him that "all his delight was to dive into his books."

Mr. Bedini is informative on a number of hitherto obscure or misunderstood points. He explains—for the first time and in detail—how, at the age of twenty-two, Banneker made a successful striking clock almost entirely from wood; he explodes the myth that Banneker was called upon to reconstruct from memory the layout of the new capital after Major L'Enfant's dismis-

sal; and he reminds us that the real author of the plan for establishing the office of Secretary of Peace, which was initially published in Banneker's almanac for 1793, was Benjamin Rush, not Benjamin Banneker. Mr. Bedini prints both the scientist's letter to then Secretary of State Thomas Jefferson, which Banneker sent along with a manuscript copy of his first almanac, and Jefferson's gracious if somewhat evasive reply. Banneker's letter contains an eloquent defense of his people -"a race of Beings who have long laboured under the abuse and censure of the world . . ."-and, whereas Bedini generally eschews speculation, the mystery of what prompted the rather self-effacing scientist to suddenly speak out so boldy to a man he had never met compels him to indulge in secondguessing:

The fact that nowhere in his surviving letters and papers did Banneker express any concern for the subjugation of his race... or refer again to his purpose in writing to Jefferson, seems to indicate that the letter may have been suggested to him or urged upon him by the Ellicotts or their associates in the [antislavery] movement who foresaw in such a correspondence the opportunity to advertise the almanacs and the abolitionist movement.

While Mr. Bedini illuminates all that he touches, those who may be looking for some light on free black contemporaries of the Banneker family will find very little information about them in this book. Again, although Bedini's evaluation of Banneker as a mathematician and astronomer, based upon the Banneker writings he has unearthed, is an important addition to the history of science in America, the personal Banneker largely eludes his biographer's grasp. Even the forty-five primary source documents cited in full in the book's final section fail to reveal the inner workings of this mild-mannered eighteenth-century scientist.

Still, the volume merits high praise. Mr. Bedini's description of this black man's life is well written, and his overall assessment of Banneker as a symbol of Negro capabilities is soundly reasoned.

Benjamin Quarles, who teaches history at Morgan State College, Baltimore, is an honorary consultant in American history to the Library of Congress. His *Blacks on John Brown* will be published this spring.

LITERARY I. Q. ANSWERS

1 Ff (bull), 2Cg (Call of the Wild), 3Am (deer), 4Kh, 5Je (python), 6Hc (raven, Barnaby Rudge), 7Mb, 8Ol, 9Ii (Three Billy-Goats Gruff), 10 Ea (Born Free), 11 No (Salar the Salmon), 12Lj (pig, Animal Farm), 13Dn (parrot, Treasure Island), 14Gk (monkey, Curious George), 15Bd (Uncle Remus).



Benjamin Banneker and George Ellicott-"a symbol of Negro capabilities."

Daughter of a J. P. Morgan partner who later moved into diplomacy and the United States Senate, young Anne Morrow embodied what Scott Fitzgerald meant when he said the rich are different. Basically, as these early letters show, that difference was one of assumptions: of perfect taste, the right to absolute privacy, and the right to look forward to a serene future, for she possessed the instruments that assured them-servants, summer and winter houses, private railroad cars, and unlimited credit.

Significantly, in Anne's case, that credit was social and intellectual as well as financial. In this country, the Morrow girls associated with Sedgwicks, Cabots, Lamonts, and Blisses. When they toured Europe in a limousine top-heavy with mountains of luggage, they were greeted by men making history. "General Pershing to lunch," was a diary entry in 1926. A few days later, at the League of Nations, Anne considered Jean Monnet "sweet" and Ignace Paderewski "a great, kind-looking, shaggy man."

Although the Morrow girls shared most advantages of Fitzgerald heroines, the syncopation of the jazz age passed them by. Their unfailing diligence, good manners, and obedience to "darling Mother" and "dear Daddy" will stir envy in some current parental hearts-but the senior Morrows set a formidable example. Elizabeth Cutter Morrow was a poet and trustee of Smith College, Dwight Morrow, like so many self-made millionaires, enjoyed "a superabundance of Puritan energy," and, unlike so many of them, practiced the Protestant ethic he professed. Finally, almost alone among his peers, he valued scholarship and imposed it on his heirs. Anne's letters from Smith are larded with literary allusions, often to authors not yet understood by the general public. Pound, Eliot, and Havelock Ellis were part of the "new continent" that excited her-the quoted phrase a reference to Keats. Hardy. another older favorite, was "magnificent," and Erasmus had "a delicious sense of humor." Preferring homework to dances, the embryo author felt "smothered with joy" when an English teacher praised her.

Ironically, the theme in question described Robert Louis Stevenson, another privileged child, as "smug," Yet Anne was herself scarcely free of that fault when she reported from shipboard: "A heavenly day: no deck tennis ... no bores." Fenced in by their mutual admiration, the Morrows shunned popular pastimes. Small wonder, then, that Anne was "a little annoyed" when, in 1927, she joined her family at the embassy in Mexico City to find its privacy shattered by the arrival of twenty-five-year-old Charles A. LindAnne Morrow in 1915.

"An honest witness" to her own history...decided to waive hindsight."



The Lindberghs, c. 1929.

bergh. On a good-will tour, the young aviator drew roaring crowds everywhere, but to Anne his solo flight over the Atlantic seemed mere athleticism, linking him with "the baseball player type." Clearly, he was "not of my world at all."

When she vowed her resistance to "this public-hero stuff," Anne had no idea that she was adhering to the plot line of a thousand B-grade movies. Life, however, has a way of mocking even bad art. "More poised than I expected." she noted of the Midwestern aviator that first evening. Before the night was over she confessed herself "confused and overwhelmed." Puzzled by what we now call charisma, she tried to comprehend his "mad popularity." Was he a symbol of the age? At a dance she turned her back but could not rid herself of his presence. Serving tea, she nervously dropped his spoon.

Before her return to college Anne faced an appalling truth. "All my life, in fact, my world . . . is smashed." This "terribly shy" and awkward boy had "swept out of sight all other men I have ever known, all the pseudo-intellectuals, the sophisticates, the posers. . . ." Even though he paid her no attention she rejoiced that "there is anyone like that in the world."

Her joy did not last. When Lindy continued to give no sign of any special regard for her, more typical feminine feelings intervened. Finally, months of disappointing silence led her to assume an unconvincing pose of indifference. He was, she told herself, "a person to whom I am really antagonistic"—and. besides, she was sure he liked her sister Elisabeth best.

Like the haughty princess of a fairy tale, Anne was being punished for her earlier hubris. Envy of the favored sister produced a "heart-breaking choke of misery inside." Nevertheless, her true story contains all the clues to its denouement that we could expect of well-crafted fiction. Months earlier she had written: "I want to do something different..." At that time she contemplated nothing more daring than a bolt to Vassar. Now, she took secret flights in a commercial monoplane and began to store up aviation terms. By the time Colonel Lindbergh called again she was ready to meet him in his own world.

"Don't wish me happiness," she wrote ruefully to a friend a few months later when her engagement was announced. "I don't expect to be happy, but it's gotten beyond that.... Wish me courage and strength and a sense of humor-I will need them all."

How true that was she could not know, but her diary proved her ready to be a hero's wife. All that "early wrestling with illusions . . . and conditionings" had brought her further than anyone in her closed circle could dream. As recorded here, her coming of age more than fulfills her English teacher's estimate of "insight and taste." Anne Lindbergh's book is, as she hoped it would be, "alive and moving," a unique affirmation of human possibility.

Glendy Culligan is a former teacher and book review editor for the Washington Post.

Attempt to Burn Viet Forests Was Failure

BY ROBERT REINHOLD
The New York Times

MISSOULA, Montana — Well-informed civilian and military sources have disclosed that in an effort to clear away enemy-controlled forests, the United States made a number of concerted attempts to set huge fire storms in Vietnam during 1966 and 1967. The project was ultimately abandoned, they said, because the moist tropical rain forests would not burn.

The project was undertaken with the collaboration of fire-prevention experts from the United States Forest Services

They were detached from the service's northern forest fire laboratory in Missoula and, according to some reports, from the Pacific Southwest forest and range experiment station in California.

In the final attempt, called operation Pink Rose, an area about the size of the City of Philadelphia was defoliated and bombarded with magnesium incendiary bombs in the Iron Triangle region northwest of Saigon, an area where the allied pacification program had never succeeded in eradicating Viet Cong influence.

An earlier attempt, aimed at a wooded area nearer Saigon, was dubbed operation

Sherwood Forest. The result of the two attempts were so disappointing that no further efforts were made.

"It produced a lot of smoke and not a whole heck of a lot of fire at all," said a Pentagon spokesman, who confirmed that the fire attempts took place under the Johnson administration. He called them test projects aimed at determining the feasibility of jungle-clearing by burning," and added that he could not provide further details of the project. It was conducted by the Advanced Research Projects Agency, a high-level research arm of the Defense Department.

The disclosure comes at a time of mounting concern among some scientists and government officials that years of defoliation, bombing and burning have inflicted irreversible damage on the Vietnamese environment.

Although the fire storm project failed, it is understood from reliable sources that military officials suggested that it be tried again if better methods could be devised. They also suggested that forest and other areas of the world be surveyed to determine if fire storms could be employed as a weapon.

LL SPEED is relative. Even while reading this article you are travelling at 1,000 miles an hour, because that is the speed of the rotation of the earth. Soviet and U. S. cosmonauts have stepped out of spacecrafts travelling at 17,500 miles an hour and have sauntered alongside them across continents. If you are airborne in a jet travelling at the speed of sound, there is no sensation of movement unless you look out of the window at the earth below. But those below are aware of the speed at which you are travelling.

The speed of change is also relative. Only those who are being left behind are conscious of it—whether it is the skilled craftsman who sees his job being automated, or the two-thirds of the world's people in the underdeveloped countries who see the scientifically and technologically endowed countries accelerating their own progress. The gap between the prosperity of the advanced countries and the impoverishment of the developing countries is not narrowing; it is widening. Science and technology are the social dynamics of our times.

Let us try to set up a time scale for the speed of change. Consider the picture at the beginning of this century. The Wright brothers had not yet flown their heavier-than-air machine. It was a year before Marconi's first transatlantic wireless signals and four years before Ambrose Fleming had developed the thermionic valve which revolutionized telecommunications. Sir William Ramsay had just discovered helium, neon, krypton, and xenon, and for that discovery, in 1904, was to be the first British chemist to be awarded the Nobel Prize; however, one does not imagine that he foresaw neon signs. Ramsay, with Frederick Soddy, turned to the chemistry of radioactivity which was to lead to the determination of radioisotopes, including U-235. But Ernest Rutherford had not yet asked himself, "Why does Marie Curie's radium give off rays?" Nor had Albert Einstein propounded his fateful equation, $E = mc^2$.

In 1900, medical students studying their materia medica knew that doctors had only four drugs which could attack the causes of disease and not just relieve to lead in the living body had the same affinity after death. He reached the conclusion that if certain tissues had a special preference for certain minerals and certain dyes, it should be possible to inject into the body specific dyes which would seek out not only specific tissues but also specific germs. This brilliant hypothesis eventually produced "the magic bullet," Ehrlich-606, or salvarsan, which could snipe the spirochaete of syphilis within the living body. Other treponemicides followed. Salvarsan was discovered in 1911, but the medical profession had a curious amnesia: they used Ehrlich's drugs but they forgot the Ehrlich principle—that it was possible to kill germs within the living body.

In 1935 a young girl, Hildegarde Domagk, was critically ill with generalized septicaemia, caused by pricking her finger with a needle. The doctors could offer no hope and so her chemist father took a desperate chance: he injected her with a red dye which had been effective in killing streptococci in mice. His daughter lived. The red dye was prontosil, the first of the sulfadrugs. Gerhard Domagk, the I. G. Farben chemist, was later awarded the Nobel Prize. Apart from the intrinsic merit of the drug he had produced, he had reminded the medical and scientific world of the Ehrlich principle.

With the chemotherapeutics, the sulfas, the antibiotics, and the insecticides that followed, medicine was armed with an immense range of ammunition. It could snipe at specific germs or massive campaigns against the insect vectors of disease.

In 20 years, antibiotics alone have saved more lives than have been lost in all the wars of all human history. And in addition, the World Health Organization has recently announced that 830 million people have been protected against malaria—a quarter of the world's population, but even more meaningful since the protected are those in the malarial regions.

In an article in *Technological Trends*, a U. S. Government report in the '30s, S. C. Gilfillan measured "The Prediction of Invention":

"Taking the 19 inventions voted the most useful, introduced between 1888 and 1913, the average intervals

Science and technology, the social dynamics of our times, have continued to accelerate.

the symptoms: quinine for malaria, pecacuanha for dysentery, mercury for syphilis, and digitalis for cardiac dropsy. Vitamins were also being discovered and they, of course, are specific in the treatment of diseases caused by vitamin deficiency. Vaccines were also being used to give protection, and a very few toxins.

Doctors knew a great deal about anatomy, physiology, bacteriology, and the processes of disease, but they could only treat symptoms. They administered sedatives or stimulants, reduced feverish conditions, and gave tonics. They did their best to help the body to rally and resist the onset of infections.

Paul Ehrlich, at the beginning of this century, was studying the effects of lead poisoning on rabbits. He found that the tissues which had been most susceptible were: Between when the invention was merely thought of and the first working model or patent, 176 years; thence to the first practical use, 24 years; thence to commercial success, 14 years; thence to important use, 12 years—say, 50 years from the first serious work on the invention. Again in the study of the most important inventions in the generation before 1930, the median lapse was found to be 33 years between the date of conception and the date of commercial success. Searching for exceptions, it is hardly possible to find any invention which became important in less than ten years from the time it, or some fully equivalent substitute, was worked out and few did it in less than 20 years."

Applying the same scale to atomic energy, we can take Einstein's theoretical prediction of 1905, $E = mc^2$,

expensive deep freeze accommodation, butchery equipment, vehicles and wages. Quite a problem, isn't it?

-ALAN O. SIMPSON Construction Surveyor Durban, Natal, South Africa

More Than a Luncheon Club

No normal man will question Lin Yutang's thesis that eating together and drinking together makes for fellowship [as quoted in Just a Luncheon Club, by Hubert Wright, THE ROTARIAN for March, 1966]. But I suggest that Lin Yutang would never have founded a service club such as the world-wide organization that Paul Harris founded.

There are thousands of luncheon clubs, supper clubs, and even breakfast clubs, in every country and they serve their purpose. We could not do without these occasions for conviviality and relaxation. In Rotary, as in any other club, they meet our need for comradeship, friendship, acquaintanceship. But Hubert Wright goes a bit too far when he says: "The luncheon club symbolizes man's greatest need the world round." There is another quotation that qualifies the case: "Man does not live by bread alone."

It may be a sour note, but not far from any of these jovial meeting places are families in want, children in distress, slums and wretchedness, stomachs that are empty, civic affairs that cry for improvement, and community needs that wait for attention.

Hubert Wright does not sympathize with those Rotarians who speak somewhat cynically of "just another luncheon club." There is nothing cynical in pointing out that Rotary is more than a luncheon club, that Club Service is not enough, that there are three other Avenues of Service to which we are committed: Vocational Service, Community Service, International Service; that the Object of Rotary is fourfold, and that the first definition is "The development of acquaintance as an opportunity for service."

Rotary is a luncheon club, but it is far more than that or it would never have grown out of a small group in Chicago to become a world-wide society of men of goodwill. Because of its very nature as a fellowship that is pleasant and satisfying in itself, it carries the seed of complacency and indifference.

So far as any Rotary Club permits itself to become "just a luncheon club," delightful as a good board and good company can be, it defeats its purpose. So far as any member considers that he has performed his duty to Rotary by attending its meetings and letting it go at that, he denies his obligation.

JUSTIN R. WEDDELL, Rotarian Senior Active Pensacola, Florida





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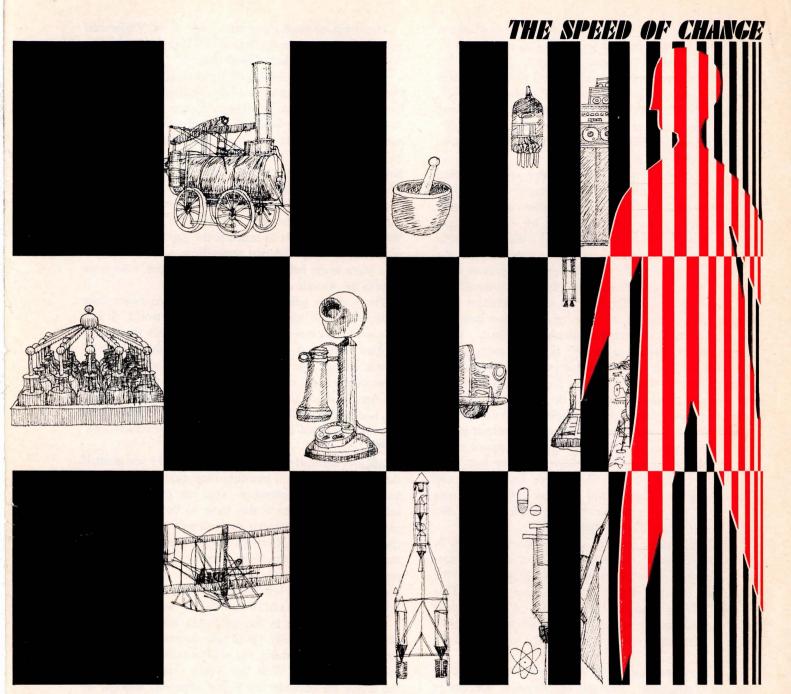
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The resulting gap between the haves and the have-nots is measured here by RITCHIE CALDER.

as the baseline. If we accept Cockcroft's and Walton's atom smasher, Chadwick's neutron, and the Joliot-Curies' artificial radioactivity, all in 1932, as "serious" work on disintegration, we would have a 27-year interval. But if we accept the fact that the release of atomic energy did not become a practical proposition until Hahn's discovery of uranium fission in late 1938, we can count it as a 33-year interval. After 1938 the speed becomes fantastic. It is the telescoping of time: from the "first working model or patent" for the use of atomic energy (Peierls and Frisch in their report to the MAUD Committee in March, 1940) to the "important use" (and I think we can agree that the obliteration of Hiroshima and Nagasaki can be called "important use") gives us four years and five months. From 50

years to four years and five months! From 226 years—dating on the old scale from "first thought of"—to 40 years. Forty years to work out the combination of Nature's atomic lock and four years and five months to turn a fundamental discovery into a bomb.

Just as one can date, precisely, the advent of the Atomic Age as July 16, 1945, when the experimental bomb was exploded in the New Mexican desert, so too we can date the other explosion—the population explosion. It was February, 1935, when Hildegarde Domagk was given an injection of prontosil.

It is important to bear in mind that it was the ingenuity of man and the rapid application of the results of that ingenuity which triggered the population explosion, which, next to man's capacity to veto the evolution of

his own species in a nuclear war, is the greatest threat we are facing. The new drugs gave us death control.

Today people are living longer, and not just in the advanced countries. For example, in 1946 the average life expectancy of a girl baby born in India was 27. Today it is 48. Notice that the average female is living through her whole reproductive life. She could have, say, 15 more children and, unless something is done about it, probably will.

The figures are intimidating. There are more than 3½ billion people today, increasing every day by 170,-000 more mouths to be fed—63 million a year—with the certainty of another one billion by 1980 and the likelihood of a global population of 6½ billion by 1995. Consider what that means: a million years (since the hominids) for the human race to reach the present population of 3½ billion and only 30 years to double it!

I am not going to elaborate on the self-evident need for restraint on the present rates of population increase. Arguments about the eventual numbers are futile. What matters is the rate of increase. If, as in many countries, the increase in food production is 2.5 percent per annum and the survival rate is 3 percent, stimulating development is like trying to go up the down escalator. If science and technology in medicine speed up the rate of population growth, then science and technology in fields that requite people's needs must also speed up or the population increase must slow down, or both. At the 1963 United Nations Conference on Science and Technology for the Benefit of the Less Developed Areas in Geneva, it was made obvious that we do not lack the knowledge; what we lack is the intent.

As Pierre Auger pointed out in Current Trends in Scientific Research (Unesco, 1961), of all the scientists and research workers who have existed since the beginning of time, 90 percent are alive today. This is another way of saying that the bulk of the recognizable and measurable achievements of science belongs to the past 50 years and preponderantly to the past 25 years.

As Gerald Holton wrote in On the Recent Past in Physics (American Journal of Physics, December 1961), "Today we are privileged to sit side by side with the giants on whose shoulders we stand." This feat of acrobatics in time is as though Harvey had met Aristotle at a seminar or Einstein had exchanged reprints with Galileo.

The contemporary acceleration of scientific discovery is due to the feedback from technology and the final emancipation of science from the thralldom of abstract theory which tyrannized Western thinking for 2,000 years.

• A journalist who has written often on scientific topics, Ritchie Calder is a professor of international relations at Scotland's University of Edinburgh. He has lectured at Oxford, has been a radio and television commentator, and served with United Nations missions to Southeast Asia and the Arctic. This article has been adapted from a longer version in the Bulletin of the Atomic Scientists, with the permission of that publication.

The break-through came with what A. N. Whitehead called "the greatest invention of the 19th Century—the invention of the method of invention."

Until then—when Liebig took industrial chemists into his academic laboratories and Lord Kelvin could descend from the stratosphere of thought to the bottom of the Atlantic and help to solve the problems of the telegraph cable—inventors had relied on the crumbs which fell from the scientists' table. Edison filed 1,033 patents but made only one scientific discovery—the "Edison effect," which, typically, he patented but never pursued.

Some are worried because the accelerated rate of science is widening the gap between the two cultures. What worries me just as much is the gap which is being produced between the two generations—between those who were born before the atom and those who were born in the Atomic Age.

The younger generation are much more aware than their elders that this is a new and a small world. It is a new world because 1945 did not mark only the end of another world war, but, with the cataclysmic release of atomic energy, the beginning of a new epoch. The students of today are of the generation which was born into the Atomic Age, had their births registered by computers, and had Sputnik as their zodiacal sign. Their future was not predicted by astrologists but by scientists.

Quite naturally the new generation take for granted the marvels which still bewilder their elders. Even those among the older generation who are reasonably well informed about science still have to come to rational terms with changes which the younger generation psychologically accept. Perhaps they are also more aware that most of the arguments of what we call "international politics" are irrelevant, although that does not make politics any the less terrifying when anachronistic quarrels are liable to be settled by modern weapons.

There is nothing in the textbooks nor in the party doctrines which really takes into account the present situation. For one thing, the confrontations are now no longer East versus West but North versus South, and the issues are between the highly advanced nations, including the U.S.S.R., and the less developed nations. There is also a collision or interweaving between two revolutions which have nothing to do with Communism and capitalism: the revolution of rising expectations and the scientific and technological revolution. The first is itself the product of the second, because it is the universality of communications which has produced a world-wide awareness, in which ideas become infectious.

The epidemic of nationalism is only one manifestation. I have been in most parts of the world in recent years and there is no place where I have been where the awareness of a new world has not penetrated. Eskimo children who have never seen a wheeled vehicle can identify the types of any aircraft which fly overhead. The young Dyaks in the longhouses of the equatorial jungle of Borneo listen to the [Continued on page 54]

Speed of Change

(Continued from page 16)

Beatles, and the wandering Bedouins with transistor radios, bought by selling dates to the oilmen of the Sahara, hear Nasser's radio telling how American planes are bombing Vietnam children, half the world away.

Even the most primitive peoples expect things to be different. Freedom is not enough. After the exhilarating potion of independence, people awake to the hangover. They are still as hungry, still as sick, still as poor, and still as illiterate. But they expect the material content of freedom. They expect a better life. They no longer accept hunger and disease and poverty as the will of the gods. And, of course, they are right because the wit of man can find the answers. It is possible for people everywhere to leap across the centuries.

The speed of change has hurried us into the Atomic Age, into the Computer Age, into the Space Age, and it is now hurtling us into the DNA Age, which is going to present us with the secret of life before we know what to do with it.

In the space of 20 years the world has shrunk to the size of a neighborhood, and we have to learn to coexist with our neighbors and share with them, and they with us, the resources of a small planet.

Other civilizations flourished and withered. The pyramids and the ziggurats remain as their tombstones, boasting the arrogance of material success. We can throw our pyramids of scientific achievement into space, while our civilization withers from our neglect. Always before, one local or regional civilization was succeeded by another. Ours is global and absolute. Mankind has become an entity, interdependent through our common necessities.

The post-atom generation sense all this; their elders are still schizophrenic—recognizing the facts of a shrunken world but rejecting the implications, which upset outworn creeds.

The thinking which produced the United Nations did not comprehend the

The Exception

I'm always wrong in arguments . . . And that's my sorry plight. I feel I'm losing confidence Because I'm never right.

Did I say "never"? It's not quite Correct. It's much too strong.
There is a time when I am right...
When I admit I'm wrong.

-D. E. Twiggs

meaning of atomic energy, nor foresee the computers, nor man walking in space, but nevertheless it released the forces of change. There were 51 founding members: today there are 115, and most of the new nations are ones who have emerged from colonial status. So we have a new generation of nations as well as a new generation of young people. Both have the troubles of adolescence, but both belong to a changed world in which they believe that all things are possible. We need to adapt the United Nations to this reality. It is plain that the confrontation is between the new and the old—between the many nations and the great powers—and that the nations born to the United Nations have a very different attitude toward the meaning and purpose of the organi-

All things are possible if we so direct science and technology and if we think of people coöperating on a world scale. Because the peoples of the planet have become interdependent in terms of material resources, there must be a sharing of knowledge and skills to develop those resources. That is the challenge to the new generation which will find its affluence in the richness of experience—experience shared to give substance and meaning to the lives of those now impoverished.

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YEARS OF REMEMBERING

By Darlene Rentz

OTARY? What a special spot it occupies in the hearts of my family. I must tell you why.

It was 1933, and the place was Vicksburg, Michigan, our home town. My parents, like most parents then, were awfully hard up. They had just buried one of my sisters and bills were piling up. Then they found that another of my sisters, a year old, had been born without hip sockets. Births at home were common at that time and the defect had not been discovered until she started to walk. It was too late for a family doctor to do anything.

Then the Rotary Club of Vicksburg heard of the problem and stepped in. Members of the Club took my parents and sister to a hospital in Grand Rapids, which in turn sent them to the Mary Free Bed Home, where the best doctors for cases like this were at work.

For five years my sister wore casts, at first from the neck to the ankles, then smaller casts, and at last braces. During these years Rotarians of Vicksburg never failed: every week they drove my parents and sister to Grand Rapids, buying their dinner as part of each trip. When my sister was required to stay in the hospital for a period of time, they took Mother and Dad up to see her. Later when she entered school on braces, they made sure she got to and from the school.

All these years the Rotary Club kept its small community interested; and other groups helped out with gifts and by amusing this small girl who could not run or play.

Today my sister is the mother of two daughters. Except for a very slight limp she is like any other housewife, doing all the work that at one time doctors predicted she'd never do.

Without these wonderful men of Rotary and their help, who knows what her future would have been? My parents feel it is a debt they can never repay, but they thank God for such men.

Bright Graveyard

Spectra of discarded cars montaged on the summer hillside as immediate as modern art.
Happy colors under the critical sun.
A standing burial expedient for the extraction of parts.
Framed by the un-mile-marked sky.
A collage of reduced speed.

-THOMAS J. CARLISLE

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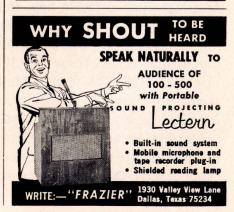
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At Home In The World, Six

The Significance of the Arrangement of the Deck Chairs on the Titanic

[The Extension of Ethics and Humanity]

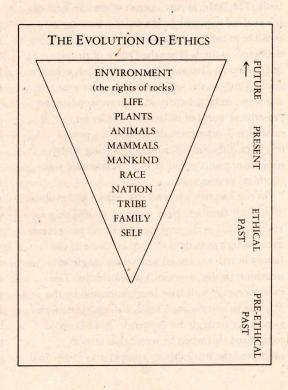
Highway 64 leads north from Williams across the Coconino Plateau. Drive it on a clear day and the sense of space is overwhelming. To the southeast the San Francisco Peaks loom a mile above the benchland. Ahead, north, you feel more than see another mile of topographical variance, but this time down: the Grand Canyon. It is a setting in which billboards loom for miles. One reads:

"ARIZONA'S FASTEST MONEY MAKER: LAND! Grand Canyon Subdivision."

The billboard not only advertises but presumes to define land. Measured by the beliefs of other cultures at other times, the definition is not only unusual but incomprehensible. If the native American precursors on the Coconino had been in the practice of erecting billboards, the definition might have read: "THE LAND IS OUR MOTHER." But the sign on Highway 64 says it all about the traditional American attitude. Economic or utilitarian criteria have dominated American thinking about land and land use.

Occasionally aesthetic factors are brought to bear on the question, but here too anthropocentrism prevails. It is man's sense of beauty that matters. The land is tailored to man's taste. The human interest dominates. Few have dared with Aldo Leopold to challenge the fabric of anthropocentricity, replacing it with a conception of "community" that is as large as life, as large as the earth. From this perspective economic and even aesthetic considerations are quite irrelevant as the basic determinants of man-land relations. The ultimate criteria become ethical—right and wrong, not profit and loss, or even beauty or ugliness. An earth ethic springs from this orientation to the environment. It is indisputably important for the earth; it may well be equally important in man's quest to be more fully human.

Many well-meaning but, it may be, short-sighted persons downplay these mental as opposed to technological solutions to environmental problems. In their opinion, concern over ethics is like worrying about the position of



deck chairs on the Titanic. Why fiddle over rights and wrongs while Rome burns? On the other hand, it could be argued that the most serious kind of pollution we experience today is mind pollution. What we do, after all, is a product of what we think and, more precisely, what we value. It follows that the humanities are vital to understanding and solving environmental problems. Ethics, in particular, are a vital part of what Robert Heilbroner calls a society's "internal capacity for response" to external threats such as the deterioration of environmental quality. And ethics answer the questions haunting environmentally-responsible people from elementary-school newspaper recylers on-why, after all is said and done, should I be concerned with proper land use? Why should I persevere when personal sacrifice is involved? The hell with wilderness! Who cares about whooping cranes? Unless we can find acceptable answers, I submit, conservation is built on a foundation of sand.

Many recent converts to the idea of an ethical posture toward the earth and its complement of life are surprised to discover that the roots of environmental ethics extend beyond the burgeoning ecology movement that recently caught their attention. Up to that time, they assume, conservation entailed economic, not ethical, relationships. But a closer look at the history of environmental ethics in Western thought brings into focus an American who died April 21, 1948, while fighting a brush fire along the Wisconsin River. Aldo Leopold, and his formulation of a land ethic, chiefly in A Sand County Almanac, must rank as one of this country's most significant contributions to the history of thought. For those courageous enough to face their full significance, the implications of Leopold's conceptions for man-environment relations are revolutionary. The accompanying diagram may be useful in explaining Leopold's ideas, and, in fairness, my extrapolations.

The central idea expressed in the diagram is the evolution of ethics. The time scale to the left of the diagram expresses Leopold's assumption that at some point in the past ethics did not exist. The reason is simple: life existed before the mental capacity to think in terms of right and wrong. In what is labeled the "pre-ethical past" beings interacted on a strictly utilitarian, tooth-and-claw basis. The "ethical past" began when one form of life evolved mentally to the point where it was possible to conceive of an action as being right or wrong on grounds other than those of simple utilitarianism. For eons, it seems logical, ethics applied only to the self (the diagram's lowest tier) and were, in fact, hardly an improvement on the pre-ethical world of isolated struggles for existence. Under pressure to survive a person might cannibalize his mate or offspring without remorse or punishment at this rudimentary stage of ethical development.

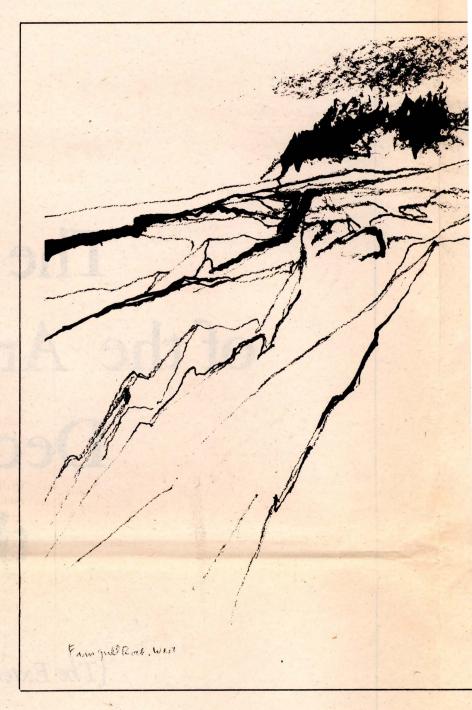
In the diagram's second tier, ethics had evolved to include families. Now a mate and offspring are encompassed in the envelope of ethical protection even though outside the charmed circle of the family hearth or cave all was a dark tangle of unethical (really, a-ethical) relationships. The extension may well have been prompted by the impulse to sustain one's kind. Ethics, then, were aids in the struggle for existence. Aldo Leopold recognized this when he wrote that ethics prompted the instinctively competitive individual

to cooperate "in order that there may be a place to compete for." This realization, according to Leopold, sprang from the individual's recognition that he was "a member of a community of interdependent parts." As Leopold, the ecologist, saw it, all ethics stemmed from this recognition of community. In this sense, then, the diagram traces the expanding definition of community (alternately, "society") as well as of ethics. The implication that ethics are ultimately based on enlightened self-interest remains one of the most plausible explanations of how we formulate the idea of right and wrong.

The extended family is a transition to the tribe. In this stage, which we can assume prevailed for many thousands of years, there are the seeds of society. The members of a tribe respect and protect each other, but right and wrong circumscribe the tribe's members much as it still does in urban street gangs. To appreciate the force of ethics consider a chance meeting among members of a tribe on a forest path far from the check of shame or punishment. The meeting involves no rape, robbery, enslavement, or murder. Now consider the same meeting between members of different tribes. Violence and probably death are almost certain; ethics explains the difference.

But ethics continued to evolve in other ways. The tribes occupying the same region gradually discovered the benefits of mutal respect and joined with other tribes in defining a broaderbased ethic. The roots of nations lie in such associations, as well as the confidence that we can cross many state borders from New York to California without being raped, robbed, or killed. Today, during wars, we see how powerful nation-based ethics are, and how utterly unprotected is the enemy. International conventions of warfare that in theory support a system of ethics based on the dignity of all men have proven frail reeds in the face of greed and hate. William Calley, the soldier accused of killing over a hundred Vietnamese civilians at My Lai, has been excoriated for totally lacking an ethical sense. This misses the point entirely. Calley is perfectly moral within his ethical frame of reference. Calley was not, for instance, in the habit of machine-gunning residents of his home town in Georgia. But Vietnamese were beyond the ethical pale for him, as Jews were for Adolf Hitler. In Calley's eyes his actions at My Lai did not involve a question of right and wrong at all. This explains the mystified reaction of Calley and his apologists to the criticism and trial that followed his return to the United States. For him "gooks" (military slang for Vietnamese) did not count; for others they counted because they were

A sense of racial identity is a transition between nation-based ethics and species-based ethics in the same way that the extended family led the way to tribal allegiances. Most black people, regardless of nation, share a sense of community. So do white and red and yellow people. Ethics expands with this expansion of brotherhood. Religious concepts like the Golden Rule, which Leopold cited, and its parallels in other faiths show the potential of an ethic embracing all mankind. Aldo Leopold took a particular interest in the ethical blind spot that permits slavery. His opening paragraphs in "The Land Ethic" described how god-like Odysseus killed a dozen slave girls on his



return from the Trojan wars. It was not that Odysseus believed murder was right. Slaves simply did not fall into the ethical category that protected Odysseus's wife and fellow citizens. The slaves were property; relations with them were strictly utilitarian, "a matter of expediency, not of right and wrong" in Leopold's words. For slaves the achievement of ethical identities awaited the attainment of the level the diagram labels "mankind." In the West such an extension of ethics did not come until the 19th century. In the United States, many historians feel, it required a civil war. The environment, one could argue, is still "enslaved." Let everyone draw his own conclusions.

What concerned Aldo Leopold was the possibility of evolving an ethic that transcended man—one that extended to include other life and, ultimately, the earth itself. The upper tiers of the diagram represent this enlargement. For most Americans today the first step is not too difficult to climb. We are accustomed to including cute

and useful mammals in our ethical make them into pets and often trea carefully as children. Useful anima and chickens, also have a secure pla constructs. For example, most peo United States today would be shoot of someone killing a dog. They might he police or at least the local chapt Humane Society or the Society for of Cruelty to Animals. Somehow the a dog is wrong, in the same moral of yet the level of legal severity as killing and often the same moral of the level of legal severity as killing and often treatment of the same moral of the same

Despite these promising beginned blindness begins soon after we pass. To extend the earlier example, few be offended at the sight of someone rattlesnake or trapping a gopher, or insecticide on a column of ants. The life are outside ethics for most peop that such people are unerthical; they probably protect their dog's life with is just that they have an ethical cut-



Reuben Tam

in our ethical hierarchy. We and often treat them as Useful animals, like kittens ve a secure place in ethical ple, most people in the vould be shocked at the sight dog. They might even call the local chapter of the ne Society for the Prevention s. Somehow they feel killing e same moral category, if not everity as killing a person. nising beginnings, ethical after we pass selected pets. example, few today would ht of someone's stoning a g a gopner, or spraying an in of ants. These forms of for most people. It is not nethical; they would dog's life with thèir own. It an ethical cut-off. Dogs are

inside the magic circle; snakes and worms and potato bugs are outside. Of course there are variations. Everyone knows someone who keeps pet snakes and twines them around his neck. But what do the snake lovers think about the mice they feed to their snakes, or amoebae? Once the pet stage is passed, man's capacity for ethical relationships with other life forms declines rapidly. Only a few feel that plants of any kind deserve inclusion in the ethical fold; still fewer extend ethics to protista and similar primitive organisms. To do this is to accept the sanctity of life itself. Albert Schweitzer with his concept of reverence for life, all life, and Aldo Leopold with his land ethic were exceptions.

It is important to avoid anthropomorphism. The tendency of man to give other forms of life human attributes as a prerequisite to giving them ethical respect defeats the whole purpose of the land ethic, which is to affirm the dignity and sanctity of life apart from man.

Anthropomorphism is, of course, actually

anthropocentrism. The way to extend ethics is not to convert animals into people but rather to recognize the worth of animals as animals. Anthropomorphism is a manifestation of the incomplete ethics that accorded respect to black people because they looked and/or acted white. Real ethical extension in this case involved not making black men white but in affirming blackness. In the same way there is no genuine extension of ethics involved in enthusiasm for Lassie or Snoopy or Smokey the Bear.

The highest level of ethical evolution involves man's relation to parts of the environment not commonly regarded as alive such as air, water, and rocks. Leopold clearly had this extension in mind when he stated in A Sand County Almanac that "the land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land." "Land," in fact, was Leopold's shorthand term for the entire environment — its living parts as well as those to which we commonly do not ascribe life. In no relationship, then, was man excused from ethical responsibility. "A land ethic," Leopold explained, "changes the role of Homo sapiens from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such." The "fellow-members" are clearly other life forms, but Leopold is careful to recognize "the community as such," indicating his extension of ethics to habitat, system, and process.

The transition from life to the non-living environment is the most difficult part of ethical evolution. Even Aldo Leopold hedged in ascribing an ethical status to the non-living environment. But it is possible to conceive of the rights of rocks. We might regard rocks as having the same ethical status as self and family. In this example stripmining would be seen as just as heinous a crime as the rape of our neighbor's daughter; the extermination of a species would rank with

There are several intellectual and emotional roads over which the transition from an ethic of life to a total environmental ethic can be made. Subscribers to religious faiths of the Far East have made the ethical leap for centuries by minimizing the significance of life compared to that of the divine spirit which permeates all things, living and non-living. From this perspective a rock could be as eloquent as a tree, a bear, or a baby in revealing universal truths and harmonies. Another option commonly taken by those who assert the rights of rocks is to argue that rocks, rightly seen, are alive, hence deserving of the full measure of ethical respect accorded to all life. One can advance this point by arguing that rocks contain all the raw chemical materials of things which we normally regard as living. A little reorganization, a lot of time and who is to say that the inanimate do not live? Loren Eiseley put it well when he observed that man and all life are but compounds "of dust, and the light of a star." It is also entirely conceivable that our present definition of "life" is greatly abridged - a mere tragment of a spectrum that extends to include things like rocks. We know that sounds exist which man cannot hear and colors which hecannot see. Perhaps there are ranges of life that also transcend our present state of intelligence. Eiseley again eloquently expresses the concept.

Stones, he wrote, are "beasts. . . of a kind man ordinarily lived too fast to understand. They seemed inanimate because the tempo of life in them was slow." Such ideas resist traditional kinds of proof, but they are the stock in trade of humanists and essential underpinnings of an environmental ethic. But perhaps stones don't live; perhaps they deserve respect for what they

There are, of course, problems with the extension of ethics. By the time we ascend the inverted ethical pyramid to the level of rocks we are well beyond the point where the beings deserving ethical identity can speak for themselves. Slaves demand and, more important for the present purposes, define freedom. Rocks don't. This means men must. As a consequence strong possibilities exist for appropriate action. What, after all, do rocks want? Are their rights violated by quarrying them for a building or crushing them into pavement or shaping one into a statue? Anthropocentrism is inevitable in any answer we might make as well as in any corrective system we might apply. For the time being, the only way out may be to assume rocks and everything else want to stay as they are. Living things want to live; rocks want to be rocks. Ethical behavior may consist of respecting that condition.

But finally we come face to face with the idea that the extension of ethics may, in the last analysis, not relate to the earth so much as to our own humanness. If the capacity for entertaining ethical ideas is one of the attributes that distinguishes us as human beings, then the extension of ethics is one of the things we can do to fulfill our humanity. Rocks, really, cannot enter into a do-unto-others, Golden Rule relationship with us. But insofar as we can respect the rights of rocks we also respect and enhance the potential of man.

The billboard on Highway 64 surely stands at one end of the spectrum of man-land attitude. At the other end one could cite the first words that greeted visitors to the United States Pavilion at Expo '74 in Spokane, Washington. Carved over the main entrance in letters equally as large as the Arizona developers', was a statement from the 1854 speech of Chief Seattle: "The Earth does not belong to man; man belongs to the earth."

A land ethic is implicit in the Chief's words, but, significantly, he spoke from outside the mainstream of American economic, legal, and religious thinking. In 1854 he was quite alone. But today there is an increasing segment of American society prepared to look critically at, if not stand outside, the dominant traditions. We have seen the term "counter-culture" come to prominence in this connection. And Aldo Leopold has become something of a guru in the new gospel of ecology that eschews old utilitarian rationales for a new definition of conservation emphasizing man's harmony with the land. From this perspective responsible land use is a matter of ethics, not economics or aesthetics or even of law. The land ethic demands that we be concerned about the condition of the environment not because it is profitable or beautiful and not even because it promotes our own survival as a species but because, in the last analysis, it is right.

> RODERICK NASH Santa Barbara, California

part

The Nuclear Blowdown

The Nuclear Blowdown is written by Jim Harding for Friends of the Earth Foundation. Layout is by Patricia Sarr and Marianne Ackerman. Other publications are welcome and encouraged to reprint articles. Acknowledgement and tear sheets would be appreciated.

A nuclear blowdown happens when a reactor's first line of defense – the primary cooling loop – loses its coolant and spills out all the water it once contained.

Uranium Mill Tailings, Reports Comey, Release Deadly Radioactive Gases

Hazard From Reactors Worse Than Coal

A new article by David Comey in the September Bulletin of the Atomic Scientists suggests that radioactive gas releases from uranium mill tailings pose a health hazard that dwarfs health considerations associated with the burning of coal. Comey calculates that the decay of thorium 230 in these piles into radon and polonium will deliver at least 394 or, more likely, 440 deaths in exchange for one gigawatt (1,000 megawatts)-year of electricity. This compares, notes Comey, with about 50 deaths per gigawatt-year from sulfur oxide emissions from the burning of coal.

Uranium mills separate uranium from the ore in which it is found. A substantial amount of liquid is used to separate the uranium, and the resulting pile of swelled material is often 30 percent larger without the uranium than was the whole shebang in the mine. Only 15 percent of the radioactivity in the ore is extracted by the

uranium mill. Currently mined uranium ore contains by volume about 0.1 to 0.2 percent uranium. Of this small quantity, only 0.711 percent of the uranium is fissionable U-235.

Left behind at the uranium mill is about 99.8 percent of what came out of the mine. A substantial portion of the remaining radioactivity is in the form of thorium 230, a third of the way down the long uranium-radium decay chain shown below. With an 80,000-year half-life, thorium decays patiently into radium 226, with its 1,602-year half-life, and thence into the short half-life highly radioactive products of concern: radon 222, polonium 218, 214, and 210, among others.

Comey's article taps an as-yet unpublished research paper by Robert O. Pohl, Cornell University Professor of Physics. Dr. Pohl analyzed only the direct health effects of thorium 230 decay to come up with his estimate of 394 deaths per gigawatt-year. If the nuclear industry succeeds in meeting the Atomic Energy Commission's last published scenario for the year 2000, at least 5,741,500 deaths will result, according to Comey, from thorium decay in tailings piles leading to cancer.

Pohl's analysis of mill tailings was prompted by the Environmental Protection Agency's "Environmental Analysis of the Uranium Fuel Cycle," published in 1973. In the EPA report, 60 "health effects" from a 250-acre tailings pile are estimated to occur over a 100-year period. The problem with this analysis, notes Pohl, is that "only 0.00091 percent of the Thorium 230 will decay during this 100 year period." The total number of deaths from thorium decay over a longer period of time will, of course, be atrocious. Comey estimates over 5 million cancer deaths in humans over the next 80,000 years, depending on the growth of the world's population, on the growth of the nuclear industry, and the efficiency with which uranium is used.

"Based on the foregoing," adds Comey, "it would seem to be a myth that the lethal effects from coal-generated electricity are 5,000 times greater than the lethal health effects of nuclear-generated electricity as estimated by Cohen and others. The deaths induced by the decay of thorium 230 in uranium mill tailings alone seem to swing the statistics in the reverse direction, and further analysis of other parts of the nuclear fuel cycle may identify additional health effects that may have been overlooked."

The real question that EPA failed to analyze in its health-effects model is a moral one. Terminating the effects from thorium decay at a mere 100 years illuminates a recurrent thread in the nuclear controversy. Do we have the right today and for the next few decades to consume additional electricity from nuclear fission power plants when this forces future generations to suffer premature death and injury from radiation-induced cancers and mutations? Thorium and its decay products are not sealed in salt mines, encased in glass or ceramic, or bubbling away in stainless steel tanks. Highly radioactive radon 222 escapes as a gas from a tailings pile and decays in less than four days into the variety of short-lived products known as the radon daughters.

Many will question this analysis. With a four-day half-life, how can the radon gas from remote uranium mines reach large population centers to deliver a substantial dose? Can the thorium 230 be recovered in a more sophisticated, more expensive milling procedure and stored as high-level waste? Can the mill tailings be replaced in abandoned mines, thus shielding the radioactive material and preventing wide dispersal of radon gas? Undoubtedly, some partial answers will be found. The hazards may be greater than or less than Comey asserts. Uranium mining is being encouraged worldwide, often in populated areas. As uranium becomes more scarce, the problem will worsen.

Mill tailings are not guarded, shielded, or covered to retard erosion or weathering. With a ten mile-per-hour wind, radon gas released from a pile can travel about 1,000 miles before its half-life is spent. And its daughters travel

RADON DAUGHTERS AND CIGARETTES

One especially damaging daughter in this decay chain is lead 210. Readers of *Not Man Apart* (Sept. 1974) may remember our discussion of the Martell-Radford finding that tobacco leaves harbor unexpectedly high levels of radioactive lead 210. Sticky, hair-like trichomes on to-

bacco leaves catch this airborne "natural" radioactivity and hold onto it. When burned in cigarettes, the heads of the trichomes, according to Martell and Radford, form insoluble highly radioactive smoke particles that lodge in the bronchi of the smoker. Both Martell and Radford believe that the subsequent decay of these lead 210 particles into more highly radioactive polonium 210 is primarily responsible for the high incidence of lung cancer among cigarette smokers.

"Results of studies," writes Martell, "published in 1965 by Drs. John B. Little and Edward P. Radford at the Harvard School of Public Health showed high local concentrations of polonium 210 in the bronchi of deceased smokers. Cigarette smokers' lungs typically have about 10 disintegrations per minute of lead 210 and polonium 210 more than the natural level in non-smokers' lungs. The added amount is highly localized and can be explained by the presence of several million insoluble smoke particles, each carrying the lead 210 radioactivity of an individual tobacco trichome."

"The cumulative alpha radiation dose," continues Martell, "to lung cells surrounding the radioactive particles is about 100 rem in 20 years for a single particle and thousands of rem in 20 years around small clusters of such particles — doses that rival or exceed the doses known to have caused a significant increase in lung cancer in uranium miners."

COMEY'S ANALYSIS MAY BE CONSERVATIVE

This hazard, which is worsened by exposed tailings piles, is one reason to think that the Comey analysis is a conservative one. Radon 222's short half-life of 3.82 days soon creates lead 210, with a half-life (20.4 years) that allows it to soldier on for many years. Further, the Comey estimates of 394-440 average human cancer deaths per gigawatt-year of nuclear electricity are based on the estimates given in the National Academy of Sciences' BEIR (Biological Effects of Ionizing Radiations) Report and do not take into account such special cases as the Martell-Radford hypothesis noted above.

noted above.

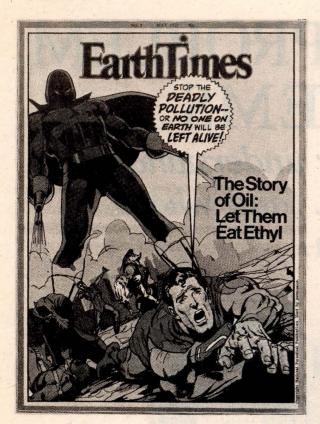
Sources: "The Legacy of Uranium Tailings," D.D. Comey, Bulletin of the Atomic Scientists, September 1975; "Nuclear Energy: Health Effects of Thorium 230," unpublished paper by Robert O. Pohl, Professor of Physics, Cornell University, Ithaca, New York 14853, 18 pages (sent by Terry Lash); letter from Martell to Harding, 17 September 1974; "Radioactivity of Tobacco Trichomes and Insoluble Cigarette Smoke Particles," Edward Martell, Nature, 17 May 1974; "Polonium-210 Alpha Radiation as a Cancer Initiator in Tobacco Smoke," paper presented by Edward Radford (Johns Hopkins University, School of Public Health, Baltimore, Md. 21205) to the Fifth International Congress of Radiation Research, 14 July 1974.

THE URANIUM-RADIUM DECAY CHAIN

Isotope	Symbol	Form of Decay	Half-Life
Uranium 238	U 238	alpha	4.51 billion years
Thorium 234	Th 234	beta, gamma	24.1 days
Protactinium 234	Pa 234	beta, gamma	1.18 minutes
Uranium 234	U 234	alpha	247,000.00 years
Thorium 230	Th 230	alpha, gamma	80,000.00 years
Radium 226	Ra 226	alpha, gamma	1,602.00 years
Radon 222	Rn 222	alpha	3.82 days
Polonium 218	Po 218	alpha	3.05 minutes
Lead 214	Pb 214	beta, gamma	26.8 minutes
Bismuth 214	Bi 214	beta, gamma	19.7 minutes
Polonium 214	Po 214	alpha	1.64 x 10 ⁻⁴ seconds
Lead 210	Pb 210	beta, gamma	20.4 years
Bismuth 210	Bi 210	beta	5.0 days
Polonium 210	Po 210	alpha, gamma	138.4 days
Lead 206	Pb 206	stable	stable



Uranium tailings near Durango, Colorado. Hill is 230 feet high, covers 146 acres.



Memoirs of a Mangy Editor

STEPHANIE MILLS

Writing about my experiences in environmental publishing tempts me sorely to pun (almost anything does). They were *The Years Without Ross*. Groucho's got *The Memoirs of a Mangy Lover*. These might be The Memoirs of a Mangy Editor. Or A Rememberance of Things Passed, for alas my experiences were with publications late and lamented.

In spring of 1970, when ecology was all the rage, and the children's crusade was in full swing, Jann Wenner, the boy genius of *Rolling Stone*, decided to publish an eco-tabloid. Baron Wolman, an associate of Jann's and friend of mine, proposed that I be the editor of this new magazine. Since my previous editorial experience consisted entirely of having edited the college literary magazine, I obviously wasn't being chosen for my keen publishing abilities. The fact of the matter is, at that time I was busy being a famous eco-whizkid, so I had a good name to put on the masthead.

Jann summoned me thither to the offices of Straight Arrow Publishing Company, then in some free space over the Garret Press on Brannan Street in San Francisco. The office faced the Acme Screw Works and a tallow plant. A flavorful neighborhood. I waited for America's foremost Rock 'n Roll publisher in fear that I'd be revealed as woefully unhip, out of my depth amid the trendy, sharp Rolling Stone staffers.

When Jann appeared he was cordial but speedy, and we discussed the proposal of doing a muckraking monthly on environment. Jann sketched the dimensions of the magazine and suggested that I think about hiring a staff. A one-person staff. Sometime during that first conversation, he opined that ecology would never be as important as Rock 'n Roll.

An inauspicious beginning, but prophetic, magazinewise.

The staff I hired was Pennfield Jensen, a bright, blarney young man who'd spoken impressively at one of the dozens of environmental conferences that were being held that year. Together we set about naming our new magazine. For a while we thought we really had something in the title *Mother Earth*, but in the nick of time found out that some fellow named Shuttleworth in Ohio had started a *Mother Earth News*. Finally we settled on *EarthTimes*. Now all we had to do was rake some muck, and get the editorial written.

That first *EarthTimes* editorial said, "Concern with the environment is fashionable nowadays. Unfortunately, if the fad is only a fad, and we fail to turn the fad into direct action, we die."

Well, for most folks, it was a fad, and it didn't get turned into sufficient direct action. But though *EarthTimes* died, I didn't. Nor did Penn or any of the other hard-hitting eco-journalists. We scattered in a diaspora, some left environment for good, some are lean and hungry, and some got a better scam.

Here's how it happened, as I understand it. At the time Jann started *EarthTimes*, *Rolling Stone* had come to be

recognized as a veritable nine-day publishing wonder. It came out of nowhere, a.k.a. San Francisco (which is publishing nowhere. If you won't take it from me, ask the refugees from the *Saturday Review* debacle), had been bankrolled with just a few thousand dollars, and was raking in money hand over fist.

This because Jann had hit on an unbeatable combination— a real hunger on the part of the literate young to understand the rock phenom and a healthy ad market. Of this more later. At any rate, he was riding high. At the same time that he spun off *EarthTimes*, he trebled *Rolling Stone*'s staff, moved it into larger, posher quarters, and started a book publishing company. The stormclouds were gathering, but Penn and I and the rest of the *EarthTimes* crew were rather blissfully unaware throughout, since Jann and Phil Freund, his business manager, controlled our financial

In our first issue, we ran batches of news, all of it bad, leavened a little by a breezy style and (we thought, anyway) witty headlines. "Nobody Loves A Fly," "Trouble Over Oiled Waters," "Frisco Dumps on Mountain View," etc.

Our cover story for the second issue was the emergence of environmental concern in comic books. Hence we were able to put Superman on the front cover. Presumably this was a step in the right direction, marketing-wise. It was slowly beginning to impinge on our rabid environmentalist consciousness that there might not be all that many people out there who were eager to lay down their hard-won 40 cents for a load of unremitting bad news.

Joan McIntyre contributed a lovely piece on wolves:

"... Having known no wolves and no wolf people except through the frozen margins of books and monographs, I know that I love wolves with more certainty than many other feelings. They are for me, and probably for a lot of others, an instance of poetry, an embodiment of myth in a world gone dry and shrunken for lack of both... Wolves beautiful, elegant and long-legged. Restless, hopeful and with a power of connection that might put a man's love to shame. Wolves as beings are needed on the earth to help make the land a habitat for hopefulness and the proper abode for joy."

Now there is a woman who can write. Pieces like that, of which we printed all too few, really are the heart and soul of environmental writing. Ultimately, it's a metaphysical issue, a matter of belief. If only cold print could kindle those fires of feeling in enough hearts.

Facts are merely tools in this effort, and they're the merest stones for a David's sling. *EarthTimes* tried hard to arm the movement with information, as did many other publications, but we failed to instill an abiding vision in enough lives.

Which gets back to the question of whether mass audience print is how you go about doing that in the first place, and plunges us back into the marketing morass.

Printing is unquestionably a means of turning on some people, literate people (not on the upswing in numbers), but it works best when the people are already susceptible to a change in thinking. Print also costs money and has to be distributed. These latter aspects of the media are the real message. Particularly for magazines.

Whatever else a magazine is, it's a consumer item. Furthermore, unlike other commodities, magazines cannot be sold to a mass market for the cost of their production plus a markup. (Warren Hinckle tried to do this with his Scanlan's magazine, charging a dollar an issue and paying advertisers. He lost a bundle.) So magazines must subsidize themselves with ads, and magazine advertising must compete with TV advertising, though it can't on the same grandiose scale, which is why, for instance, the big format general audience magazines like Life and Look died like flies in the late sixties. They just couldn't target their market. An advertiser buying a full page in Life could only be assured that his message might be flipped past in the doctor's office. An advertiser on prime time television knows that he's pitching to captive, mesmerized viewers. Which makes TV a much more efficient use of the ad

Magazines then, have to take another tack: identifying their readers' lifestyles and buying habits so closely that a potential advertiser can feel with some confidence that his word will reach an appropriate customer. So the wildly proliferating sports magazines can tell their advertisers how many cans of ski grease their average reader will buy in a year, or how many yards of nylon rope. Specificity becomes a secret of success.

Needless to say, your average ecology magazine cannot proffer its readers as arch consumers. What do you tell an advertiser? That the typical *EarthTimes* reader buys 500 pounds of brown rice, three new typewriter ribbons, and a backpack strap every year? The implicit austerity of environmentalism isn't exactly a winning sentiment with advertisers, and there are only so many record ads to be had in the world, *Rolling Stone* having most of them. So one of *EarthTimes*' tragic flaws was that we were quietly trying to

talk our readers out of, not into, buying stuff. That left us competing with more venerable journals of ideas for ads, and we had no track record. We hardly even had a track.

To stretch the metaphor a little, the track is partly

Somehow you've got to convince Independent News, or

distribution, the weakest link in the publishing chain.

whichever distributor you use, that they ought to muster their troops to put your little magazine out where everyone can see it on the newsstand, not buried behind a stack of astrology magazines and tip sheets. This isn't an easy thing to do, even with God on your side. Assuming that they get your publication out at all, you then have to lean on them for feedback, which means that the distributor must somehow persuade mom and pop in their grocery and the grumpy little guy at the kiosk on Sixth Avenue to tell, in some detail, how your rag, out of the other hundreds there, is doing. Once you get this information, you have a small tidbit to lure ads with, but since *EarthTimes* lasted only four issues, and there was about a three-issue delay in returns from

distributors, well

A magazine's other option is to lure subscribers through direct mail, but this is a pretty costly undertaking, and requires a lot of money up front.

The subject of money brings me back to the EarthTimes' untimely demise. It was costing Straight Arrow somewhere in the neighborhood of ten grand an issue to produce, and generating hardly any revenue. Along about issue three, Jann took a good hard look at his books and discovered that he had rather overextended himself with his burst of expansion. He told us we had to start producing most of the the copy (a mere 40 pages) ourselves. He threatened to fire people, but gave us a hard-hitting two color cover and the headline "A Brief Against Standard Oil: How the Corporation Deceives the Public" for our ante-penultimate issue. We were getting better and better each issue, but quality and flash couldn't save us.

EarthTimes concluded its brief life with a bang: the destruction of Indochina, a masterful and passionate piece by John Lewallen, "Scorched Earth: How to Make a War Last Forever" was a good exit line.

For too long, and even now, environmentalists have been involved in turf fights with other liberal types for public attention and support. There was a war on in those earth days, a war with dire environmental consequences, and a lot of us were out trying to lure away support from the cranky anti-war left to our clean cause. While I was out on the hustings, I was constantly having to deal with neo-Marxist criticism that ecology wasn't radical enough. These days, I'm inclined to agree. While I believe that the ecological perspective is the most fundamentally radical framework available, and the truest, I think that ecology as interpreted by Gaylord Nelson was sadly reformist, and deserving of some criticism. We were all too busy trying to stay in business to lay an intellectual groundwork for a restructuring of society along ecological lines. Such a restructuring would inevitably comprehend issues of war and racism, even sexism, which hadn't been invented in

Needless to say, radical skylarking wouldn't be a formula for magazine success either, nor would much of it be particularly good copy. Still, I wish we'd introduced more of those ideas in our pages, because magazines are the proper outlet for that kind of thinking.

This is neither to bury nor to praise, really. We did our best with what we knew at the time, and it was worthwhile, but as the very Rolling Stones concisely put it, "Who wants yesterday's papers?"

Not even me. But I do want some papers. I want there to be more than two or three mass magazines which can publish what Hazel Henderson calls the 12 pages of ideas that get inflated into a book. Essays, muckraking articles, and think-pieces are short genres. They are apt lengths for transmitting fundamental ideas. There's no dearth of people aching to write them (walk into any bar in North Beach and I daresay you'll trip over at least three, fondling their rejection slips and awaiting the next big magazine bubble). But there's a sore lack of outlets, particularly for folks who can't abide either New York or literary agents.

Subsidized magazines, like *Not Man Apart*, are part of the answer. And ocasionally, there'll be a slight upwelling of venture capital to start a new magazine which will attract a swarm of aspiring talent, strut its petty pace for a bit, and then pass into publishing oblivion. Magazines are by nature ephemeral, but lately, a little too ephemeral for this writer's

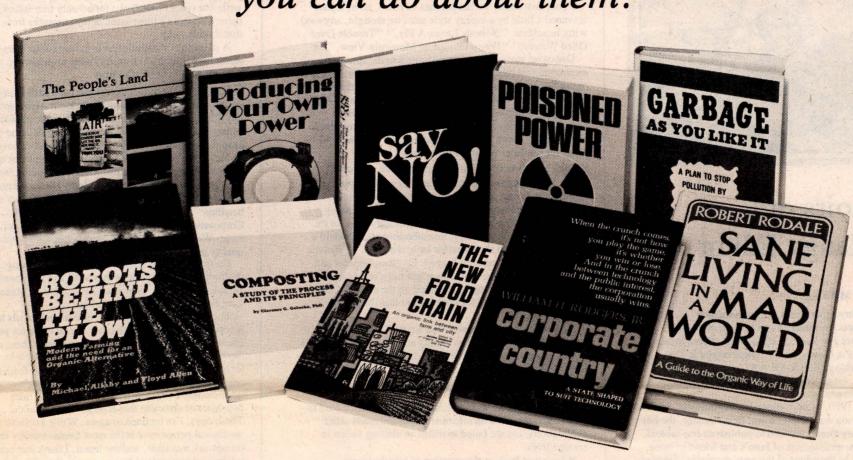
Perhaps the answer is to be found in this (maybe apocryphal) tale out of San Francisco's Zen Center:

The Zens were offered TV time by the local educational station. They proposed to use it thusly: Fifty-nine minutes and fifty-nine seconds of blank air to be followed by this subliminal message: "Grab hammer. Smash television set"

Ms. Mills coordinates FOE's travel program and works on membership development, a definite step upward.

THE ENVIRONMENT PROBLEM IS MANY PROBLEMS

...here are 10 books to help you better understand them ...how they relate to each other ... and what you can do about them.



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#204 POISONED POWER By John Gofman & Arthur Tamplin. Challenges the Atomic Energy Commission's program to produce electricity through commercial nuclear power plants. Its authors, former AEC scientists show why the question of nuclear power can't be left to the experts alone. \$6.95

#383 THE PEOPLE'S LAND Edited By Peter Barnes for the National Coalition of Land Reform. How the economics of ownership determines whether land is farmed or paved, strip-mined or preserved, polluted or reclaimed, who is wealthy and who's poor, who exploits others and who gets exploited. \$9.95 (Hardcover)

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#317 PRODUCING YOUR OWN POWER Edited By Carol Hupping Stoner. How to harness energy from the sun, wind, water, wood and organic wastes. Over 165 charts, tables, building plans and illustrations. Includes a comprehensive source list of equipment and supplies. \$8.95

#208 SAY NO! By Ruth Adams. A how-to for environment action that puts you in touch with the practical way people all over the country are saying, "NO" to the polluters of our environment. Everything from effective letter writing to picketing. Learn what you can do right now. \$6.95

257 CORPORATE COUNTRY By William H. Rodgers, Jr. How American business retaliates against environmentalists when their harmful technologies and profits are threatened. An expose of bribing, political chicanery, distorted research and massive propaganda campaigns. \$7.95

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Dr. Stanley Brunn's Magic Geography

A 16-State Nation?

By David W. Hacker From East Lansing, Mich.

"Will the distinguished senator from Tropicana yield?"

"The senator from Tropicana will be delighted to yield to his distinguished colleague from the great state of North Heartland. My grandfather came from Kenosha in North Heartland, and my grandmother was born in Terre Haute in the great neighboring state of South Heartland. I have great admiration for these states."

"I thank the senator from Tropicana. May I say that great state, the home of St. Augustine, the nation's oldest city, is as familiar and as beloved by me as the states of Empire and Yankee, where my forebears came from, before they migrated to Albuquerque in the great state of An-

gelina and to San Francisco in the magnificent state of Pacifica."

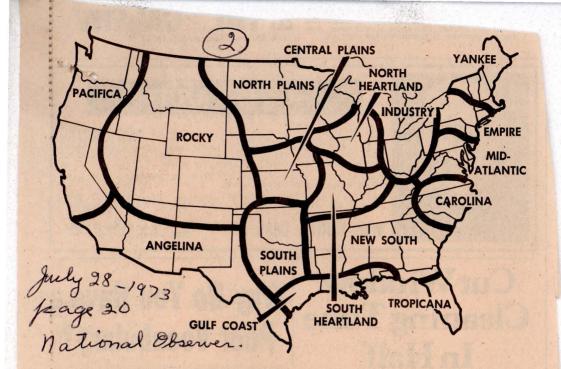
Tropicana? Heartland? Yankee? Empire? Angelina? It sounds as if a geographer—if not a U.S. senator in this imagined scenario—has cracked his globe and gotten the pieces back together all awry.

But hear out Dr. Stanley D. Brunn, an associate professor of geography here at Michigan State University. It's his theory that the United States by the year 2000 could look something like this geographically: Instead of 50 states, we will be reduced to 16 states. Each of these states will be centered on a metropolitan area.

What ties together the residents of each of these states will be similarities of economic outlook, social and cultural heritage, and political ideology.

These states will emerge, contends

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Dr. Brunn's Magic Geography

Building a 16-State Nation

Continued From Page One

Brunn, because of the inevitable drift toward urban life, the need for greater efficiency in running the social and economic programs that citizens are demanding, and the growing national "standardization" of issues—environment, health, education, highways, welfare.

"Realistically, I don't suppose you're going to get three-quarters of the states to go along with a Constitutional convention that would put them out of business," Brunn said the other day in his small campus office. "But at least this is a plan that can set people talking and thinking about the problems."

Another geographer, G. Etzel Pearcy of California State College in Los Angeles, has concocted a map similar to Brunn's, except that his projects a 38-state nation (among them Bitterroot, Cochise, Dearborn, Hudson, and Biscayne). Pearcy figures that wiping out 12 state bureaucracies would save more than \$4 billion in taxes. Brunn's plan might save even more.

Voting at Work

Current state boundaries no longer make sense, says Brunn. Why, he asks, shouldn't an Illinois resident be able to easily sue a Wisconsin industry that's polluting a river upstream from him? The air-pollution problem of Gary, Ind., is a Chicago-area problem, not just an Indiana problem.

Voting is a national right, not a local right, says Brunn, and therefore voting requirements should be uniform (as the courts are declaring), and voting should be made easier. "You should be able to vote where you work or where you shop."

The duplication of suburban services—water, police, school districts—is often a waste of taxpayer money. Consolidation is more effective; computers can do all the paper work.

Even more senseless, says Brunn, is the existing situation where 6 states with a total population of 82 million (39 per cent of the nation) have a dozen U.S. senators; 15 states that total 10 million persons (the population of Ohio) are represented by 30 senators.

Inevitably, Brunn believes, this is going to change. Already he sees the signs:

There are regional commissions, set up mainly to deal with perking up the economy, in Appalachia, the Upper Great Lakes, the Ozarks, the Four Corners area of the Southwest, and in New England.

✓ Zip codes cross state lines, in Minnesota and Wisconsin, and the Carolinas.

Interstate compacts enable adjoining states to deal with common problems. He cites the New York Port Authority, joint police jurisdiction in Arkansas and Tennessee, and joint-state commissions along such river basins as the Columbia and Colorado rivers.

As these regional efforts expand, the states lose their political clout, says Brunn, and eventually the states will go the way of the township and the county as key elements of government.

'Barriers to Progress'

This belief suggests that anyone with a hankering for politics aim for the mayor's, not the governor's, chair. The Nixon Administration plan of revenue-sharing with cities, bypassing the states, is further evidence that Brunn may be reading the tea leaves right.

the tea leaves right.

"No longer can a societal issue be unique to one region, one state," he says.

"We all want clean air, clean water. The Federal Government is setting the tenor for the states. I am not saying we want everyone to be the same. But maybe

some of the differences should be reduced. States as they now exist are really barriers to legislation and political progress. Do we want to continue to pay all these property taxes for police and trash pickup?

"If you come from the state of Industry," says Brunn, "you can still say you're from Michigan. Industry will just be another label, for administrative purposes. I don't think it would be that upsetting. One out of four Americans moves every year now. We move from city to suburb, suburb to suburb, state to state. We have all these identities, and I'm not sure how fixed these really are throughout life. You don't hear of hillbillies and city slickers any more. Those identities change. People aren't much identified any more as Italians or Irish or Catholic. Religion and ethnic identities are disappearing."

'Political Baggage'

Said Brunn in a speech at the University of Montreal: "With migration (one or several times) an individual's political knowledge and 'world' ceases to be with only one particular county, city, region, or state. That is, he takes his political baggage (sorted and unsorted) to his new political 'world.'"

These new worlds will be places like Chipitts (Chicago to Pittsburgh), Bowash (Boston to Washington), or SanSan (San Francisco to San Diego). In these metropolitan areas of the new 16-state nation, efficiency is the rule, the computer is the tool. This may be a frightening prospect from the year 1973. But in the year 2000, just 27 years away, the Congressional Record may well note:

just 27 years away, the Congressional Record may well note:

"The senator from North Heartland: It is my honor and privilege to note the 61st birthday of the new father of our nation, Stanley D. Brunn, who was born on June 24, 1939, in Freeport in the old state of Illinois. When asked where he is from, this tall, slender, bewhiskered gentleman replies, 'Just say I'm a cosmopolitan Midwesterner.' It was Stanley Brunn who helped lift geography into an art and a science more exciting and useful than coloring maps."

Plan to realign states looks haphazard, but is not

TALK of secessions and realignment of state-and local-government boundaries through the years usually has reflected regional political disputes.

The recent proposal to carve a new county out of parts of King County, for example, is based on disenchantment among the locals toward the Courthouse administration in Seattle.

Much earlier, a plan to divide Washington into two states grew out of philosophical differences on either side of the Cascades. Eastern Washington conservatives, who wanted no part of those "radicals" on the west side, sought unsuccessfully in the 1930's to organize a new state of Lincoln.

STILL FURTHER back in history, Oregon Democrats — miffed because the Far West was not participating fully in the settled federal government elsewhere in the nation — tried in the 1850's to organize the Pacific Coast states into a single new government separate from the union.

But few thoughts unaffected by political disagreements have been given in the past to the general academic question of whether the country's geographical layout makes any kind of economic or sociological sense.

Filling that void now, however, is a newly published study which suggests that instead of 50, the country would be much better off as the "38 states of the United States of America."

IN A MONOGRAPH that will not please those steeped in tradition and parochial pride, Dr. G. Etzel Pearcy of Los Angeles not only reduces and reshapes the total number of states, but gives them new names — "El Dorado," "Alamo,"

Proposed 38 states of the United States of America CASCADE BIGHORN BITTERROOT DAKOTA SUPERIOR EL QORADO PRAIRIE BONNEVILLE DEARBORN ALLEGHENY PLATTE SAN LUIS SUSQUEHANNA WABASH SAN GABRIEL CHESAPEAKE CUMBERLAND SHAWNEE COCHISE OZARK AROLIN BAYOU ALAMO SEWARD

"Wabash," "Plymouth" and the like. (See map.)

Pearcy, a onetime federal government geographer and a frequent writer of texts in his field, retired recently from the geography faculty at Caifornia State University.

Using such criteria as population density, geographical size and natural boundaries, including rivers and mountain ranges, Pearcy's 38-state plan encounters its greatest difficulties in regrouping the small, yet heavily populated Eastern states.

IT WAS MUCH simpler to realign the Western regions.

In the Pacific Northwest, Pearcy visualizes creating a state of Cascade encompassing the western two thirds of Washington, all but a sliver of Eastern Oregon and thin slices of Northern California and Nevada.

(If the name Cascade doesn't grab you, Pearcy suggests as alternates Columbia and Olympia.)

The remaining parts of Washington and Oregon would join larger chunks of Idaho and Montana plus pieces of Nevada and Wyo-

ming in the new state of Bitterroot.

AND SO ON down the line. Alaska would be severed into two new states, Seward and Kodiak to achieve better compactness of size.

With 586,400 square miles, Alaska's land area is 483 times as great as that of Rhode Island (1,214 square miles). Which helps explain why Pearcy has chosen to eliminate such small states as Rhode Island, Delaware and Vermont from his new national map.

As a rule, Pearcy said, the objective was to take into consideration common char-

acteristics involving terrain, river patterns, the position of metropolitan centers and lines of transportation and end up with a more logical configuration of state boundaries.

WHAT'S THE point of all this? At first glance, the study appears to be simply an interesting academic exercise conducted for the author's amusement.

Closer study, though, indicates that Pearcy's plan offers some distinct financial advantages.

Calculating the amounts spent for general state-gov-

ernment overhead, Pearcy figures the maintenance of 50 separate state capitals now costs about \$19.1 billion a year.

ELIMINATION of at least a dozen of the 50 theoretically would produce savings in fixed costs of about \$4.6 billion a year. That is more than the government spent to send astronauts to the moon.

At those prices, a lot of taxpayers might find the 38-state plan rather attractive, even if such a famliar greeting as "Howdy, Tex!" wound up being changed to "Hello, Alamo!"

A rare interview with Andrew Wyeth

By AMEI WALLACH

CUSHING, Me. — In the meadow stretching up from the Maine sea coast to the gaunt gray house where Christina Olson once lived, the grass is long and dry. Except in one spot. There it is trampled, and still green, an oblong scar left on the landscape by the scores of pilgrims who come to lay themselves in the place where Christina herself once sat in what has become probably the most famous painting in America: "Christina's World."

Andrew Wyeth, the creator of that inescapable image, pauses as he circles the old Olson house. "I get letters - I get a letter a week, sometimes more than one week," he says. "Some housewife will write, 'It's really me, that painting. It's my world.' It's gotten a little out of hand. And people come to her house from all over the world to be photographed. It's a cult."

Wyeth stopped painting the

Wyeth stopped painting the world of Christina and her brother Alvaro in 1969, soon after Christina died. He no longer spends much time at the Olson house, a few miles from his own. Except for a rare couple of interviews nearly 10 years ago, at the time that his big retrospective was becoming the most popular show ever at New York's Whitney Museum, he has never taken the time to talk about himself and his paintings to report-

But on Saturday, the New York Metropolitan Museum of Art will be opening a massive exhibit, "Two Worlds of Andrew Wyeth." The show explores two of his favorite and most-painted subjects: the Olsons and their house in Cushing, Me., and the Kuerners and their farm near Chadds Ford, Pa.

The subjects and the show mean a great deal to Wyeth, so he is making an exception. And it turns out he has a great deal to say. Moments after I had arrived here on Down East Airlines' nine-seater Piper Navajo out of Boston, he was announcing genially, "Hello, I'm Mr. Wyeth." And he is volunteering information from the driver's seat of his dusky-green jeep.
"I haven't been deine

er's seat of his dusky-green jeep.

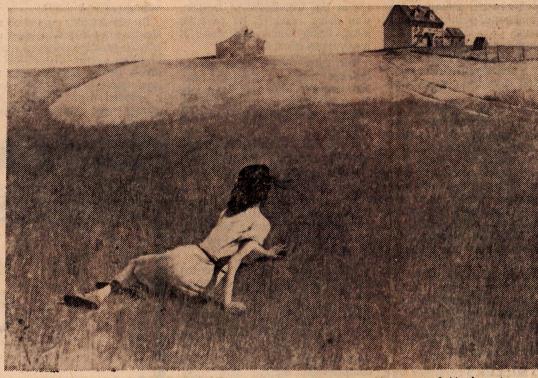
"I haven't been doing a great deal of painting," he says. "Just one big tempera. I might just close up shop. You have to get new ideas. When you dry up you ought to quit or put a bullet through your head."

But then, back in 1965, he was saying he'd stop painting for the next 25 years, and he didn't then. And he's been afraid of running out of ideas before.

out of ideas before.

"AFTER 'Christina's World,' I did a painting with a horse in a field," he remembers. "And Lincoln Kirstein (director of the New York City Ballet) said, 'It's a horsey Christina's World.' "And every deep line in his face crinkles Wyeth throws back his head

But what he's really talking about when he mentions giving up painting is going abroad. "I won't travel until I give up painting."
Still, he's just been made a member of the French Academy,



"Christina's World," by Andrew Wyeth. Collection, Museum of Modern Art

the first American to receive that designation since John Singer Sargent in the 19th Century. And he might just go to France to accept the honor. Popular as he is in America, with his all-American style and eye, he's relatively unknown in Europe as yet.

He has never traveled. He's al-ways insisted that what nourished him as an artist was his sense of place, that with travel he might lose what he calls his innocence.
Innocence. It's at once the quali-

ty that makes him so popular and so misunderstood. 'While, on the one hand, eager buyers are lined up for the privilege of purchasing his temperas at \$200,000 a shot, and reproductions of "Christina's World" proliferate in motels and living rooms, avant garde critics have tended to despise Wyeth's work. They call him "sentimental" and "the rich man's Normental"

mental" and the man Rockwell."

He himself gets a kick out of the are some who are very strong people who are against me, which I love," he says. "I'm so far behind I'm ahead. I think people are surprised Tom Hoving (the Metropolitan's director), that radical, is doing this show. I think he realized I'm controversial and he likes it. He's going to smear it in their faces."

Hoving himself is acting as curator of the show after Henry Geldzahler, the museum's contemporary art curator, bowed out because he thought the exhibit would conflict with his reputation as a champion of the avant garde.

HOVING wanted to do the show, he says, "because of the enormous resurgence of realism today, and because I was intrigued at the belief that if he was so popular he was no good. Then when I got to talk to him, I found we could really penetrate and it intrigued me tout historically."

'art historically.' "
Hoving and Wyeth hit it off so well that for the exhibit's catalog

Hoving taped 5½ days of conversation with the painter, detailing the background of every work in the show. Hoving calls that catalog "a remarkable document," and indeed it is, revealing Wyeth's intense vision and thoroughly poetic vocabulary. ("What I was after supering off what you get after sugaring off maple sugar from the maple tree. You keep boiling it down until you

have the essence of purity.")

The catalog, and the paintings, too, reveal that Wyeth's work is as complex, as slippery and as diffi-cult to define as the man himself. They are neither the photographic images or the melodramatic scenes that they have been misunderstood as being. They are certainly not just quaint pictures of barns. Wyeth leaves those to his imitators, my weak qualities and show all my weak qualities and second to the minimum of the minimum o accentuate them."

Even when he paints faces so closeup that there's no place to hide a wart or a worry, it's the emotion he's after, not the super reality. He wants to catch a very American quality of Gothic anxie-ty that's on every page of a Na-thaniel Hawthorne novel and lurks just below the surface of even the most streamlined American city. That's why housewives think they're Christina.

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A rare interview with Andrew Wyeth

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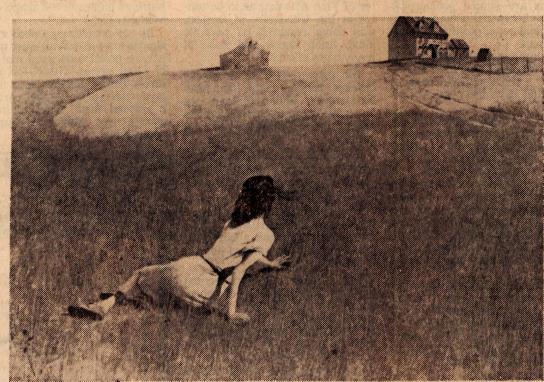
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"Christina's World," by Andrew Wyeth. Collection, Museum of Modern Art

the first American to receive that designation since John Singer Sargent in the 19th Century. And he might just go to France to accept the honor. Popular as he is in America, with his all-American style and eye, he's relatively unknown in Europe as yet.

He has never traveled. He's always insisted that what nourished him as an artist was his sense of place, that with travel he might lose what he calls his innocence.

Innocence. It's at once the quality that makes him so popular and so misunderstood. 'While, on the one hand, eager buyers are lined up for the privilege of purchasing his temperas at \$200,000 a shot, and reproductions of "Christina's World" proliferate in motels and living rooms, avant garde critics have tended to despise Wyeth's work. They call him "sentimental" and "the rich man's Norman Rockwell."

He himself gets a kick out of the controversy. "There are some very strong people who are against me, which I love," he says. "I'm so far behind I'm ahead I think people are surprised. says. "I'm so far behind I'm ahead. I think people are surprised Tom Hoving (the Metropolitan's director), that radical, is doing this show. I think he realized I'm controversial and he likes it. He's going to smear it in their faces."

Hoving himself is acting as curator of the show after Henry Geldzahler, the museum's contemporary art curator, bowed out be-cause he thought the exhibit would conflict with his reputation as a champion of the avant garde.

HOVING wanted to do the show, he says, "because of the enormous resurgence of realism today, and because I was intrigued at the belief that if he was so popular he was no good. Then when I got to talk to him, I found we could really penetrate and it intrigued me 'art historically.'"
Hoving and Wyeth hit it off so

Academy, well that for the exhibit's catalog

Hoving taped 51/2 days of conversa-Hoving taped 5½ days of conversa-tion with the painter, detailing the background of every work in the show. Hoving calls that catalog "a remarkable document," and in-deed it is, revealing Wyeth's in-tense vision and thoroughly poetic vocabulary. ("What I was after is what you get after sugaring off what you get after sugaring off maple sugar from the maple tree. You keep boiling it down until you have the essence of purity.")

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that except to say, "I enjoyed it. I really did." From the time he was 10 he was painting, wandering fields and forests, "not thinking artistic thoughts I'll tell you that."

Wyeth never did go to college. "My father really believed in the training of an artist. He felt that it was just as important as the training of a lawyer or a chemist, and I worked in the afternoon in the studio and in the morning I was tutored."

By the time he was 19 he had had his first show and his first success

He stays in Maine from late spring to late fall and lives in a stone house in Chadds Ford, Pa. But his paintings love the emptiness of winter. "I'm happiest then," he says. Spring paintings are of the first muddy days with snow still on the ground and a morning chill in the air. Summer paintings are seldom as clear and sharp as the Maine air, but dusty and stale, sifted through the closed-in quality of Christina's own

ON THE NIGHT before Christina was buried, Wyeth went once again to the house where he had spent so many hours. That night he was in the kitchen which he had painted with Christina's beloved geraniums in "Woodstove." It was snowing, and down in the family

snowing, and down in the family graveyard in the field, where now geraniums grow on Christina's grave, the men were making a bonfire to soften up the earth.

And suddenly, Wyeth says, "This thin line of crystal white snow come in the door, across the floor and up over the chair she always sat in It was the damndest thing. sat in. It was the damndest thing. Almost like the white finger of death and the bones reaching out. Strange."

That sort of detail is the making of a Wyeth painting. It's caught in the watercolors and drawings going on view now for the first time at the Metropolitan. In spite of himself and the fact that he says this will be his last American show, Wyeth is excited about the Metropolitan exhibit.

"I have never even considered a show at the Metropolitan, because it was beyond," he says. "I mean, you don't think of things like that in your lifetime."

But the Olsons are dead and the work he is doing at Kuerners now "is completely different," he says.
"It has nothing to do with what the show's about. I won't talk about it, and the work I'm doing there now won't be seen until after I'm dead, anyway. So when people ask doesn't it bother me to have intimate things I'm doing talked about, well, they don't know what I'm doing."

(C) 1976, Newsday

(The Los Angeles Times-Washington Post
News Service)

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COLLECTOR'S GUARDIAN

Memorials of diligence Donald Winterscill on doing samplers

CHILDHOOD used to be a fairly serious business, and it cannot have been made less serious by the tradition of little girls doing samplers to show their skill in needlework. Thousands of these memorials of diligence are handed down in families and others can often be picked up inexpensively in antique shops or at auctions. Some are wonderfully preserved. They give an insight into a totally different way of life

The pride of a mother, teacher, or governess was satisfied; but it was not the only aim. The little girls learned their stitches; absorbed moral and religious precepts; and became familiar with letters and numbers. Some examples show almost incredible skill among children as young as six or seven.

The inscriptions were of course chosen by adults. A sampler produced at school says:

Oh smile on those whose liberal care

Provides for our instruction here:

And let our conduct ever prove

We're grateful for their generous love.

The young were warned of the transcience of human life:

Come gentle God, without thy aid.

I sink in dark despair

O wrap me in thy silent shade

For peace is only there.
There is an hour when I
must die

Nor can I tell how soon 'twill come.

A thousand children such as I

Are called to hear their doom.

Our days, alas, our mortal days Are short and wretched too.

Are short and wretched too, Evil and few the patriarch says

And well the partriarch knew.

The Lord's Prayer, the Ten Commandments, the Apostles' Creed, hymns, psalms, and chapters of the Scriptures are favourites.

Pictures also are frequently religious: Adam and Eve with the Tree of Knowledge; the finding of Moses; the flight into Egypt; the sacrifice of Isaac; Herod and Salome with the head of St John the Baptist; the Virgin; Christ; and so on.

More interesting to the girls may have been the ornaments and borders. Lions, stags, rabbits, leopards, crowns, hearts, trees, and human beings were popular. Birds, insects, and flowers are frequent; strawberries, roses, and pinks grow profusely. Sometimes houses are shown. Maps of Britain or England were done in the later part of the eighteenth century.

Samplers began not as proofs of skill to be framed and displayed but as patterns done by adults of different kinds of stitches which the housewife could use for embroidering clothes, cushions, household linen, and other useful or ornamental things. The decoration is in bands or scattered haphazardly. Among the techniques were birdseye, satin, tent, and back stitches. These samplers were up to a yard long and nine inches wide. Some have survived from the early seventeenth century, and Shakespeare has references to them, for example in Titus Andronicus. Pattern books were published too, and they provided themes. Some patterns were repeated from generation to generation.

Popularity of samplers increased during the seventeenth century; the arrival of Methodism in the eighteenth century brought in the serious precepts and religious subjects. The variety of stitches became less important and cross-stitches were almost universal.

A decline in quality came towards the end of the eighteenth century. Moths, light, and damp are the enemies; woodworm attacks the frames; and large numbers must have been lost.

A well designed example avoids clutter and the conglomeration of ornaments, letters, and numbers. The names or initials of the girls and the date are almost always given after the middle of the eighteenth century, but the dates and ages are sometimes lost. The thread may have rotted. The thread may also have been picked out: a woman would not have liked to have documentary evidence on show of her age. And dates and even names have been changed, perhaps by dishonest vendors who want to pass the sampler off as being of a different and more valuable period.

It is hard to say accurately when a sampler was made if it does not carry a date—the patterns were so traditional. No local traditions have been found, although the places where they were made is sometimes given:

Ann Stanfer is my name And England is my nation Blackwall is my dwelling

And Christ is my salvation.

This one is dated 1766.
One unfortunate specimen failed in its aim of proving that the young lady was well brought up in domestic virtues. This sampler, slovenly, unkempt, and unfinished, is inscribed:

This is my Work so you may see what care my mother as took of me.

Ordinary pieces can be bought for about £5 upwards. Rare and earlier ones may cost several hundred pounds.



Canvas and coloured silk, dated 1780 (Victoria and Albert Museum)

Man, Rock

—An Ancient

Love Affair

BY URSULA VILS

Dr. Richard Stone, chairman of the USC geology department, is a good-natured soul who has managed to weather years of puns about his profession and surname.

"Everybody thinks he's the first one to think

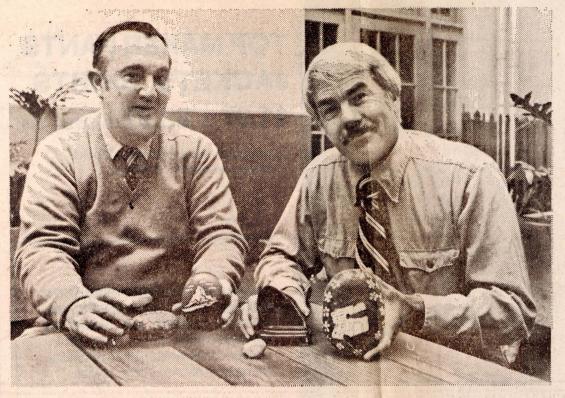
of it," he says with a wry grin.

These days he's fending off a new onslaught: Why didn't he think to box and market Pet Rocks at \$4 a crack for a profit that's heading into the millions?

"Why didn't I invent the paper clip?" said Stone, waving a colleague. Dr. Bernard Pipkin, into his office for a more serious but nonetheless lively talk about man's love affair with rocks.

"The Pet Rocks fad is a very clever advertising deal." he said, "but there is more to it than a catchy publicity and promotion job. It involves the age-old affinity man has for rocks.

Please Turn to Page 27, Col. 1



PET ROCKS-Dr. Richard Stone, left, chairman of the USC geology depart-

ment, and colleague, Dr. Bernard Pipkin, display rocks given them by students.

Times photo by Marianna Diamos

Man and Rock: Old Love Affair

Continued from First Page

"I think right now it also reflects the current back-tonature movement, our interest in ecology, environment, the plants kick—except rocks don't die and plants do. The whole man-nature-God thing.

"There is a long history of man and rocks and man and

Rocks appealed to primitive man on aesthetic and mystic levels, Dr. Pipkin said.

"Early man looked at fossils and believed that the organism grew in the rock," Dr. Pipkin said. "He didn't know the true nature of what he was seeing."

"Primitive man also saw religious relationships with meteorites." Dr. Stone said. "Wouldn't you feel there was something supernatural if this heavy rock fell from the

"There's one very famous one in Greenland that we stole from Eskimos who regarded it as sacred.

"There are Australian aborigines who believe in 'pointing stones.' If a witch doctor points them at you, you die —and you do die, because you believe you're going to. It's all bound in with religion, mysticism."

Man's affinity for rocks is not confined to primitives, the geologists said.

Commemorating an Event

"It's amazing how many people have rocks on their desks; just look around business offices for a while." Dr. Stone said. "And many people take home rocks to commemorate an event-if you climbed a mountain or went to Borneo, you might very well take home a rock from the place."

"In other words." said Dr. Pipkin, "many people have a pet rock and don't know it.'

He freely confessed that includes himself. He showed a triangular piece of polished jade ("an imperfect variety").

"I paid for this in Taiwan," he said, "when I was teaching there. I just love jade . . . "

Although Dr. Stone insists that "a geologist wouldn't. collect rocks." both he and Dr. Pipkin have several in their offices, most of them donated, and sometimes decorated. by students.

Dr. Stone has one painted with a mountain scene and emblazoned. "Dear Rock, Thank you for being. Love." Dr. Pipkin's chief treasure, next to the jade, is an oval rock with a painted green turtle reading the USC Daily Trojan amid a wreath of flowers.

"You notice they are always rounded," Dr. Stone said. "Jagged ones just are not comfortable."

Centuries of Usefulness

The geologists noted that rocks were used to navigate Viking ships, that medicine men in primitive societies carried special rocks in their sacks of magic herbs, that rocks have been chosen to represent beliefs from Christianity to Hawaii's goddess Pele.

'Pele's tears' are little rocks that look like obsidian" (volcanic glass). Dr. Pipkin said. "They are formed when lava flows into the sea and explodes, forming these small pieces of black rock.

"In legend. Jason and the Golden Fleece involved rocks. In early placer mining—and in some places to this day miners removed gold from gravel by rolling the gravel over sheepskin. When they finished, there was a very fine good dust that remained, causing the sheepskin to be 'the golden fleece.

"Our use of stones as jewelry probably goes back to the use of rocks as amulets or talismans, good luck or protection from evil spirite."

"The Japanese form their gardens around one great

rock you can contemplate," Dr. Stone said. "We use rocks in aquariums, and remember the 'Martini stones' of a few

"There are now hundres of lapidary and gem clubs. a major hobby for thousands of people. Senior citizens' facilities now are offering gem p shing as one of their recreational opportunities.

"Even rock candy . . . It's almost limitless.

"Every kid goes through a rock-collecting stage. I get a tremendous amount of letters from kids; I have a lot of little pen pals out there. We send them a rock sometimes. I have three to identify and send back to a lad right now."

Dr. Stone plucked a polished concave stone from his office shelf and identified it as a rock that a dinosaur swallowed into his stomach to help digest his food. A joke?

"No, no," he assured in his most professional tone, "They are called gastroliths and they helped the dinosaurs

grind up the leaves and plants they ate."
"We have seal gastroliths today." Dr. Pipkin said. "Some biologists have said they use them for ballast-literally putting lead in their tails. But they really use them to grind up food in their stomachs. You can find them on any of the Channel Islands."

"We had one professor who used to take kids on field trips to the Channel Islands," Dr. Stone said. "He'd find a dead, bloated seal, take his knife and open up its belly and

look for gizzard stones. There'd be little girls throwing up Los Angeles Times Thurs., Dec. 25, 1975—Part IV 278 and strong men blanching . . . "

Despite his academic professionalism, Dr. Stone sees the humor and appeal of the Pet Rocks.

"What can you get for the man who has everything?" he said. "A Pet Rock. He can use it as a doorstop . . . or throw it at his wife . . . or feed it to his seal.'

But Barney Pipkin had the final word. As the visit to the USC geology department ended, he confided one last piece of information.

Nodding toward Dick Stone, he said, "The faculty call him its Pet Stone."





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LEISURE

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Faith and Charity Make a Movie Of a Hit Play

By ALJEAN HARMETZ

LOS ANGELES

n a neat white farmhouse by the side of a country road, just after 6 P.M. on

an evening in early fall, a woman is preparing to kill herself.

Of all the unlikely subjects for a Hollywood movie, "'night, Mother" seems among the most improbable. Hollywood is clever at animating nightmares, at turning into rubber and plastic the tangled, slithery hordes of alien things that crawl through our unconscious. Audiences feast on dis-guised fears. However, they have usually recoiled from

straight jolts of bad dreams that don't go away in daylight. In "'night, Mother" a 36-year-old woman decides to take control of

her life by ending it. The mother who has never understood her is the only barrier on her road to the grave. That Marsha Norman's Pulitzer Prize-winning play has been turned into a movie is due to the willingness of everyone involved to take much less money than they usually command. Miss Norman wrote the screenplay on speculation. Sissy Spacek allowed her name to be Sissy used by the producers of the play used by the producers of the play during the year and a half that they were trying to sell Miss Norman's script. Instead of the \$1 million-plus salary that she got for her last movie, "Marie," Miss Spacek was willing to accept less than \$300,000. The director, Tom Moore, was paid Directors' Guild of America minimum, slightly less than \$100,000. The producers of the movie,

The producers of the movie, Alan Greisman and Aaron Spell-

ing, are deferring all their fees; like everyone else involved, they

will share in any profits that might eventually come from the film. And Anne Bancroft, who describes the film as "so low-

budget that I reused my paper towels twice and paid for my own speech teacher," also earned roughly a third of her usual fee. What Miss Spacek and Miss Bancroft earned was a lot of Bancroft earned was a lot of mingled exhilaration and pain. "We'd be on that sound stage and it was utter doom, death and depression," says Miss Spacek. "I have everything to live for. Life is just a bowl of cherries. The most difficult thing was to find in myself Jessie's hopeless. find in myself Jessie's hopeless-ness. I felt like Mary Sunshine going into the depths of despair. Sunday nights were the hardest because Monday was coming. Yet I found things in myself

never called upon before. I've released a lot of demons." "I couldn't shake Mama," says Miss Bancroft, who never got out of her pink housecoat and slippers between scenes and could hardly drop the accent she had matched to Miss Spacek's Texas accent until noon on Sun-day. Says Miss Spacek, "I only

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"I reused my Anne Bancroftpaper towels twice and hired my own speech teacher.'



Sissy Spacek--For a chance at "doom and depression," she took a major salary cut.



Stokley Towles/The Patriot Ledge

She wrote Marsha Normanthe screenplay with no advance fee.

knew Anne with that accent and, three days after the film ended, when she came to the wrap party all made up

and with her own accent, I didn't recognize her."

"I can tell if my work's good," says Miss Bancroft. "That comes from running in a play as long as I did — one and a half years in 'Two for the Seesaw,' a year and four months in 'The Miracle Worker.' I get more pleasure when it's good." Wrapped in a black velvet dress, eating grilled swordfish in Continued on Page 21

Faith and Charity Make a Movie of a Hit Play

Continued from Page 1

a cool, expensive restaurant a few blocks from her Brentwood home, she is stating a fact, not fishing for compliments. "I hadn't worked this deeply since 'The Miracle Worker,' only now I'm older, more experienced, smarter."

Whatever the two actresses poured onto film, they can no longer influence "'night, Mother," and they have each gone on to the lesser intensities of real life — Miss Spacek to her Virginia farm and her freckled, 4-year-old daughter, Miss Bancroft to a summer on Fire Island with her 14-year-old son, her husband, Mel Brooks, and her two sisters and their children.

In Dubbing Room 3 at Universal Studio, Tom Moore, the director of "'night, Mother," plays Reel 12 endlessly, making the ticking of a clock louder, making the voices of his two actresses softer. For weeks, he has been concentrating on raising and lowering the sound on tiny pieces of film. "I feel like I've been on this dubbing stage my entire adult life," he says, his pale yellow hair falling into his eyes as he bends over rows of dials and switches. "It's amazing what you can do to a performance by pulling highs off a voice."

Dubbing stages are huge because the sound must spread as it will in a theater, and there is a Ping-Pong table in what seems an acre of empty space. "You need the Ping-Pong," says Mr. Moore, "because working with sound is so tension producing."

Sound is particularly important to "'night, Mother," because it is one of the few devices that can be used to make this particular stage play into a movie experience. It is usual to "open up" a stage play by adding scenes outdoors. "A Soldier's Story" used the vastness of the Army base on which its murder occured to shake off its theatrical origins. Climactic scenes between Anne Bancroft and Jane Fonda in "Agnes of God" were played outside the convent. But the fact that Jessie has made herself a prisoner in this farmhouse on the outskirts of some small Middle Western town is integral to her decision to kill

"What was I to do?" asked Marsha Norman. "Go to the grocery store where Jessie never goes?"

Except for two scenes where Jessie peeks through the Venetian blinds, the camera never leaves the house. "She looks out the way fish look out from their fishbowl," says Miss Norman. "They know they couldn't breathe out there."

The movie, like the play, takes place in real time. It is one long scene, 1 hour and 35 minutes in length. Miss Norman has tried to build tension by "making a murder mystery, a chase inside the house." Jessie is intending to shoot herself. "The shoe box the gun is in gets lost on stage," says Miss Norman. "But you can't have a loaded gun in a film and not pay attention to it. I had to give Mama the additional mission of finding that gun and getting rid of it. When she finds Jessie's drawers empty, it's like a classic horror movie."

What bewilders Miss Norman about the play to which she gave birth is "that there are people who are so frightened by it" and, at the same time, 32 countries have turned Mama and Jessie into archtypes to suit their own cultures. The play, which opened in New York at the John Golden theater on April 1, 1983, has actually made more money since it left Broadway than it did during its 11 months there and, with the aid of the movie sale, is close to making a profit. "Any list New Guinea is on is a very long list," Miss Norman says, referring to a recent production of "'night, Mother" in New Guinea. In the Italian production, "Mama is enormous, an Italian mother, and Jessie is an angel child." In the Scandinavian production, "Jessie is a valkyrie, and Mama is this little old lady who lives in a shoe." In South America, the two women look the same age, as though they were sisters, while, in the Oriental production, they are exactly the same size.

The universality of the play comes, she thinks, because, "We all lose our children. You can live for a lifetime and not know what their life is to them. You think for a lifetime they belong to you, but they are only on loan."

She originally imagined Jessie as



Anne Bancroft and Sissy Spacek in a scene from "'night, Mother," scheduled to open next month

"rail thin, moving through the world without moving the dust on the floor," a woman "who had tried to disappear by not eating." Yet the role was played on Broadway as awkward, too solid flesh by the heavyset Kathy Bates and, says Miss Norman, "made my vision absolutely irrelevant."

Both Miss Spacek and Miss Bancroft wore only the minimum makeup required by the camera and were willing, even eager, for the plainness of their characters to show through. With a brown rinse on her hair and brown contact lenses, wearing a gray sweater and limp gray pants, Miss

Spacek is close to Miss Norman's original Jessie. "She vanishes," says Miss Norman. But Miss Spacek is matched with a Mama very different from the frail, aging stage mama of Anne Pitoniak. "I have a very strong face," says Miss Bancroft. "To make it softer, to make myself fade, I cut and bleached my hair and tweezed and bleached my eyebrows." But she is still a vibrant and vigorous woman. "The audience won't have a concern for her physical health," says Miss Norman. "That takes away one element. What you get in return is that this can happen to someone at the peak of their life, that jarring feeling of 'this isn't fair' you have when 40year-olds have heart attacks."

Miss Norman feels that it was harder for Anne Bancroft to become Mama than for Sissy Spacek to turn herself in to Jessie. "I write characters who make mistakes," she says, "and actors are reluctant to make mistakes. Anne Bancroft is a real smart person. 'Doesn't Mama know that's a dangerous thing to say? How could I make this mistake?' she would ask. As soon as they walked off the set, Sissy would come out of Jessie, but Anne lived further away from Mama."

Miss Spacek disagrees. "To find that hopelessness, I had to dredge up everything that ever happened to me that was painful and stay in that state of mind. I was so envious of Anne Pitoniak and Kathy Bates going through it each night, like a cleansing down to their toenails. We had to hold it for six weeks and move agonizingly slowly. Halfway through, I remember thinking I would have succeeded just by finishing it, never mind hoping to be good."

It was because Miss Spacek loved the play and wanted to be in the movie that the film's producers. Dann Byck and David Lancaster, felt they had a chance to bring bring "'night, Mother" to the screen. Even with the magic name of a star, they were turned down by all the major studios. Mr. Lancaster estimates that 'he shopped "'night, Mother" to 100 different people. One New York company agreed to finance the film for \$1.2 million if the producers gave up control. "But we wanted Marsha's scripts and the director of the play. Tom Moore, a first-time film director," says Mr. Lancaster. Mr. Moore, who directs Chekhov in regional theaters, created "Grease" on Broadway in 1972. The head of 20th Century Fox's specialty films division wanted the rights, but the studio changed ownership, and he was out of a job. "That was the worst moment, because the deal took five months to die," says Mr. Lancaster.

Somewhere among the half dozen maybes and almosts, Universal offered to make the film for \$1.5 million; the producers felt their minimum budget would have to be \$2.5 million. A year later — because the agents for Sissy Spacek and the tele-

vision producer Aaron Spelling worked at the same agency — a copy of the script was sent to Mr. Spelling and Alan Greisman. The two men had formed a movie company a few months earlier.

"We were able to figure out a way to finance the movie, and we were willing to take a chance on Tom on blind faith," says Mr. Greisman. "Entirely because of Aaron's relationship with ABC," the network agreed to buy the movie for television for \$1 million." Mr. Greisman had produced "Fletch" for Universal, and the studio told them it was still willing to put up \$1.5 million. An extra \$500,000 in production services came from Mr. Spelling's television company, for a total of \$3 million.

The movie is nearly finished now and is scheduled to open in New York Sept. 12, one week after its world premiere at the Toronto International Film Festival. "We'll go slowly, on an exclusive basis, almost the way an independent releases its films," says Marvin Antonowsky, president of marketing at Universal.

When he stands in the dubbing room and looks at his farmhouse, Mr. Moore remembers the night John Lennon was shot and he walked to the Dakota and stood outside. "All the lights were on," he says, "and I was overwhelmed that everything was exactly the same but nothing would be the same."

Miss Bancroft thinks of her husband's mother, in the hospital for an operation at the age of 68, calling "Mama, Mama," under the anesthetic. What will her own mother think of "night, Mother?" "She won't tell me. She won't expose herself to me. She thinks of herself as my mother."

Miss Spacek — whose "favorite movie of all time" is "The Miracle Worker" — thinks often about the "powerhouse" Miss Bancroft. "When you get down to the nitty-gritty with people, exposing yourself to your toes," she says, "there's a real bond."

For the unsentimental miss Bancroft, when a picture is over, it is over. Yet she wonders about Miss Spacek every now and then: "I usually don't ever see the actors I work with again," she says. "But, this time, we did have a bond."

notes from Montana conference, "Search for a Workable Future" - macho romantic shales! - One Trail 100 mi from here! 1-800-007-0F-LA

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The Humanities are about how ordinary people live. The root of the word is vital-human, xxx as in humanity. Along with civil, as in a civilized society and civilization—the so-called budget—cutting politicians who pride themselves on being radical ought to go back to the roots of the se words, and think about what they they really mean. They mean the best in us, as a people—ideas and aspirations and imagination.

--As someone from very small towns in Montana, my life was expanded thru books. It could have been expanded further, I now see, if projects such as these the Montana Committee for the Humanities has been putting on existed then. I might not have become part of the Montana diaspera—the outflow, the exiles—if those had been there to turns me on.

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For this novel, start at the back

List of sources is good indication of why 'English Creek' is special

English Creek. By Ivan Doig. Atheneum. 339 pages. \$15.95.

By KEVIN MILLER Of The Register-Guard

The place to start "English Creek" is in the final five pages, where Ivan Doig thanks his sources for this remarkable novel.

It is the standard, "This is a work of fiction" disclaimer, followed by perhaps 150 acknowledgments that make it clear "English Creek," set in the Two Medicine area of northern Montana's sheep- and cattle-ranching country in the summer of 1939, flows along the boundary between truth and fiction.

Doig, whose other works include "This House of Sky," "Winter Brothers," and "The Sea Runners," pored over old newspapers, personal memoirs, firefighters' logs and other written records. He scoured his own mem-

ory for tales told in his growing-up days along the Rocky Mountain Front, called "the Front" and not "the eastern slope of the Rockies" for reasons obvious to anyone who has seen it.

He interviewed others who heard the tales told firsthand, and he interviewed a few who told them firsthand. He then wove the collected anecdotes into his tale, creating a novel that is as much a passing on of precious lore as it is a work of fiction.

The story of those three months at English Creek is recalled by 60-year-old Jick McCaskill, who gazes back on his 14th summer with that mixture of nostalgia and befuddlement that glories and plagues a person who feels compelled to keep looking back, to try to re-sort his life.

"Some mornings," Jick confesses early in the book, "I will catch myself with a full cup of coffee yet in my hand, gone cold while I have sat here stewing about whether my threescore years would be pretty much as they are by now had I happened into existence in, say, China or California instead of northern Montana."

Jick sees that summer of '39 as a summer of turning points, the most important of which was his realization that the tensions that had always seemed to hold things together, namely those that bound the McCaskill family, could just as easily pull in opposite directions. Told as it is by a 60-year-old looking back through the eyes of a 14-year-old, the story becomes a fascinating study of how and why lives get changed.

Jick's father, Varick "Mac" McCaskill, is a recalcitrant forest ranger trying to keep sheep ranchers happy and his forest from burning down. He and his wife, Lisabeth, have big plans for older son Alec, who is too smart to spend the rest of his life herding sheep or cattle in the Two Medicine country. Alec will go to college and be an engineer, and will become the first of this family of hardscrabble Scots to escape the beautiful yet stifling confines of "the Two."

That sounds fine until Alec announces that he and Leona are getting married, and that he intends to hang

around the Two and try to work his way up from cowboy to cattle rancher. Alec's decision rends the family in ways that Jick can't understand decades later, and it creates a tension that lasts beyond the final page of "English Creek."

As always, Doig's writing is peopled with keenly drawn characters and is imbued with a crystalline sense of time and place. His descriptions of a small-town rodeo, an out-of-control forest fire and a Rocky Mountain thunderstorm create mental photographs that are so full of detail that a reader can examine them weeks later and see new things.

Although it often delves into the most painful of human experiences—the tearing apart of families and friends—and is set against the dark backdrop of the tail of the Depression and the beginning of World War II, "English Creek" is leavened with dry country humor, with wisecracks and nicknames and inspired put-downs that are evidence of Doig's love for the regional language. It is a story well-told and one worth reading.

Register-Guard reporter Kevin Miller used to live in Montana.

My comment, 14 Jan. '85: rare for a reviewer to perceive this. But I think you should let the reader inspect the deck you're dealing with. Stegner tells in the Etulain book about woes he got into with Angle of Repose by not disclosing source, evidently out of good motive.

Writing example

** PROFILES

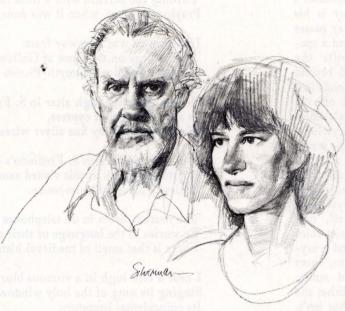
CITY VOICES

JON SCHUELER AND MAGDA SALVESEN

AINTERS should live close to the sky -for light, for stimulation, for perspective. That, in many ways, is what the painter Jon Schueler does. He divides his year between New York and Mallaig, in Scotland. In New York, he and his wife, Magda Salvesen, live in a big white twelfth-story loft in the West Twenties. It has four exposures and a view that runs from Hoboken, in the west, to the Chrysler Building, in the northeast. The sky presses in at every window. In Mallaig, a small

fishing village on the west coast of the Highlands, Schueler and Salvesen live in an old schoolhouse under the huge weatherswept Hebridean sky. Since his first visit to Mallaig, in the late fifties, he has ceaselessly painted its skies, and they have come to possess him. He has attempted to describe what he does, but emotion invariably wells up and his words grow dizzy. Here is part of a note he wrote for the catalogue of a one-man show held at the Whitney Museum in 1975: "From the claustrophobic terror of my studio I enter the unframed sky. There I find every passion, soaring to Death, as certain and as fleeting as the intimacy of a night mist ... I fall in motionless silence across a high sky. I watch the light spread through the shadowed snowcloud and the sea, and I recognize what I have always known and have come here to find: Not the Highlands, but a nameless place—unless North is a name. It is truly North. The sun and shadow and infinite sea, all of it the sky, vast and intimate . . ." John I. H. Baur wrote in the same Whitney catalogue:

Jon Schueler has walked a difficult path between opposites. His paintings look abstract but are not. The character of the Scottish coast...speaks through these poetic canvases with remarkable clarity and exactness...And yet these are basically abstract pictures, not unrelated to the work of Mark Rothko or some of Clyfford



Still's big canvases. They have that kind of largeness, mystery and power.... He risks more by deliberately exploring a narrow area where nothing is secure, where everything is changing, evanescent and evocative. We see his paintings one minute as clouds and sea and islands, the next as swirling arrangements of pure color and light

The writer B. H. Friedman, another Schueler admirer, talked of him recently: "I first met Jon at a party in the fifties. Franz Kline was there, and I told him I had just bought a painting by a young painter named Jon Schueler. Kline introduced us, and we've been friends for thirty years. Jon has always looked at me as an orderly man, and I've always looked at him as a romantic. His interest in jazz, his love of women, his painting—all these things are highly romantic. And when I first knew him he was extremely good-looking-in a Peter O'Toole way. He is very loyal. He remained loyal to Clyfford Still, who had been a teacher of his, and Still was one of the most difficult people I've ever met—irascible and practically a John Bircher. Jon has never let politics get in his way, and he has always had a remarkably clear head on such matters. He understood what a terrible mistake we were making in Vietnam long before I or anyone I knew did. Unlike many painters, he is a careful reader and an astute critic. He has an

amazingly large and diverse social circle. He loves meeting new people, and he always carries cards and a little address book and follows up in a nice way. He is a generous host. Once, he gave a party for a West African dance troupe, and I recall a guest's asking one of its members—they were all sophisticated Frenchspeaking blacks-what tribe she was a member of and her replying, 'Je suis Pygmée.' Jon is highly respected by other painters, but he has not had the success he should have had. He was a mem-

ber of the second generation of Abstract Expressionists, and got caught between the first generation, of Rothko and Still and Pollock and Newman and Kline, and the third generation, of Rauschenberg and Warhol and Jasper Johns. The money came down on both sides of him. Countless people have admired the Schuelers I own and not known who he is."

Schueler's early sky paintings, dating from the late fifties, were bold and heavy and intense, and were done with strong, complex fingerlike strokes. They tended, in texture and weight, to be more earthen than ethereal. Since then, his sky paintings, some enormous, have moved back and forth between periods of subtlety and delicacy and periods of great strength. In the delicate ones, the fog or mist or clouds look as if they had been breathed onto the canvas. The mountains and islands float, the sea is blue light. Everything is lucent and gentle. A layer of light gray covers a darker gray, and under that is still another gray. Grays and blues and violets and off-whites rule these canvases. In his strong periods (he is in one now), his pictures are often full of reds and blacks and yellows; they are tumultuous and angry. Their images are noisy. They come up off the canvas. All his pictures appear to be bottomless. They are never still. They have a restlessness and fluidity that are further stirred by whatever light they hang in. A Schueler seen in the morning and at dusk is two different pictures.

HE elevator to the Schueler-Salvesen loft opens into a wide hallway. At the right is Schueler's office, and across the hallway is his studio. To the left, the hallway passes a utility room, a bathroom, and a spacious open kitchen. Opposite the kitchen is a dining area, and beyond that a bedroom. The hallway ends in a big, light living room, and off the living room is Magda Salvesen's office. Schueler's paintings hang everywhere, and they are like windows in the walls. Schueler is thin and stooped and medium-sized. He stands out against the Arctic white of the loft. He has intense blue-gray eyes, overhanging eyebrows, and wild gray hair. A small, ruly beard balances his hair. His quiet voice camouflages the urgency behind everything he says. He has a bright, short laugh and a snaggletoothed smile. Magda Salvesen is slim and lithe; she appears taller than Schueler but isn't. She has a cloud of curly brown hair and a V-shaped face, lit by deep-brown eyes and a dazzling smile. She is quick. She runs from the living room to the kitchen to fix lunch, she runs to answer the intercom or telephone. She thinks and talks fast, and has a kind of stutter, in which whole words, rather than letters or syllables, jam together in their haste to get out. When she answers the telephone, she may say four "Hello"s in a row. She has a luxurious, stately contralto that seems to assuage the flow of her words. Sometimes the sound of her voice blots out her words. She loves to talk and so does Schueler, and here, in counterpoint, are their autobiographies:

SCHUELER

"T WAS born in Milwaukee, in ■ 1916. I come from the German middle classes. My mother's father, Rudolf Haase, was born in this country and was in the furniture business. My father's father, Fred Schueler, came from Bern, but was German. The Schuelers had a printing company in Switzerland. Both grandfathers prospered and were moral, hardworking men. Grandfather Haase didn't miss a Monday Rotary Club lunch for fifty years. My father met my mother, Clara Haase, at a Masonic party. I see my childhood two ways. When I was in it, it looked like this: I

S. FREDIANO'S

S. Frediano is St. Finnian Who spelled the rivers with his wand of faith, The Ayrshire Garnoch and the streams of Down.

He brought his water-miracles to Tuscany, Turning the Serchio with a little rake, Praying, perhaps, when it was done, in Gaelic.

In Lucca he was far away from That college on the coast of Galloway, Candida Casa's white myth-Pictish stone.

He lies under the high altar in S. Frediano's In a faint aroma of cypress, His bones united by fine silver wires.

It is cool and dark in S. Frediano's church. Parishioners pray in this visited sanctity, Listlessly pious, old, *simpatico*.

The tourists listen in on telephones
To stories in the language of their choice.
There is that smell of medieval history.

I hear a bird high in a vitreous blur Singing its song of the holy windows, Its coincidental literature.

St. Zita, mummified, is dressed For blessed waltzing when the trumpets sound. Her skin is fastened like a frozen dust.

In her glass case, she is an exhibit In a museum of charity. The light Italian lire clink in the coin boxes.

It is a human place—there, a tourist Stooped in a pose of scholarly inspection, And here, a couple who light candles for

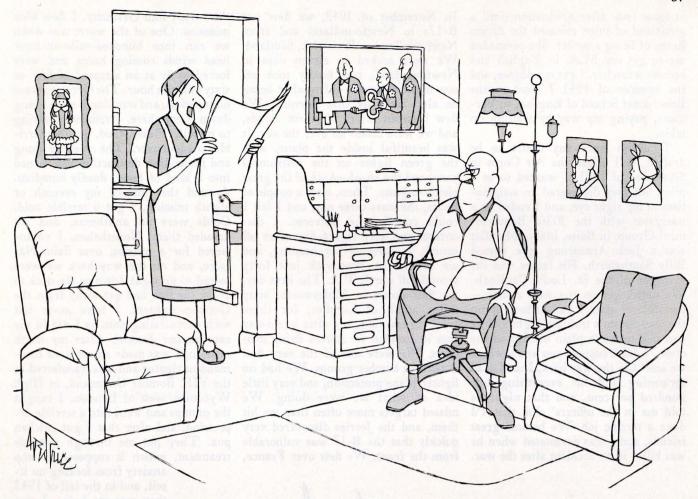
Their dead, a wife, a father, unaware
S. Frediano learned his miracles
In places they came here to be away from.

—Douglas Dunn

lived for several years with my Uncle Fred Schueler and Aunt Marie, who was of Polish extraction and was a warm and giving sort of person. One day, walking along a path, I met the woman who would be my stepmother and to all intents and purposes my mother. Her name was Margaret Alice Vogt. My father had met her at



Battle Creek Sanitarium, where she had been studying to be a dietitian. She was thirteen years younger than he was, and she was beautiful. There were always levels of combat between us, but she raised me in her way. When I was twelve, that childhood ended. I happened to overhear a maid talking about someone who had died when I was six months old, and I slowly understood that she was talking about my mother. I never told anyone what I'd heard. I never asked my father, and it became a kind of guiltridden secret. When I was nineteen, my stepmother brought a shoebox down from the attic and gave it to me.



"'Fuming in Flatbush,' 'Spooked in Staten Island,' 'Vexed in the Village,' but nothing from 'Miffed in Manhattan.'"

It was full of my mother's effects rings, letters, photographs. I burst into tears, and my stepmother was furious, and said, 'I did everything for you!' In San Francisco, after the war, I heard from the woman who had nursed me as a baby. She had probably saved my life. She told me that when she came to work for us I was suffering from rickets and malnutrition. It seems my mother was breast-feeding me, and because there was something wrong with her, her milk had no nutrition. My mother died-I still don't know why—and that nurse brought me back to health. She stayed on a couple of years, and one day, she told me, she said she was going for a ride with her brother and she never came back. I don't know exactly what happened, but I suspect things had gotten too intense and she wanted to marry my father, or vice versa. I tend to lose things, and by degrees I have lost everything in the box my stepmother gave me, with the result that my

mother, vanished, looms larger than ever. The beat of my life has come out of her death and the mystery that surrounds it. My father could be hard, but he had integrity and he was fair. I came to have great affection for him. He never went beyond the eighth grade, and he was a self-made businessman. He had some problems during the Depression, but my stepmother kept him together. It was her saving pennies that enabled me to go to college. I asked my father once why he had always taken her side in our battles, and he said that the marriage would have broken up if he hadn't, and that in many ways she was a good woman. When he retired, they moved to Santa Monica; he planned to spend the rest of his days playing golf, which he loved and had tried to teach me. But he had a heart attack almost immediately and died. My stepmother is still out there, near my half brother and half sister.

"I had done well in school until

puberty and the news about my mother hit me. Then I started going up and down like a teeter-totter. I went out for basketball in high school, but I wasn't any good, and I went out for track and became a miler, but I was never in any races, because no one else had a miler. I had worked one summer at J. C. Penney, selling ties and shirts, and when I graduated they asked me to stay on. That was pretty depressing. Then my stepmother gave me the money to enroll at the University of Wisconsin. It was a very liberal place, and I went a little crazy. I joined Alpha Delta Phi, which was the best drinking house on what may have been the best drinking campus in the country. But it's a good thing I cut loose, because I had been treated like a twelve-year-old at home. When I was in high school, I had to go to bed at eight-thirty, and all my clothes-terrible clothes-were chosen for me. I studied journalism at first, and ended up with a degree in economics. I was

girlfriend of mine released the dream in me of being a writer. She persuaded me to get my M.A. in English and become a teacher. I got my degree, and the summer of 1941 I went to the Bread Loaf School of English, in Vermont, paying my way by waiting on table.

"I didn't have any desire to be drafted, so I joined the Air Corps in September of 1941. I wanted to be a pilot, but they discovered an astigmatism in my right eye, and I ended up a navigator with the 303rd Bombardment Group, in Boise, Idaho. My pilot was a Jack Armstrong type named Billy Southworth. His father was the manager of the St. Louis Cardinals. We didn't get on too well at first particularly after I had messed up on the way out on a training flight and he had said to me in plain hearing of the crew, 'I don't suppose you know where we are?' On the way back, I used dead reckoning and hit everything one hundred per cent, and that night he told me in the officers' club that I'd done a terrific job. We became great friends, and I was devastated when he was killed in an accident after the war.

at loose ends after graduation until a In November of 1942, we flew our B-17s to Newfoundland and from Newfoundland to Prestwick, Scotland. We were socked in eleven days in Newfoundland, and finally took off one night at twelve-thirty after being on alert since six that morning. We flew between layers of storm clouds, and we were tossed all over the sky. It was beautiful inside the plane, with the green lights on the instrument panel and the ah-ah-ah of the great piston engines. Then, after a couple of hours, the stars came out, and I felt I could contain the universe. I discovered we were eighty-five miles off course. I corrected our heading, and we landed in Prestwick just forty seconds off our E.T.A. The next day, we flew down to Molesworth, sixty miles north of London, for three weeks of training, and after a two-day pass in London we started flying missions. We were one of the very first American bomber groups. We had no fighter-plane protection, and very little idea of what we were doing. We missed targets more often than we hit them, and the Jerries discovered very quickly that the B-17 was vulnerable from the front. We flew over France,

then went into Germany. I flew nine missions. One of the worst was when we ran into hundred-mile-an-hour head winds coming home and were forced to fly at an airspeed of fifty or sixty miles an hour. The Germans were on top of us, and our planes were going down everywhere. I remember saying to myself, 'Please, God, get this terrible boredom over.' The creeping along and the endless destruction had turned into a kind of huge, deadly boredom. Around the time of my seventh or eighth mission, I got a terrible cold. Colds were an anathema, and we dreaded them. Nonetheless, I volunteered for a mission over Saint-Nazaire, and on the way back we were forced to go right down to the deck to avoid the flak and get away from the German fighters. I have never felt such excruciating pain as I did in my ears on our descent. After my ninth mission, I was made an assistant command navigator and was transferred to the VIII Bomber Command, in High Wycombe, west of London. I caught the mumps and went into a terrible depression, and after that I got chicken pox. They put me through narcosis treatment, which is supposed to stop

> anxiety from feeding on itself, and in the fall of 1943 they sent me home. I was discharged in February, 1944. Three-quarters of the people I had flown to England with had been killed. The day rarely goes by that I don't think of

that."

SALVESEN

WAS born in 1944 in ▲ Midlothian, about five miles from the center of Edinburgh. It was still countrified. We had two fields and a river and a garden. I was the fifth of six children-Kirsty (or Kirsteen), Ann, Katrina, Johnny, me, and Andrew. My given name is Magdalene. My father and his father were born in Scotland, but the Salvesens had come over from Norway in the nineteenth century. My father still spoke a thick Norwegian dialect, which he kept up for business purposes but never suggested we learn. We went to Mandal, in southern Norway, every other sum-



"Pay no attention to him. He's not supposed to beg at the table."



"I don't like myself, and Peter doesn't like himself, but we do like each other."

mer, and when we were eleven we were permitted to go up to the fishing hut my father had built in the hills. We stayed two or three weeks, and almost the only people we saw were occasional berrypickers and a farmer a couple of miles away who sold goat's milk. There were ponies and a lake, and we slept in a loft in narrow beds laid between the joists. My mother loved it. I have often wondered if she was fearful being so far from a doctor, but, if so, she never showed it. Her name was Eleanora Cameron. She was called Mora. She came from a Scottish naval family and grew up in genteel poverty. They moved from naval base to naval base, usually in England—it was a peripatetic life. My mother had a soft face and lovely hazel eyes, and had red hair when she was young. She had been beautiful, I think, but she didn't trust her looks at all. She was of that period when all women had permanents, and she would get to look so much prettier when her hair got loose and frizzy-then off she'd go to have it done up again. Mother was twenty-six when she got married. She thought it very old. She was ten years younger than my father, so by the time I was a teen-ager both parents were middle-aged, and that is probably why I have always thought of them more as

grandparents than as parents. All my mother had ever wanted was to run a house and have six children, and she did it wonderfully well. She had worked in an AGA-stove showroom before she was married, but there was nothing in her that felt that a career was of the least importance. It was baffling to her that I wanted to go to university. She was afraid of intelligence, particularly in women. She did read biography, because she had a compassion for people, a great patience for people. Her life was the kind that touched those around her very deeply. My father's name was Harald. He was remote, but in his way he was a family man. He was proud of his peasant ancestry and proud of how far his family had come. He ended up in shipping, but he spent the First World War in the Army in India and Persia. He never lost that Army look of the straight back and the mustache and the neatly brushed hair. After the war, he went up to Oxford and got a first and stayed on as a don for three or four years, teaching economics. Lord Longford was one of his students, and so was Hugh Gaitskell, of whom he was very proud. My father was very Scottish. He was élitist, and it was never easy for him to talk to people of all sorts. Yet he was truly democratic,

and if there had been a Social Democratic party he would have been a member. He believed you should take responsibility and think things out for yourself. He was wary of people who had inherited high positions and didn't live up to them, and he couldn't stand civil servants who didn't take their work seriously. I had always thought of him as domineering, but after he died, in 1970, the schedule at home went on just as before-breakfast at eight on weekdays and at a quarter to nine on Sundays, lunch at one, and dinner at seven-fifteen. My mother continued to arrange flowers and keep up her garden."

SCHUELER

BEFORE I'd left the States for England, I had married a girl named Jane Elton. She was a saucy little thing—very amusing, very sharp. She was a speech pathologist, and she taught riding in the afternoons. She was the second person who has saved my life. I had with great difficulty gotten permission to go off base and get married just before we shipped out, and because of that I missed a disastrous training flight—the plane I would have been on flew into a storm and crashed, and everybody was killed. When I got back to



the States, Jane and I lived in New York for six months. She was getting a degree at Columbia, and I got a job with an industrial-research outfit. Jane liked jazz, and I had played a little piano in high school—mostly for noon dancing and with a trio I had. We started going to the clubs on Fifty-second Street. I met Oscar Pettiford, the great bassist, and we became close friends. Oscar had a ferocious temper that could flare up after a few drinks. He was part Indian and part black, and he felt the pressure of racism in the States terribly, and eventually he moved to Europe. I last saw him in Paris in 1958, and he died under mysterious circumstances two years later.

"In 1945, we moved to the San Fernando Valley, in Los Angeles. Anita O'Day lived down a little dirt road from us, and when Dizzy Gillespie brought the first bebop band to the West Coast I invited the band to dinner, and Dizzy went out and played on the lawn at two in the morning. It was glorious. My wife had started taking a night course in portrait painting, and I decided to join her, which didn't please her too much. Art had had no

figure. Most of the students had had some training, but all I could do at first was look at the model. The teacher, David Lax, was aware of the first tremblings of Abstract Expressionism. He kept looking over my shoulder, and he made me aware of the vitality of art. I worked first in charcoal, then in oils. We moved up to San Francisco in 1947. I taught English at the University of San Francisco and went nights to the California School of Fine Arts. My marriage was breaking up, and I moved out. We had two girls—Jamie, born in 1944, and Joya, after Joya Sherrill, the Ellington vocalist, born in 1946. Jamie works in forestry in Oregon, and Joya lives in the Mojave Desert and works at Edwards Air Force Base. Their mother is dead. The California School of Fine Arts was a very exciting place. Richard Diebenkorn and David Park and Elmer Bischoff were teaching, and so were Rothko and Clyfford Still. Still was extraordinarily dynamic, and he turned the school upside down. He had come out from New York, bringing the early news of abstract art. Much of his talk was evangelical—the independence of the artist, the importance of place in my life, and I couldn't paint a truth in art, and so forth—and it was

exactly what I wanted to hear. But he tended to talk in circles. You'd feel the poetry of it but be hard put to it to repeat what he'd said. He was very persuasive. If he wanted to, he could make you believe that all Renaissance painters were charlatans. He could be kind and supportive, and he could be very critical. He hated the academy, and he hated galleries and museums. He talked about New York in terms of combat. He played catand-mouse with the galleries and museums, and they would end up chasing him. In the late fifties, he was invited to do a one-man show in New York, and he refused. Instead, he had one at the Albright Gallery, in Buffalo, which meant that everyone had to go to Buffalo, and the show made even more noise than it would have in New York. Of

course, opinionated people like Still are essentially fragile, or they wouldn't go to such lengths to overrule other people and prove their own strength. One day, Still brought in a portfolio of reproductions of late Turners. I looked at them, and suddenly I knew that that was what painting wasthe way the paint was handled, the imagery of the sea and the sky. Still left the school in 1950 and went back to New York, and when he returned for a visit I had a long talk with him and decided to quit school and go to New York."

SALVESEN

"ALL of us were sent away to board-ing school. It had nothing to do with getting us out of the way-it was just done, that's all. I went to Prior's Field, in Surrey. I was very happy there, and I made a lot of good friends. But I haven't been very happy about it since. The school library was limited to the classics—the Trollopes, the Scotts, the Eliots, the Austens. We were allowed to bring only four books from home, so we read each other's books after we'd finished our own. We learned a limited amount very thoroughly—Shakespeare and Chaucer line

by line. When I spent six months in Paris between Prior's Field and university, I would read Racine and Molière in the same way before going to see productions of them at the Comédie Française. We wrote papers about social mores in Hardy and about whether or not the Napoleonic Wars had any influence on Iane Austen's novels. We were never told anything about Maugham or Graham Greene or Evelyn Waugh or T. S. Eliot or Yeats. Yet we were supposed to be incredibly eclectic in the British way -debate any side of a question and be thoroughly convincing. I've since had a terrible reaction to the education at Prior's Field. I rarely read a book or go to a play that doesn't have to do with the twentieth century.

"I went on to the University of St. Andrews,

across the Firth of Forth. It was sixty miles from Edinburgh, and you took a ferry to get to it. We had mostly lectures, and I think the teachers were bored. I took French and English and Latin and moral philosophy. I took a whole year of Anglo-Saxon, and I still know the reasons that 'mouse' turns to 'mice' in the plural. I was somewhat cowed by St. Andrews. That made me unadventuresome, and even more timid than I already was. What saved me was spending a year on scholarship at Sweet Briar College, in Virginia. The campus was lovely, and there were views of the Blue Ridge Mountains. It was very sheltered, and your morals were looked after. It was 'Now, girls, time to work' or 'Now, girls, we're going to the theatre in Charlottesville.' Sweet Briar stimulated me far more than St. Andrews. I was still terribly idealistic, and many of the teachers there were really involved in their subjects. And there was a steady infusion of outside culture, ranging from Peter, Paul, and Mary to Reinhold Niebuhr. There were also many ambitious, intelligent girls.

"I went to the University of London after St. Andrews and got my M.A. in the history of fine art. That



"Can you cut it a little finer, Mergeson, than 'umpteen'?"

felt that the more educated I became the less likely I was to get married. So much education made you selfish and opinionated and bossy. My options when I graduated were getting a job as an assistant curator in a museum or teaching art at the college level. I went home and worked in a gallery in Edinburgh, hardly being paid. Then I got a job as an exhibitions officer with the Scottish Arts Council. They had a gallery in Edinburgh and one in Glasgow, and they put together all manner of exhibitions that travelled all over Scotland. I helped choose the exhibitions and supervised their hanging. It was a great challenge to arrive in a new town late in the afternoon and find all your paintings stacked against the walls of whatever hall, waiting for you to put them up. I had a Mini car, and I travelled up and down the country. It was a wonderful job."

SCHUELER

T first, I lived in Clyfford Still's A studio, on Cooper Square. It was on the top floor of a town house with' elaborate bannisters. We had lunch together a lot, either at a cafeteria that became the first Five Spot or at McSorley's. My first studio was at Twelfth Street and Fourth Avenue. I was 1968. My mother was horrified. was there a year, then moved around She found it all very dangerous, and the corner. The first building had a

little restaurant on the ground floor, which sent evil smells up the airshaft, and the second had a noisy union. Many of the painters in New York lived where I was, and it was a tremendously exciting time. I continued seeing Still, and I met Barnett Newman and Franz Kline. I liked Kline immediately. He never got out of his painting clothes, and his studio was a mess. But he always had one beautiful thing on hand. Once when I went to visit him, there was a gleaming sink from Macy's sitting in the middle of everything. He'd sold a picture and bought it. And he loved cars. He had a Thunderbird, then a Ferrari. I had taken up the bass in California, and I was still playing. I had a good beat, at least, and I sat in at places like the Village Vanguard. I studied with Lennie Tristano, who was the Clyfford Still of the piano. We'd play together after my lesson, and it would lift you into realms you had never been in before. But the bass was taking up too much time. I had to make a decision, and I did: no more bass playing. It was sad, because I probably had more fun doing that than anything else in my

"You could live for nothing in New York then. The Tuesday-night openings at the galleries provided free social gatherings, and most evenings I had dinner at the Cedar Street Tavern coast called Mallaig. It was monu-—or the Cedar Bar, as we called it. It was on University Place at Eighth Street, in a building now gone. The clientele was chiefly white-collar people and artists-groups that floated easily through each other's curves. It was a homely, nothing bar with wooden booths and very good spaghetti. Fridays, everybody went to the Club. It met on Eighth Street and in I thought, How am I going to get various lofts. There were panels and through this? But I caulked the house heavy discussions, and afterward we'd Vup—'It's not fair to the wind,' the take up a collection and buy a bottle of Avillagers said—and I did forty-five whiskey. The generations of painters were all mixed up. Nobody had any money, so we were all together. That changed later, and you became uncomfortable being around an artist who was selling paintings for fifty thousand when you weren't selling any. Lofts were just coming in, and they were plentiful and cheap. Their high ceilings and great wall space were one reason that the abstract painters began ways in comparison with our muted doing such big pictures. Also, there Scottish ways. The relationship develwas the influence of the Mexican muralists of the thirties, like Diego Rivera. And the painters discovered they could go downtown to John Boyle's canvas shop and buy cotton duck for a couple of dollars a yard instead of linen for twenty. When I got to New York, I thought I was well on the way to becoming a good painter, but I was soon shattered. Nothing much happened until Philip Guston came by my studio and looked at my work and told

Eleanor Ward, of the Stable Gallery, about it. The Stable was on Seventh Avenue. She gave me my first show, in 1954. Three years later, Leo Castelli opened a gallery, and I was his first one-man show. On the basis of that, I went to Scotland.

"In England during the war, I had met a lovely, slim-boned girl named Bun-

ty Challis. She drove one of those big, boxy ambulances, and nothing rattled her. She had been to the Highlands, and she would talk about its mountains and skies in images that reached dream images of mine—even though she was not that articulate. I brought back to this country what winding, tiny roads all the way from she had told me, and it stayed with Bremen and Copenhagen to pick up me. Then I happened to see 'I Know fish. The surroundings are beautiful. Where I'm Going,' with Wendy, On the east coast of Scotland, you look Hiller and Roger Livesey, and that did Vout and there's nothing there but the it. I rented a car in Scotland and drove North Sea. On the west coast, you around the Highlands looking for a look out at islands and straits and place to live and work. Someone told sounds, and the feeling is utterly difme about a fishing village on the west ferent. From Mallaig you see the

mental. I was moving into my world. I stayed in a small hotel owned by Archie MacLellan, who rents me the house I live in in Mallaig now. He took me out to a little bungalow set all by itself near the Sound of Sleat, and I rented it. There I was all alone at the end of the world and the winter coming on. I hate being alone, and paintings. After that, I went down to Paris, and came home and had another show at Castelli and a show at Hirschl & Adler."

SALVESEN

MET Jon at the Demarco Gal-L lery, in Edinburgh, in 1970. He was very American, very definite about what he wanted. I was amazed by his oped extremely slowly at first. He moved up to Mallaig—he had been going there off and on for years—and when he came back he announced that he was moving into my apartment in Edinburgh. He wanted to do a piece of writing and persuaded me to let him use my study. I only half wanted him to move in, but I didn't have the guts to say no. He was like a bull in a china shop, and I never knew what he was going to do next. I didn't tell anybody.

I had never fought with my family. I was utterly different from my mother and didn't want to be sucked into her way of thinking, but I didn't want to hurt her, either. I didn't lie. It was an absence of telling at first. Then I told her in bits. She was very upset when she understood. Finally, I made up my mind

about Jon. In 1971, I left the Council and moved to Mallaig with him, but kept my apartment.

"Mallaig is not a pretty, old, decaying Highlands village. It's a fishing village, and ugly and busy. Huge refrigerator trucks come in on the Sound of Sleat and the islands of Eigg and Rhum and Muck and the Isle of Skye. Every island has its own shape and look, and they make an extraordinary combination. The weather changes constantly, so it affects you. You never know whether it will rage or shine or snow. You are very much aware of nature in Mallaig. Man has made no impact at all. The land gives nothing, and the people squeeze a living from it. There is little social life and no gentry, but there is a middle class, made up of the headmaster, ministers, bankers, and some retirees. They live in private houses, and much of the rest of the housing is council housing. There is a certain social life in the streets, and when I first went there I would be invited to women's houses for elevenses. They would serve tea and cakes, and I would ask them back for tea and a coffee cake or a cranberry-nut cake—things that they had never had before and that I had learned about in America. We would exchange recipes. There are many, many children in Mallaig, so I worked in a day-care group. I also did a great deal of reading and took care of our dog and arranged trips for Jon and me to Spain and Morocco and Italy and America. Jon is a timid traveller, and I had always travelled. I also did a lot of work for him-not willingly, I admit. He wanted me to be in on everything he was doing. He thought it far more important that I work for him than do things for myself. I resented his self-centeredness. People like Jon are very sure of their direction. I respect distance between people, but Jon will suck anyone into his life, his drama. He revels in emotion. He lives by the rule that feeling anything is better than feeling nothing. Also that there is no need to put the lid on any emotion. Of course, there were compensations. He was very appreciative of what I did for him, and he shared everything with me. But in 1975 we split up. I went back to Edinburgh and attended a teachers' training college, and Jon went back to America. But we wrote to each other, and in 1976 I came over, and we were married in July. Since then, I've taught several years at the Day School, up on Fifth Avenue, which I loved but which was exhausting because I also had to keep up with Jon. I've done some public-school remedial teaching, and now I'm teaching English as a second language. We go to Mallaig every summer and fall, and we've been to China, and I've just



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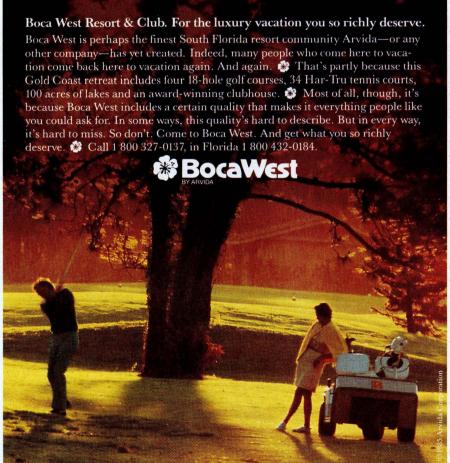


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finished editing Jon's autobiography, which is over a hundred thousand words long.

"I see life in New York in terms of Mallaig and Edinburgh. In Mallaig, our life is extremely simple. Almost everything is cut out of it. We go days without seeing people, and one engagement a week can press on us. We're terribly excited when we get back here, and we go to all the galleries and see our friends, and then we retreat and settle down. Keeping up with what's going on in New York is a week-to-week thing, as opposed to Edinburgh, where it's month-tomonth. In New York, you do things scatteringly-you dart off, you do things by chance. New York is a city of individual buildings. It's raw compared with Edinburgh, which has its little green parks and seems built for people. Edinburgh is a wonderful residential city. I loathe the suspicion New York arouses in me vis-à-vis other human beings. Edinburgh is genteel and has few excesses. So much about a city like New York is unvoiced, but it is those very unvoiced things that keep you away from other American cities, which lack it."

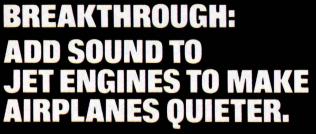
SCHUELER

↑ROUND 1960, I got divorced A from my second wife, Jody Todd. She had been married to the poet Ruthven Todd, and I had met her on Martha's Vineyard. She was a painter. We were married in 1956 and separated in 1957. She had come over to Mallaig to make hotcakes for me, and she hated it, and we plunged into hell. Then I went through a time when I seemed unable to resist getting married. I would meet someone, like her, ask her to marry me, watch the relationship deteriorate the minute the word 'marriage' was mentioned, get married, go through hell, and have the marriage annulled. This happened twice-with a young black dancer and with a cheery girl who had just come down from Boston. The sixties were a bad time all around. Pop Art was taking over, Abstract Expressionism wasn't selling, and painters were talking about nothing but money. I had two shows at the Stable. I taught at Yale. I visited Alastair Reid in Spain. I found a new loft, at Broadway and Twentieth. In 1967, I went to the Isle of Skye, and did a very important series of watercolors. They took me closer to Turner, whose secrets are in his watercolors. I sold my lease to my studio in New York and moved THE NEW YORKER 49

to Chester, Connecticut, and built a) fancy studio there. Then I got an offer from the University of Illinois—a full professorship, tenure, and twenty thousand a year. They wanted a kind of spiritual leader. I was painting, but I was broke. I suffered the anguish of indecision, then signed on the dotted line. I taught a year and took a leave of absence. I tried to take another leave, and they said no, and that was that. I had been approached by a dealer in Edinburgh named Ricky Demarco, who wanted to give me a show. I went over in 1970, and I met Magda at his gallery. She was with her mother and some relatives, and they were on their way to 'Blithe Spirit,' which is not my favorite play. But I wormed my way into the party and went. Magda is like none other. She is independent and self-contained and she never feels the need to explain. She kept disappearing over the horizon. I really had to pursue her, to court her. In 1973, I showed a hundred and fifty paintings in three working studios at the Edinburgh College of Art. I mounted them myself. I had tables and chairs and arranged for a light lunch. People could sit down and look at the pictures and take their time. The show lasted four weeks, and I sold a lot of paintings. Between 1974 and 1981, I showed in Minneapolis, at the Whitney, at the Cleveland, and in Chicago. Then, in 1981, I again had a marvellous experience in Edinburgh. I was invited by the Talbot Rice gallery to be part of the Edinburgh Festival. What I did was paint six rather large paintings-two were eighteen feet, three were fourteen feet, and the last was ten feet—in public over a period of a month. I worked in a large studio, and the public watched from a gallery. I had an eight-foot palette table on wheels. The paintings were meant to reflect one another and to be in a state of counterpoint yet to be true to themselves as single paintings. I was stimulated by all that canvas, by the idea of the whole thing, by the public.

"In Mallaig, I often paint at night. In New York, the kernel I strive for is nine in the morning to one in the afternoon, although there are many distractions in the city. Each day, the struggle to paint starts again. It's easy to talk a picture and very hard to paint one. I try to make the experience of light real. I make my hand think light. I try to get the organic quality of movement, of change. If you let your eye move up a blank white wall, that wall changes every second. There are





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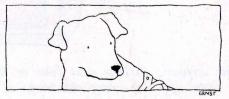


a thousand whites. Change is constant. So is surprise. Once a canvas is finished, the paint is frozen there. Yet it has an inner life, and as day moves over it it changes and changes. Long ago, I decided to go through Abstract Expressionism and come out the other side. The abstract painters rejected everything, but I felt that all painters were my brothers. I started painting skies before I knew what I was doing. Now it is my odyssey."

Schueler's studio measures roughly ninety feet by fifty feet, and has an eleven-foot ceiling. It takes up twothirds of the loft—a ratio that, Schueler has said, "most artists demand of their nearest and dearest." One end faces north, and has five good-sized windows. Four large tables line the windows. The tables on either side are palette tables, and the middle ones are covered with tools. The south end of the studio is filled with paintings, many of them enormous. Some are stacked face to the wall and some are in racks. Two dozen aluminum studio lamps are fastened to metal rods hung from the ceiling. Schueler paints perhaps a hundred pictures a year. He prepares his canvases, which are made of cotton duck and are stretched by an assistant, with two coats of acrylic gesso, each sanded. He uses housepainters' two-and-a-half- to threeinch brushes, and one-and-a-half-inch brushes for final touches.

It is four o'clock on a cold afternoon, and Schueler is in his painting clothes-bluejeans, a tattered bluejean jacket, a blue turtleneck, and a bluejean hat. The sky is still blue, and the top of the Chrysler Building is silver white. Schueler drives two nails into the west wall and hangs a fresh canvas, measuring forty-four inches by sixty-five inches. Before he hangs it, he sprays the reverse side of a small dent in its lower right-hand corner with water to tighten the cotton duck. He drives another nail into the wall at the foot of the canvas to keep it steady, and steps back about twenty-five feet. He stares at the canvas a long time, moving from side to side. He walks to the palette table near the west wall, squeezes out some paint, and walks back to where he had been standing and stares again at the canvas. Then, moving quickly on a semicircular path, he goes to the table, picks up a brush, works its end in the paint, continues on to the canvas, leans forward, and makes a single, startling horizontal pale-blue pattern from the left edge to

vaguely suggests a flintlock pistol, its butt to the left. He squeezes out more paint and covers the pattern with a pale gray, enlarging its right end at the same time. He takes a new brush and works at the right end of the pattern again, making it still longer and softening its edges. He keeps his brush at a thirty-degree angle to the canvas, and he works fast, holding the brush between his thumb and fingers the way old-time drummers held their sticks. Many of his strokes go against the grain of the brush. Using a battleship gray, he places a roundish, windy figure above the original pattern, adding a separate daub at the left edge of the canvas. He softens these new patterns with pale gray. He inserts a large blue-gray patch at the lower right of the canvas, and stands back and looks at what he has done. He covers the new blue-gray with a darker gray, and stands away again, the brush hanging loose in his right hand. His stance is easy, his knees slightly bent. He goes back to the canvas and makes a bluegray pattern at its top left, a cloud coming into a clear sky. He darkens the center of the original flintlock pattern with a purple-gray, and adds a whitish gray to its butt. The layers of paint float on the canvas. He puts a whitish blue on the new cloud pattern at the top, and places daubs of it in mid-right and upper right. A third of the canvas is filled with paint. The sky outside has darkened, and the studio has grown brighter. More whitish gray appears at the top of the picture and at the right of the original pattern. Schueler pedals back like a quarterback and stares a full minute at the canvas. He holds his brush in both hands in front of him-a cook about to drain a big saucepan. He adds blue-gray to the top pattern and down in the lower right, and enlarges the right section of the original pattern. Its outlines are no longer visible. Gray goes into the center of the canvas and whitish gray along what was the bottom of the original pattern. He adds a blue swatch to the bottom of the painting and a narrow band along the underside of what was the flintlock. Blues and grays control the canvas. Schueler



the middle of the canvas. The pattern inserts a patch of violet in the top right quarter of the canvas. Then he stretches a more vivid violet across the bottom left and over a gray area at bottom right. His movements have got quicker, and the only sounds in the studio are his shoes and the soft thrush-thrush-thrush of his brush. He joins part of the top right section to the right end of the original pattern with a bold gray-white column. He picks up a small brush and puts dark gray over the bottom left corner and between the original pattern and the top of the canvas, so that a rough, heavy gray arc dominates it. It is dark outside: the last of the afternoon light has been sucked into the studio. He covers the right center of the painting with a pale-blue swatch, and walks back almost to the opposite wall. He moves forward and sits down in a chair and stares at the painting for several minutes, his face propped in the fork of his left hand. He goes to the palette table and back to the canvas and applies a whitish patch at the left center, near the heavy gray, and in the upper right corner, and sits down again. He gets up and closes a white area at the top of the canvas with pale violet, and another, at top left, with pale blue, and the canvas is filled. During the next ten or fifteen minutes, he makes dozens of tiny changes with a small brush: a whisper of violet below the dark-gray center; a touch of white-gray at the upper right and along one edge of the dark gray, which produces the first hard edge in the picture; a very light coat of gray over a patch of blue at the upper right; a little staring white near the gray center. He softens the center by rubbing it with a cloth, then with two fingers. He adds a little blue to the top left corner and some pale gray to the far right. He puts down his brush and backpedals into the studio and stands still. There, suddenly, is the picture. It is an abstraction of a cloudy sky, and at the same time it is a cloudy sky. We are looking up into the sky, or perhaps we are in the sky looking down through clouds at still blue water. No matter where we move in the painting, the painting moves. Schueler is apparently finished. He clears his throat and says "Well!" and laughs. "It's that time of adjustment. I could go on until the whole picture was repainted, but I'll wait and see how it looks in the morning." An hour and five minutes has passed since he put the first blue on the canvas.

-WHITNEY BALLIETT

REFLECTIONS

FLASHBACKS

HE passage of the fifty-year interval since the establishment of Soviet-American diplomatic relations at the turn of the year 1933-34 led to an intensive search by a large number of people—publishers, editors, television interviewers, arrangers of academic-lecture series, you name them-for someone who was involved in that particular episode and whose memories could instruct or divert those today whose impressions of what it all amounted to might be dim or nonexistent. There was a search, in particular, for someone who could relate that event to the previous state of Soviet-American relations and to the immediately following years of the Stalin era. This search soon revealed, to my surprise no less than to that of its authors, that of all those thus directly involved in the episode itself I appeared to be the sole survivor (on either side), and of those who served in the Soviet Union off and on through the remainder of the Stalin period I alone seemed to have the dubious double distinction of being an eyewitness and trying to be a historian. The pressures, therefore, centered on me.

about, and written about as well as experienced much of a given phase of history will understand the distaste with which at an advanced stage of life one receives the suggestion that one should undertake an analytical effort to put the whole subject once again in historical perspective. Historical perceptions, like affaires de cœur, are a matter of a particular stage in one's life; attempts at repetition are unlikely to be successful. When my mind returns to the events in question, what comes to it is primarily the memories of individual experiences along the way. Some of them, it seems to me, speak for themselves; and I would rather recall them as they were, and let them tell their own story, than try to embroider them analytically.

With apologies to my own memoirs, in which most of the recollections had some sort of place, I offer a few of these recollections here to any who might like to know what it was like or (to borrow the common query of the TV interviewer) "how it felt" to be involved with Soviet-American relations at the moment of their establishment and in the ensuing years of Others who have studied, thought Stalinist horror. To stress the respon-

sibility of these memories in speaking for themselves and to distance the young man who received the experiences from the elderly one who now recalls them, I take the liberty of putting them in the narrative present.

MUST begin at a point a bit more than fifty years ago—in 1932, to be exact—just before the establishment of diplomatic relations which we have lately been recalling. My wife and I are living, at this point, in Riga, Latvia. Latvia is a country that has until recently been part of the Russian Empire and will soon become part of the Soviet one but is now, during a twentyyear interval, independent. The atmosphere of the old, prerevolutionary Russia still hangs over it. The city of Riga is itself a smaller edition of the prerevolutionary St. Petersburg, but without the palaces. The sleigh in which I am sometimes driven to the office in winter-a one-passenger open-air affair, in which the furcoated passenger sits behind and below the massive figure of the bundled coachman on the box-is right out of Tolstoy. In summer, because we are poor, we live in a little wooden cot-

tage out at the seashore. I commute on the suburban trains. The trains and the passengers, I among them, seem to be right out of Chekhov's stories. And if one goes farther into the countryside all that one sees-the cobbled roads, the swamps and fields, the birch trees and evergreen forests-is the purest Russia. I drink it all in, love it intensely, and feel myself for a time an inhabitant of that older Russia which I shall never see again in the flesh.

In the office, here in Riga, my work is the study of the Soviet Union. I have already been established as a Russian expert. I know the Russian language, and I, with two or three others, go thoroughly and systematically through the Soviet news-



"I suggest that you not take me seriously for the next four or five days, honey. I'm going to be up to some of those crazy old tricks of mine."

Personality: Major Traits Found Stable Through Life Nyz Jun 1, 187

Studies challenge theories that see transitions.

By DANIEL GOLEMAN

HE largest and longest studies to carefully analyze personality throughout life reveal a core of traits that remain remarkably stable over the years and a number of other traits that can change drastically from age to age.

The new studies have shown that three basic aspects of personality change little throughout life: a person's anxiety level, friendliness and eagerness for novel experiences. But other traits, such as alienation, morale and feelings of satisfaction, can vary greatly as a person goes through life. These more changeable traits largely reflect such things as how a person sees himself and his life at a given point, rather than a basic underlying temperament.

One of the recently completed studies followed 10,000 people 25 to 74 years old for nine years. Another involved 300 couples first tested in 1935. The studies are joined by a new analysis of more than two dozen earlier studies of lifetime personality and a study of twins that looks at the genetic contribution.

The recent work poses a powerful challenge to theories of personality that have emphasized stages or passages — predictable points in adult life — in which people change significantly.

The new research is "a death knell" for the passage theories of adult personality, in the view of a researcher who conducted one of the new studies. "I see no evidence for specific changes in personality due to age," said the researcher, Paul T. Costa Jr. "What changes as you go through life are your roles and the issues that matter most to you. People may think their personality has changed as they age, but it is their habits that change, their vigor and health, their responsibilities

official questions the scientists' report.

By WALTER SULLIVAN

ENERAL Electric scientists have reported evidence for a gradual breakdown in PCB's deposited in Hudson River sediments by spillage from plants manufacturing electrical appliances. The two-stage microbial process, they said, "will eventually effect total PCB destruction."

PCB's, or polychlorinated biphenyls, were widely used in industry until they were banned in 1976 after an outbreak of what the Japanese called Yusho disease. It was marked by a variety of symptoms, such as skin sores, liver damage and birth defects, and was attributed to contamination of cooking oil with a form of PCB. After animal tests some PCB's were then determined to be cancercausing.

Large amounts of PCB's were spilled into the Hudson from General Electric plants at Fort Edwards and Hudson Falls. According to the new General Electric report, as of 1977, there were an estimated 137 metric tons of PCB's on the floor of the river, much of it 6 to 12 inches beneath portions of the river bed where flow in

the river was slow.

Two-Step Breakdown

In the journal Science scientists from the General Electric Research and Development Center in Schenectady, N.Y., have now reported that PCB's lying in the Hudson sediment for a decade or more have been partially broken down, initially by organisms that thrive where oxygen is in short supply.

The polychlorinated molecules (those containing three or more chlorine atoms) that are of primary medical concern are broken down, the researchers said, into those with two or fewer chlorines. The latter can then be digested by oxygen-breathing

bacteria.

The researchers estimated that in the upper Hudson 40 to 70 metric tons of PCB's with multiple chlorines had

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Personality: Three Stable Major Traits

Continued From Page 17

and circumstances - not their basic

personality.

But the new work has not made converts of the theorists who see adult life through the framework of passages. Rather they assert that simple pencil and paper tests cannot discern the richness inherent in the maturing personality. A theory proposed by Daniel Levinson, a psychologist at Yale University, suggests a series of sometimes troubled transitions between psychological stages; Erik Erikson coined the term "identity crisis" for the difficulties some young people have in settling on a life

Proponents of the most recent studies say, however, that the notion of passages, built on clinical interviews, was never objectively tested.

Some of the strongest evidence for the stability of the core personality throughout adulthood comes from a study by Dr. Costa and Robert McCrae, psychologists at the National Institute on Aging in Baltimore. They interviewed thousands of people in 100 places throughout the United States in 1975, and again in

The researchers found virtually no change in the three key personality traits. Their report in a recent issue of the Journal of Gerontology asserts that a person who was calm and welladjusted at 25 years of age would remain so at 65, while a person who was emotionally volatile at 25 would be about the same at 65. Their findings represented averages, however, and could not reflect the changes in some individuals that might have been brought on by, for instance, psychotherapy or a personal catastrophe.

Only the Form Changes

"There is no evidence of any universal age-related crises; those peo-ple who have crises at one point or another in life tend to be those who are more emotional," said Dr. Costa. "Such people experience some degree of distress through most of life; only the form of the trouble seems to change."

A mellowing in midlife, found by other studies, has now been shown to relate more to a muting of some of a person's more extreme feelings than to any change in the overall pattern of

personality.

The new studies find no increase in irritability with aging. "The stereo-type that people become cranky and rigid as they age does not hold up," said Dr. Costa. "The calm, outgoing, adventurous young person is going to stay that way into old age, given good health. Those who are dogmatic and closed to experience early in life remain that way."

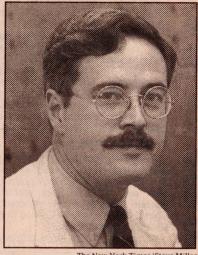
The greatest changes in core per-

sonality occur in childhood and from adolescence to early adulthood, according to Dr. Costa. "After 25, as William James said, character is set in plaster," he said. "What does change is one's role in life, and the situations that influence your tempo-

rary behavior one way or another." Support for Dr. Costa's large study comes from a recent study of twins that found an important genetic influence on the three main traits. Early childhood experiences, the investiga-tors concluded, are pot the main influence in shaping the most persistent of personality traits, though they may shape them to some degree, as they

do all personality.

In this study of 203 pairs of twins at Indiana University, the researchers, Michael Pogue-Geile and Richard Rose, administered a personality test



Dr. James J. Conley

when the subjects were 20, and again when they were 25. The researchers were looking to see whether fraternal twins changed in the same ways as identical twins in that time, which is one of the stages of turbulent transition proposed by some theorists. If a particular trait is genetically deter-mined it will tend to change more similarly in identical twins than it will in fraternal twins.

There was evidence of significant genetic influence on the three main personality traits of anxiety or emo-tionality, friendliness and openness to

Life experience also shaped these basic traits. But it had a far greater influence on other personality traits, including alienation, morale and feelings of satisfaction. These traits change so much over the course of adult life that there is virtually no relationship between their levels when a person is in his 20's and when he is in his 60's, according to James Conley, who studied 300 couples who were tested in 1935, 1955 and 1980, when the researchers were able to interview 388 of the original 600 men and women.

"If you try to predict how alienated or satisfied with life people will be in their later years from how they seem in college, you will fail abysmally,'

Dr. Conley is among those finding that the three basic traits change little over a lifetime. In addition to the study of couples, he has reviewed data from more than two dozen other long-term personality studies.

Some personality traits may make certain crises in life more probable. For instance, the study of couples suggests that specific combinations of personality in a marriage are explosive. Over the course of 45 years, the highest probabilty of divorce oc curred in those marriages where both the husband and wife were emotion-ally volatile and the husband had little impulse control.

"The evaluations in 1935, by five friends, of the personalities of an engaged couple was highly predictive of which marriages would break up," Dr. Conley said. "If you have a couple with emotional hair triggers, and where the husband philanders, gambles drinks or loses jobs a break-up. bles, drinks, or loses jobs, a break-up is almost certain. Some marriages broke up right away: some took 45 years to end. Data from younger couples suggests that today the dangerous combination of personalities is the same, except now it can be either the wife or the husband whose impulsiveness triggers the trouble."
Walter Mischel, a psychologist at



Associated Press

Dr. Paul T. Costa Jr.

Columbia University, wrote an influential article in 1968 arguing that the variation in expression of a given trait from situation to situation is so great that the notion of personality traits itself was of little use in accounting for how people behave.

Variations With Situation

"There is lots of evidence for the stability of some traits, such as extroversion, over time," Dr. Mischel said in a recent interview. "But the same person may be quite outgoing in some circumstances, and not at all in others."

Kenneth Craik, a psychologist at the University of California at Berke-ley, said, "The belief for 10 to 15 years after Mischel's critique was that the situation determined far more than personality about how people behave." Now, within the last few years," he said, "personality and situation are seen by most researchers as having about equal influence." Researchers are concluding that the influence of one situation or another on how a person acts may also create the impression that personality itself changes more than is the case; apparent changes in personality may actually reflect temporary circumstances.

"Any trait can vary with the moment," said Seymour Epstein, a personality psychologist at the University of Massachusetts at Amherst. "You need to look at the person in many situations to get a stable rating of that trait" of that trait."

And people seem to differ in how much situations affect their actions, according to research by Mark Snyder, a psychologist at the University of Minnesota. In "Public Appearances, Private Reality," published recently by W. H. Freeman & Company, Dr. Snyder reviews evidence showing that some people are virtual chame that some people are virtual chame-leons, shaping themselves to blend into whatever social situation they find themselves, while others are al-most oblivious to the special demands and expectations of differing situations, being more or less the same person regardless of where they are.

The situation-oriented, Dr. Snyder has found, are skilled at social roles: At a church service, they display just the right combination of seriousness and reserve; at a cocktail party they become the friendly and sociable extrovert.

Those less affected by situations are more consistent in their behavior, putting less effort into role-playing: They have a smaller wardrobe, wearing the same clothes in more situations, than do the situation-oriented.

It is as though each type were playing to a different audience, one inner, the other outer, says Dr. Snyder

Those adept at situations flourish in jobs where they deal with a range of different groups, Dr. Snyder reports.

Broadway every Friday in Weekend.

Come on along and turn right to Enid Nemy's Broadway. Come on along behind the scene On and Off-Off Broadway...

Every Friday in Weekend, E writes about Broadway. St what's coming and what's She tells you about the the theaters themsel

If you love theater It's written just fo

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At least 25 companies are racing to improve virus detection.

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of killed AIDS virus on beads or another medium. If antibodies to the virus are in the blood, they will stick to the virus particles. Through further chemical steps, the virus-antibody combination changes color in a characteristic way. characteristic way.

The Elisa is extremely sensitive, to insure that no samples with AIDS antibodies are missed. This leads to a problem. Because the viruses used in the test are grown in human cells, a certain amount of cellular debris can be present that attracts non-AIDS antibodies. Also, some people carry antibodies against other diseases that react with a part of the AIDS virus

As a first safeguard against false positive results, the Elisa test is usually repeated, eliminating some errors. But then, before a person is declared infected, the more specific, more expensive (\$30 to \$70) Western blot test is used blot test is used.

There are three possible results: a confirmation of the presence of AIDS virus antibodies, a clear indication of their absence, or an indeterminant result, which can leave patients in a frightening state of the presence of the property in the property is the property of the property in the property is the property in the property in the property is the property in the property is the property in frightening state of uncertainty.

False Results

While some experts say that recent improvements have all but eliminated false positive results in the Western blot, others say that they can

occur. A recent report from the Harvard School of Public Health concluded that for every 100,000 people at low risk of AIDS are tested, there could be ll false positive and 2 false negative results, even with the West-

ern blot backup.

When there is doubt about results, additional, but expensive techniques, such as the radioimmune precipita-

"You don't want to give people bad information," said Dr. Johanna Pindyck, director of the Greater New York Blood Program. "You could destroy someone's life."

Even such a battery of tests can yield ambigous results. And critics of mandatory, mass screening programs fear that use of more than one extra, expensive backup test would be deemed impractical.

To reduce the number of false positive results in Elisa tests, thus reducing the number of backup tests required, manufacturers are turning to virus particles that are genetically engineered and grown in yeast or bacteria, or assembling viral proteins, molecule by molecule, in protein synthesizing machines.

According to Gary Buck, president

of Cambridge Bioscience in Worces-ter, Mass., these newer Elisa tests eliminate the manufacturers' hazards of working with live virus and do away with the cellular debris that may cause false positive reactions.

Tests for the Third World

Genetically engineered Elisa tests are also being fashioned into ex-tremely simple, rapid formats for use in Third World countries. Dr. Steve Mertens of the University of California at Davis, working with Centocor Corp., and Cambridge Bioscience Corp., and Cambridge Bioscience have both developed plastic cards impregnanted with Elisa-type materials. The simplified, inexpensive tests are beginning to be used to screen

blood in Africa.

Despite all improvements, however, two problems will remain with antibody tests. First, they do not really confirm that the virus is present and in an unknown number of

cases it might not be.

The second problem is the time lag between infection and development of detectable antibodies in the blood. To overcome this, scientists are developing direct antigen tests to confirm that the virus is present and active in the first days or weeks after infec-tion. First, scientists need to isolate human antibodies to the 15 to 25 antigens — proteins — made by the virus. Antibodies can then be cloned in quantity and used to hunt for viral antigens in blood samples.

This task is complicated by the fact

that, after infection with AIDS, antibodies tend to attach to those viral antigens over time. Such natural antibodies can mask or hide the antigens, making it more difficult for the cloned antibody to do its job.

Another problem is that only one in

Another problem is that only one in 10,000 immune system cells is typically infected with the virus and capable of making new virus. Finding those cells is like searching for the proverbial needle in a haystack.

Companies are searching for newways to find viral antigens. For example, the Epitope company of Bea.

ample, the Epitope company of Beaverton, Ore., says that while few cells make viral proteins, one in ten cells of the immune system appears to pick up a certain antigen marker on their surfaces that can aid the search. Acording to Dr. Denis Burger, a com-ny official, Epitope has found a 'que monoclonal antibody' that 'izes the first protein typically an AIDS virus once it takes

sts can also be used to

follow the course of AIDS virus infections in patients with or without symptoms, according to Dr. Jaap Goudsmit, a Dutch scientist who has helped developed an antigen test for Abbott Laboratories in Chicago.

Dr. Goudsmit recently reported that individuals who produce viral proteins tend to go on to develop active AIDS or AIDS-related complex. In contrast, patients who do not produce recurring antigen are more likely to remain free of the disease. The antigen test can also be used to monitor the effectiveness of drugs.

Probing the AIDS Virus

Also on the horizon are tests for the AISO Of the horizon are tests for the AIDS virus itself. Several firms are developing so-called DNA probes that seek out AIDS viruses within the genetic material of an infected cell. Again, the problem is how to find the one cell in ten thousand.

According to Dr. John Sninsky of

the Cetus Corporation in Emoryvi'e Calif., Cetus has developed a process that amplifies a bit of targeted genetic material a million-times. "If looking for the AIDS virus is looking for a needle in a haystack," he said, 'our procedure allows you to make a million needles.

A complicating factor is that the AIDS virus, like some others, seems to lie dormant in certain cells over a long time. It is not yet known if gene probes can outfox this viral trick

probes can outfox this viral trick.

Another company, AIMS Biotech
Corp. of San Francisco, said it had developed a highly accurate method of
detecting the AIDS virus within 14
days of infection in an improved
virus-culture technique and will offer
it available commercially. Virus culturing methods, which seek to activate any AIDS virus present in a
specimen in a test tube, have had
variable success in the past and are
usually time and labor consuming. usually time and labor consuming.

r Two Groups

Commission began considering whether an inmate had AIDS or antibodies to the virus in deciding whether to grant, deny or revoke padoes al or

Under the Fifth Amendment to the Constitution, which guarantees "due process of law," and under the Eighth Amendment, which prohibits "cruel and unusual punishments," it would be improper to prolong a person's inarceration because of a medical ndition, Mr. Bronstein said.
Towever, Attorney General Meese

'One of the factors on when peo-'o with whether they are a dane community." He declined
n any general rules for pans affecting people with
that each case would ed individually.

said that the testing s "scary" because beginning of a in screening" of hat, in turn, er prisoners us should lities, he

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About Men.

The New York Times Magazine

BEAUTY, HEALTH, AND PERMA-NENCE: Environmental Politics in the United States, 1955-1985. By Samuel P. Hays. New York: Cambridge University Press, 1987. xv + 630 pp. Footnotes, index. \$29.95.

Samuel Hays, well known for his Conservation and the Gospel of Efficiency, which deals with the Progressive conservation movement between 1890 and 1920, presents us with a similar, well-documented study of environmental politics between 1955 and 1985. Both studies place the actors and structures of environmental politics in the context of social change. Because of this overriding objective Hays claims (p. x) that neither book is an example of "environmental history." Despite his disclaimers both books show extraordinary scholarly breadth in examining the evolution of environmental policy.

In the new book Hays dissects his subject from several angles, looking not only at environmental topics and ideas wildlands, forests, rural and urban areas, toxics, value changes, limits to growth but also at government institutions, agencies, environmentalists, politicians, scientists, managers, planners, economists, and their interrelationships. He includes major and minor historical events, environmental crises, legislation, litigation, regulations, all from the viewpoint of political power structures and decision making. The book is a marvel of integration and focus, especially when one considers the bottomless pit of detail that characterizes the period.

Those who have participated in the struggles of the past generation or more might expect Hays's conclusions to be upbeat and optimistic, applauding signal environmental political accomplishments. After all in 1965 only 13 percent of Americans believed that water pollution was a problem, but less than two decades later, 93 percent believed water pollution was a problem in 1982, and 95 percent believed hazardous wastes constituted a "serious problem." Air and water pollution monitoring data indicate significant improvement; toxic disposal practices have improved dramatically; forest and range

managers are more accountable (a result of legislation in 1960 and 1976); and all of this happened despite exponential increases in the population, workers, cars, urban congestion, and other nonamenities in every metropolitan region in the world. Even during the Reagan administration the EPA's collection of civil penalties went from zero to twenty-three million dollars (in 1985), a figure that is still rising. District, state, and federal attorneys are beginning to throw corporation presidents and managers into jail for pollution violations and are forcing them to take out fullpage ads of repentance in such papers as the Wall Street Journal and the Los Angeles Times.

None of these dramatic changes could have been predicted even a decade ago or particularly when Reagan took office in 1980, yet none of them seems to make Hays change his skeptical view of environmental progress. He records many of these events but interprets them as coming primarily from social forces that changed the United States, since World War II, from a producing nation that emphasized the efficient use of natural resources to a consuming nation with more and more interest in aesthetics and recreation-all while the nation's standard of living and level of education rose. Thus the natural environment and environmental quality are now prized as necessities rather than as luxuries. Environmentalists have articulated these needs of the broader population and are fighting for them, but Hays sees that fight as largely impeded by environmental "experts, the professionally trained scientists, engineers, planners, and economists, and the equally highly trained managers and administrators who play important roles in public decisions"(p. 5). Hays is especially interested in the professional outlooks and political roles of these players of the environmental game. In short he sees the major environmental battles as being fought between the experts, who reflect a "professional," neutral, "moderate" viewpoint that favors industry, and environmentalists, who make more radical demands for cleaner cities and more aesthetically appealing forests and wildlands. Thus he does not read recent environmental history (which he claims he is not writing; his refinements of the definition of environmental history have escaped me) as optimistically as I would, because of the political power these experts hold in defining and regulating environmental problems.

Hays sees the difference between experts and the people in general in their personal or group experience as the source of this problem:

Whereas the world of environmental experience and action amid the general public was shaped by the geographical context in which people live, the world of environmental expertise was shaped by thought and professional organizations dominated by the specialization of knowledge. That experience was derived not from where one lived and worked but from specialized training and ability that tended to establish personal ties with others of similar specialized knowledge to create many but different and separate worlds of expertise. . . . Here was a fractured world of specialized endeavor, relatively cut off from public experience, deeply rooted in the experience and culture of expertise" (p. 9).

Here Hays connects with his earlier book's point that the first conservation movement was a scientific one led by experts in and out of government. Now, however, the experts are in effect slowing down environmental progress and defanging the environmental program.

The second group of moderates allied with the technical experts are "thought leaders" in the establishment press and in environmental organizations such as the Conservation Foundation; these individuals seem to be shocked by the demands of more aggressive environmental groups, which Hays views as outsiders. Citizens often lack the technical expertise to challenge the power of such environmental managers and decision-makers.

Hays shows that expertise is not all neutral, that it prefers one side or another in a controversy, and that experts themselves tend to fight over data, interpretations, conclusions, and methodologies. His major complaint is against the accepted notion that expert opinion is more rational and informed and less emotional than public opinion. He lists a series of environmental controversies that turned into scientific fights (over the health effects of radiation, dioxin, lead, toxics, and pesticides), claiming that the decisions were based not on the merits of the cases but rather on the idiosyncratic experiences, professional (class) background, training, techniques, and methods of the scientists.

One would think, however, that these experts and leaders live in the same social and economic context, commute in the same congested traffic, live in smoggy urban/suburban areas, enjoy the same forests and open spaces, and maybe even choose to work in the environmental field because they are committed to the same goals as the rest of the population. This is in fact generally what I found in my own research (reported in Environmental Protection in the United States: Industry, Agencies, Environmentalists [1987]). Among the approximately three hundred environmental professionals I interviewed about environmental regulations, at least 38 percent expressed moderate to strong environmental commitments, and only 29 percent expressed disinterest to hostility (136 of the respondents were from industry-a group not known for its environmental fervor). This suggests that strong environmental commitment is found even in "conservative" environmental groups, although their leaders may prefer to focus on what *can* be done rather than on more radical goals that may never be realized.

There is ferment among the experts as well as among the more radical environmental groups. Hays is surely correct in his fundamental appraisal of professional culture; I also found much empirical support for this view. But I discovered enough exceptions to constitute a large minority "environmentalist" contingent in every professional group.

That experts have done as much for the environment as anyone else is clear from a close examination of radical environmental demands. It is true, as Hays points out, that environmentalists were the first to organize solid waste recycling and pollution reduction campaigns in the 1970s, but by the mid-1970s technical experts (who also were de facto environmentalists) began to tell industry managers that they could pollute less and save money by recycling hazardous wastes like solvents. Environmental engineers soon began to design hazardous waste reduction systems and more efficient production systems as well. Hays mentions Joseph Ling of 3M

Corporation, but there were dozens of other environmental scientists working on these problems during the 1970s, particularly in California where the state government set up a hazardous waste recycling section in 1977. The environmental groups did not pick up these notions nationally until the 1980s. Hays indicates that these and other progressive activities resulted solely from environmental lobbying by his "outsider" groups, but in the case of industrial engineering and redesign, he is dead wrong.

It is puzzling to me why Hays should see disagreements among experts, particularly over carcinogens, as discrediting those experts - both environmentalist and industry scientists admit that these and other risk assessment studies are very complex and difficult to interpret. I also wonder why he neglected the work of scientists such as Bruce Ames, who in the 1960s developed one of the first short-term tests to identify chemicals that might be carcinogens, then in 1983 identified many toxic chemicals in plants and other foods regularly eaten by humans (Science 221:2256). Ames's point was not that these foods-from peanut butter to burned material from fried hamburgersare necessarily dangerous, but that all human risks are relative. Chemicals synthesized in small quantities by some plants as "natural" defenses against predators might be health hazards if eaten by human beings in large quantities. Industry spokespersons were quick to use Ames's studies to point out that many chemicals are statistically less dangerous than peanut butter. Does this make Ames suspect as a scientific expert? Or less environmentally committed than he was when he developed the Ames test, on which all environmental groups lean? Or most importantly that his new work about the levels at which a substance becomes dangerous is any less valuable to the environmental cause in the long term than his early work identifying which substances could be toxic? In other words, experts and moderates have played and are playing a crucial role in environmental gains.

The second important fact that Hays overlooks is that *despite conflict among scientists* the people are pressuring their legislatures, state governments, and sometimes the EPA to pass strict laws for environmental protection, specifying safety in circumstances of doubt. For example in 1986 the citizens of California passed by a large margin Proposition 65, which prohibits the discharge of any chemical known to cause cancer or birth

defects into drinking water supplies and mandates warning people if they are exposed to hazardous chemicals (including foods). Furthermore Title III of the federal Superfund authorization bill includes extensive emergency planning and warning systems in the event of a toxic spill or gas emission. These can be enforced if the environmental managers are well trained and committed to their jobs.

Hays implies that experts will always be more conservative than radical environmental groups, which will speak to the real needs of the people (assuming that the strictest environmental rules speak to these true needs). All of my survey research of the past ten years shows a much more complex state of affairs. The one certainty that has emerged is that environmental specialists need to be committed service professionals, trained not only in scientific methods but also in listening closely to citizens' concerns. Hays seems to think that this dual mission is a contradiction in terms. Perhaps this is the reason that I am cautiously optimistic about our environmental future while he is not.

JOSEPH M. PETULLA

Joseph M. Petulla is the director of the graduate program in environmental management at the University of San Francisco. He has written American Environmental History (1977, 1987) and Environmental Protection in the United States: Industry, Agencies, Environmentalists (1987).

BEYOND THE ACROPOLIS: A Rural Greek Past. By Tjeerd H. van Andel and Curtis Runnels. Stanford, California: Stanford University Press, 1987. xii + 221 pp. Illustrations, tables, maps, bibliography, glossary, index. \$27.50.

This small volume summarizes results from the Argolid Exploration Project (AEP), a recent archaeological surface survey of the southern Argolid, one of the peninsulas of the Greek Peloponnese. Throughout the book the authors (a codirector and assistant director of the project) focus on human activity and land use and their effects on the local physical environment, especially the soil.

After an introduction, two chapters outline the area's topography and economy (from prehistoric times to the present) and the survey methods used by the AEP. The five chapters following summarize five periods of history and the major economic or historic trend of each: the middle



Michael Gambon in the title role—restless imaginings

Is the Year's Best Film on TV?

By VINCENT CANBY

HILIP E. MARLOW, 10, SITS high in a tree in the Forest of Dean, which, with its abundant, heavy foliage, looks as if it might once have sheltered Robin Hood, Will Scarlet, Friar Tuck and the others. The Forest of Dean is, instead, a kind of seed covering for West Gloucestershire's sooty, barren coal-mining villages, where lives are as bleak as the forest is rich.

The boy turns toward the camera. He stares at it without self-consciousness. "When I grow up," he says, "I'm going to live forever and ever, since, in my opinion, you don't have to die unless you want to." When he grows up, he's also going to have books and shelves just for books and a whole tin of evaporated milk and a whole tin of peaches — "I bloody be mind, I bloody damned buggerin' well be. And I

'The Singing
Detective' series,
which returns this
week, is wittier
than most movies.

shall curse." When he grows up, everything will be all right. When he grows up, he shall be a detective. "I'll find out things. I'll find out."

Nearly 40 years later, Philip Marlow is not a detective. He's a wreck of a man, but he's still trying to find out things.

What is one of the wittiest, wordiest, singingest-dancingest, most ambitious, freshest, most serious, least solemn movies of the year isn't, strictly speaking, a movie at all.

It's "The Singing Detective," Dennis Potter's BBC-Television mini-series, which Channel 13 will re-run in three two-hour segments, this Thursday through Saturday at 9 P.M. John J. O'Connor, of The New York Times, and other television critics have, with good reason, already raved about the show. Now it's the turn of the rest of us.

"The Singing Detective," which is better than anything I've seen this year in the theater (live or dead), was first broadcast here in January at an hour (11 P.M.) seemingly chosen to protect the sensibilities of children and unwary devotees of Masterpiece Theater.

It is not a film for the "Forsyte Saga" crowd. A lot of it is as nasty as the imagination of a furtive, guilt-ridden 10-year-old boy. When men and women come together in "The Singing Detective," they don't make love. They grunt and sweat and are in such hurries they never have

Continued on Page 8

7-10-88

Is the Year's Best Film on Television?

Continued From Page 1

time to remove any clothing except the immediate impedimenta.

"Do you think sex is dirty?" someone once asked Woody Allen. The answer: "Only when it's fun." It's not fun in "The Singing Detective." It's often mean, at best joyless. Betrayals, real and imagined, are cruel. The language sometimes sounds like elevated graffiti.

This is not to say that "The Singing Detective" is perfect.

Toward the end of the sixth hour, wrong decisions are made. The timing goes awry. The psychiatrist achieves his therapeutic effects, it seems, almost instantaneously. Deliverance is won with more ease than one has a right to expect from all that has gone before. The story concludes before the cameras stop.

These are minor reservations about a work that is truly innovative, partially for its heedless length on behalf of a script that was never a literary classic or an overweight, presold best-seller, and partially for the invigorating way that it fuses the past with the present, the fantastic with the real. The result is a film of a

density more often associated with the literary form than with the cinematic.

"The Singing Detective" is a writer's movie. Yet, like such very different "director's movies" as "Napoleon Vue Par Abel Gance," James Whale's "Invisible Man," Orson Welles's "Citizen Kane" and Robert Zemeckis's "Who Framed Roger Rabbit," it seems almost drunk on the technical possibilities available only to film makers.

Sequential events are seen out of all order and sometimes so quickly that the effects are subliminal. Unrelated shots are intercut without, initially, apparent purpose. The wrong sounds are connected to the wrong images.

"The Singing Detective" is not something that, in even a high-toned, so-called novelization, would read much better than the novelization of "Rambo III."

No matter that one watches it in installments, on the small screen of the home telly, "The Singing Detective" is more of a movie than anything one is likely to see in most theaters these days. It enters the in-

tellect not as a series of received ideas. It works on the senses first, through an accumulation of visual and aural impressions. They evoke everything from the helpless laughter of burlesque and the satisfying confusion of an utterly incomprehensible mystery story to the elation of hearing words turned upside down and inside out, as if understood for the first time.

The film proceeds simultaneously on three and sometimes four levels. Philip Marlow (Michael Gambon), now in exhausted middle age, lies in a London hospital ward, his crippled hands bandaged, his arms, legs, torso and face a mass of scaly skin and sores that, when greased by cold cream, burn like wounds doused with iodine

Philip has retreated into his body and become its raging prisoner. He suffers from arthritic psoriasis, which is, it seems, psychosomatic in large part. In the outside world he was a writer of paperback mysteries (now out of print) featuring a beefy, dime store-suave private eye who, being the leader of a 1940's dance band, is known as the Singing Detective.

Philip is at the end of his tether, but he can't let go. He lies on his bed, furious, humiliated, swearing at the imbecilities of the doctors and nurses who address him with the collective "we." His mind won't rest. It goes careering off into a rewrite of his first Singing Detective tale, into fantasies about his unfaithful, scheming wife, Nicola (Janet Suzman), and into memories of his childhood in the Forest of Dean as the son of a stoic coal miner and a desperately unhappy

Sometimes the memories, fantasies, suspicions and present circumstances become hopelessly muddled in his brain. Fictional characters become real and real characters become fictional. He takes great pleasure in imagining the dialogue for his wife's trysts with her lover, who plans to steal an old screenplay Philip once wrote based on "The Singing Detective."

When, finally, the lover turns on Nicola, who had wanted to play the lead in the screen adaptation, Philip laughs out loud as he has the lover say to the double-crossed, double-crossing wife, "Don't you think you're just a tiny bit old?"

In his restless imagination, Philip himself is the Singing Detective, wearing what seems to be an unconvincing, dark auburn toupee with a pencil-thin, dark auburn mustache to match.

Standing in front of his band at the Laguna Palais de Danse, he lipsynchs, as if they were his own, ancient recordings of "The Old Accordian Man," "Accentuate the Positive," "Don't Fence Me In" and other 40's favorites. The actual voices are those of Bing Crosby, the Andrews Sisters, the Ink Spots.

Off the bandstand, he is caught up in a caper involving the body of a nude woman fished out of the Thames and his latest client, who seems to be a Russian agent with mysterious ties to the Nazis. The body sometimes looks like his wife, sometimes his mother, sometimes like a beautiful hooker.

When the hospitalized Philip is really up against the wall, when he might will himself dead if that were possible, he retreats still further from the ward. With his eyes wide open, smiling at his own deviousness, he watches the patronizing doctors who, for his delight, suddenly break into a syncopated, furiously funny, lipsynched version of "Dem Bones, Dem Bones,"

In the middle of the night, a palsied, senile old man, who usually can't walk without help, manages to crawl over to Philip's bed and, in a ludicrous confirmation of everything Philip thinks about sex, attempts to rape him in the fond belief that Philip



BBC Enterprises Ltd

Michael Gambon as Philip Marlow-a wreck of a man but still trying

into view a world of extraordinary texture.

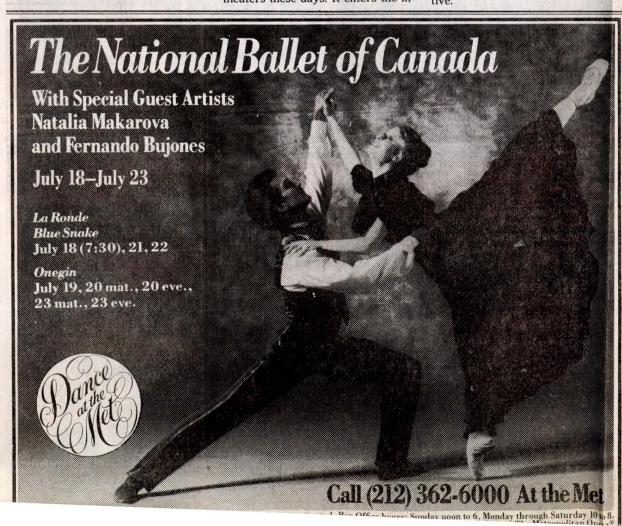
There is, first off, Philip Marlow's hospital ward with a cast of characters that includes a cheerful, dying Pakistani (Badi Uzannas) who understands Philip's "Hey, nig-nog" as the term of endearment it is under such circumstances; a pretty, exceptionally wise nurse (Joanna Whalley), whom no ward should be without; a prissy cardiac patient (David Ryall), who fusses about the temperature of his tea and attempts to teach manners to a slob of a younger man (Gerald Horan), who has the next bed and moves his lips as he

It works on the

curious relationship between Lewis Carroll and Alice Hargreaves, the original Alice of "Alice in Wonder land"

He is, however, best known for his "Pennies From Heaven" mini-series (1978), which starred Bob Hoskins and also used lip-synched recordings, though for different purposes, Mr. Potter is a most singular writer. He chooses to work in pop-cult television, which, in England, is adventurous enough artistically and financially to embrace this sort of production, whose subject matter is risky and which looks to have cost a mint.

Watching "The Singing Detective," we aren't peering into the world of the comparatively distant past as presented in an acclaimed and thus certified literary work. "The Singing De-







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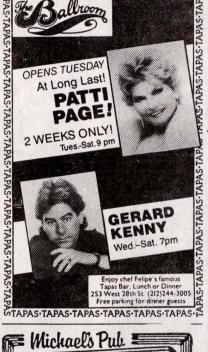
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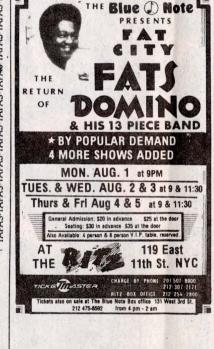




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From Sophocles and Shakespeare through Ibsen, O'Neill, Beckett and "As the World Turns," a large portion of our dramatic literature depends on events, usually terrible, that have taken place before the lights come up on the imperfect world of the present. What happened? Why? Who is responsible?

The past holds the answers. In most plays and films, the answers remain immutable, frozen in time like fossils in deposits of asphalt. All one has to do is dig in the right place to find them.

In Dennis Potter's view, this is a rather too comforting concept of the past. It is why he calls nostalgia "a very second-rate emotion." It preserves the illusion of chronological sequence and progress, with the past kept safely to the rear. Time is tamed. For all of its unpleasant secrets, which can rise up to transform the present, the past remains fixed. It is an orderly, knowable ghost.

Not so in "The Singing Detective" in which the past, as Mr. Potter once said in a television interview, rides alongside the present and flails at it. In return, the present twists and reshapes the past for its own ends.

"'He said, she said,' " Philip Marlowe says with disgust to Nicola when she urges him to write "something serious." "All conclusions," he says. "Life is just the opposite. All clues and no conclusions.'

In fact, in "The Singing Detective," the solutions are not as important (certainly not in dramatic terms) as the search for the clues and in their recognition, which is when one can begin to deal with the realities outside the hospital ward.

Mr. Potter and Jon Amiel, the director whose huge contribution should not be underestimated, evoke what might be described as the nonpresent-tense portions of "The Singing Detective" in an exhilarating. freewheeling way. They out-dare other film makers. "The Singing Detective" has an exuberance more often found in the contemporary musical theater, where the leapfrogging over reality is taken as a matter of course. Along with everything else, the film is an entertainment

The time covered reaches from the final days of World War II ("War Rushing to Its End!" says one headline in Philip's memory, to which he responds, "I've always liked a good Thatcher's England, which Philip loathes. As real, imagined and remembered images succeed one another, sometimes to be repeated somewhat differently, there comes

enters the

intellect not as a series of received ideas.

reads (by coincidence) an ancient copy of "The Singing Detective."

None of the people is more understanding than the hospital psychiatrist (Bill Paterson), a Scotsman who finally takes on Philip Marlow's case, matching each of Marlow's hilariously scathing put-downs with one in kind.

In the fantasy sequences, there are Miss Suzman, the wife whose existence is flatly denied by Marlow at first, and Patrick Malahide, who plays her lover as well as the villain within the fantasized "Singing Detective." Dominating the childhood sequences are Janet Henfrey, as young Philip's terrifying teacher (she looks a little like Margaret Hamilton's Wicked Witch of the West), who is onto the boy's awful secret, and, in the film's most affecting performance, Lyndon Davies as the adolescent Philip Marlow.

Mr. Gambon (the philosophical aquarium keeper in "Turtle Diary") has a titanic role and is splendid in it, whether spitting out Mr. Potter's magnificent invective, weeping in self-pity or delighting in paying off old debts, if only in his head.

Most works of fiction about writers remain as remote to the rest of us as novels set in academe, written by people who, during sabbaticals from their sanctuaries, attempt to reinvent the world on a university campus the size of the head of a pin. They are parochial, self-referential. "The Singing Detective," however, has less to do with the lot of the blocked writer than with a particular man in the grips of a gigantic depression, and who just happens to have the gift of gab of a dark, roaring angel.

Mr. Gambon's Philip Marlow never is content to say anything once. As he talks, he repeats and refines his insults. His is the kind of self-loathing that takes in everyone around him. He sounds like a talking "Roget's Thesaurus" for the blind.

Mr. Potter's screenplay is remarkable not only for its achieved seriousness and lucid complexity but also for having (in American eyes, at least) achieved production. It couldn't happen here. This is an original work, not an adaptation, but something conexclamation mark") to Margaret ceived as a television play by a writer who has spent most of his career working in television.

In 1985, Mr. Potter wrote the haunting screenplay for Gavin Miller's the atrical film "Dreamchild." about the

Mr. Potter, which was broadcast by Channel 13 to introduce "The Singing Detective" last January, clips from earlier Potter works were shown, including his "Follow the Yellow Brick Road" (1972).. In it, Denholm Elliott. playing a maniacal actor who has become popular as a television product spokesman, has a memorable speech in which he defends the kind of commercial television that Americans know best.

"Commercials are clean," he says with fury at those who look down their noses at commercial television. "There are happy families in commercials. Husbands and wives who love each other. They have sunshine and laughter, and kids playing in the meadows. Nobody mocks the finest human aspirations. There's no deliberate wallowing in vice and evil."

In "The Singing Detective," Mr. Potter demonstrates that television needn't be a wasteland inhabited solely by commercials, sitcoms and crime shows. There are other possibilities, both for television and, by extension, the theatrical film.

No theatrical film running six hours can be easily accommodated by the economics of film distribution or the public's physical stamina. The approximately two-hour film is the suitable form for a theatrical movie. The length forces concision on the artist. The best of our popular films discover their art in ellipsis and condensation.

In recent years, the evolution of the mini-series has provided a suitable format for a different kind of film, the adaptation of a literary work of the sort of manifold narrative detail that can support installment-viewing: Rainer Werner Fassbinder's "Berlin Alexanderplatz" and Robert Sturridge's "Brideshead Revisited," being among the most stunning examples.

With "The Singing Detective," Mr Potter and his collaborators appear to embrace the discipline forced on the writers and directors of films playable in theaters. Though "The Singing Detective" runs six hours, it doesn't unravel at book speed, chapter by chapter. Even with three interruptions, it remains as concentrated in content, style and effect as any theatrical film.

Mr. Potter seems to have liberated the conventional narrative to such an extent that one might think he has discovered a new form. He hasn't, but he has used his freedom to set a new standard for all films. He has also, single-handedly, restored the reputation of the screenwriter, at least in television. He's made writing for television respectable and, possibly, an

Paris Journal

French Thinker Who Declines a Guru Mantle

By JAMES M. MARKHAM

Special to The New York Times

PARIS, Dec. 20 - André Malraux is dead. Jean-Paul Sartre is dead. Raymond Aron is dead. The age of France's intellectual giants is past, and it is now customary to bemoan the decline of culture and even thought in France, to rail at the tawdry ascendancy of television and the transformation of writers into entertainers.

Yet if one climbs a narrow staircase in the Collège de France, just down from the Panthéon on the Left Bank, one can encounter the last uncontested giant of French letters. Alert and nimble at age 79, Claude Lévi-Strauss jests that he is toiling at

his "posthumous works." Mr. Lévi-Strauss fashioned a theoretical and empirical oeuvre that decoded the myths of so-called primitive peoples as attempts to explain existence; penned a literary and anthropological classic, "Tristes Troand, unintentionally, godfapiques." thered the movement known as structuralism, the search for underlying patterns of thought in all forms of human activity. But he now shuns the term as having become too ambitious in the claims made for it.

In the complexities of this century, he has become skeptical of a single thinker's ability to explain "all the great problems," and has watched the political vision of his old rival Sartre fall apart a few years after his death.

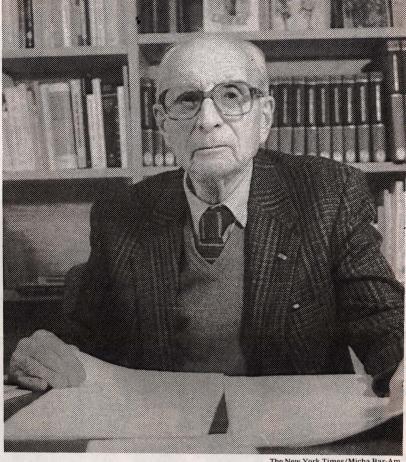
Trying 'to Be a Good Artisan'

"One does not try to be a giant," said the courtly Mr. Lévi-Strauss, who speaks in cadences of precision while a smile plays on his owlish countenance. "One tries to be a good artisan.'

He does not particularly like this century, and says he would have preferred to live in the 19th century, when someone like Victor Hugo could imagine applying his reflection to all the problems of humanity something that has become an unrealizable dream and a folly." But his researches into vanishing cultures like those of the Indians of Brazil and the United States have made him doubtful about the 19th century's most hallowed idea: progress.

"I believe one has to abandon the idea of global, massive progress that is valid for all societies," he said. "I think one can speak of progress with a little 'p,' and in the plural. In certain epochs in certain places of the earth certain progresses have occurred, which have probably been paid for by regression in other domains.

This is a long trajectory from the young Socialist militant who in the late 1930's thought he would become a political theorist. In 1941, belatedly realizing that being Jewish put him at risk in Hitler's Europe, Mr. Lévi-



The New York Times/Micha Bar-Am

Claude Lévi-Strauss at the Collège de France in Paris.

Strauss fled Vichy France and found refuge in New York City with other exiled European intellectuals.

'Fruitful Period' in U.S.

"It was completely decisive, the most fruitful period of my life," he said, recalling his encounters with American ethnologists, long hours logged at the New York Public Library and a little rented room at 11th Street and Sixth Avenue. "Everything I know I learned in the United States. And I adore New York, a superb city.'

He had several job offers that would have permitted him to stay in America, but felt an irresistible tug back to France. "I belong to the Old World," he said with an apologetic sigh. "I can't help it. I feel it very profoundly.

The Old World today looks less robust to him, menaced somewhat in the same manner as the fragile Indian tribes that he studied in Brazil a half century ago.

"I have the concern insofar as I mix in practical things, which is very little, to defend a certain number of values which are those of my society and which I consider to be threatened," he said. "They are threatend by the Soviet Union, by Islamic fundamentalism and by the demographic growth of the third world."

Western industrial nations, he argued, do not have the kinds of allembracing myths common to primitive peoples, but popularized versions of history partly fill the void left by the withering of religious faith.

Need for Irrational Beliefs

"I think that a society cannot live without a certain number of irrational beliefs," he said. "They are protected from criticism and analysis because they are irrational

Mr. Lévi-Strauss speculated that the very complexity of the late 20th century contributed to a "slowing down" of intellectual activity in France. But he said no society was capable of being "exceptionally productive or original in a permanent fashion."

"All over in the world," he mused, "one is seeking more than one is find-

He called the exaggerated claims made for structuralism a distortion of ideas he once applied to linguistics.

"I believe that French society, and

especially Parisian, is gluttonous," he said, "and that every five years or so it needs to stuff something new in its mouth. And so five years ago it was structuralism, and now it is something else."

"I practically don't dare use the word 'structuralist' any more," he added, "since it has been so badly deformed. I am certainly not the father

of structuralism."

This refusal to be a prophet, a guru, another Sartre, is one of Mr. Lévi-Strauss' most salient traits in a France that hungers for what are called master thinkers. Pierre Bourdieu, a sociologist at the Collège de France, noted that "one of his effects has been to change the nature of the French intellectual, to propose something more modest.

When Mr. Lévi-Strauss was elevated to the Académie Française in 1973, there was an outcry of protest among colleagues and students, who accused him of selling out to the Establishment. But in his maiden speech to the academy, the berobed anthropologist reminded them that just as they respected the customs of primitive peoples so, too, they should respect those of France.

What does it mean to be a Jew in France today? The question stopped him, and a long pause ensued. "It means that one belongs to a certain intellectual climate," he finally answered. "and one knows that one runs the risk of being disputed for that reason. But I feel myself to be so profoundly French that I don't think about it willingly or clearly."

His visitor ventured that after Hitler it must mean something more than that, but he answered that he felt simply that he belonged "to a fraction of humanity on which a kind of enormous catastrophe has fallen" - but no different from another fraction of humanity that could be ravaged by a natural disaster.

History for Mr. Lévi-Strauss is whimsical and unpredictable, "progress" is uneven at best and certainly relative, and there is no God. His interlocutor suggested that this was a pessimistic vision.

"I would say that is completely indifferent to me," he answered with a gentle smile. "I try to understand. I am not a moralist at all.'

Gypsies Protest in Rome

ROME, Dec. 20 (AP) - About 200 gypsies protesting that they were discriminated against in Rome marched today to St. Peter's Square. Pope John Paul II, in his noon prayer from his window overlooking the square, wished them well in their efforts to find a welcome in the city. Residents of outlying Rome districts recently erected barricades on roads and sat on railroad tracks to draw attention to the presence of gypsies in their neighborhoods.

Haiti's Gloom Kills the Spirit Of a Holiday

By LINDSEY GRUSON

Special to The New York Times

PORT-AU-PRINCE, Haiti, Dec. 20 — Sitting on a stool pitched against his shanty on a hill overlooking this threadbare capital, Jean Delarouche sniffed and spat as he watched a group of children kicking a soccer ball along

the half-paved street.

"Every day it gets worse," said Mr.
Delarouche, a 62-year-old driver who has not found work this month. "This is meant to be Christmas. But this year, there is no Christmas spirit. I don't have any hope. The Government spits on the people and we can't do a thing."

A volatile mixture of fear, anger and helplessness has surged through the narrow streets of this city since 34 people were killed three weeks ago with guns and machetes at polling places by thugs in civilian clothes and soldiers, forcing the cancellation of what was to have been Haiti's first presidential election in 30 years.

"There's almost a state of despair," said Pierre Benoit, a 28-year-old peddler of radios and cassette player.

Yet the unofficial coalition of the

Roman Catholic Church, opposition candidates and labor unions is not succeeding in its effort to turn that sense of hopelessness against the military-dominated Government of Lieutenant General Henri Namphy.

Holiday Without Gusto

The shock of the violence and the desperateness of the economy have also vanquished the holiday gusto that usually prevails at Christmas in this predominantly Roman Catholic coun-

try.
Unlike in previous years, few Christmas decorations adorn the shabby streets of the capital. The independent Radio Métropole, which usually broad-casts Christmas carols continuously after Dec. 15, is playing only two carols an hour this year. Although the nightly violence has abated, the city is deserted after dark, and many families have canceled their Christmas parties.

The personnel manager of a large department store, situated in a narrow three-story building in the capital, said that customers are almost as rare this year as winning lottery tickets. The manager of a downtown boutique, which stocks French perfume and Irish crystal, said sales are down 45 percent from last year, which was not a good

Bonus May Be Threatened

Because of the election violence, the Finance Ministry is facing cutbacks in foreign aid, which accounts for almost 70 percent of the Government's budget. The ministry has directed public agencies to cut spending by up to 50 percent, raising the possibility that public em-ployees will not receive their legally mandated holiday bonus of one month's pay.



There were few buyers for the Christmas decorations being offered by vendors last week on a street in Port-au-Prince, Haiti.

'The Government spits on the people.'

first step in easing the economic plight of their country, the poorest in the Western Hemisphere, where many people live on \$100 to \$150 a year. They blame the provisional Government for the bloody election disaster and say they are convinced that the military is determined to keep control of the Government, using terror if necessary.

General Namphy's Government has blamed the independent electoral council for the collapse of the elections and insists that it will turn over power to a democratically elected civilian on Feb 7. In preparation, the general dismissed the electoral council and appointed another group in its place.

Many Haitians political leaders and ordinary citizens have denounced those

ness district, but attracted only weak support in poor neighborhoods.

"Unfortunately, the Haitian people have been brainwashed," said Eddy Volel, a member of the leadership of one of the largest political parties, the Haitian Christian Democratic Party.

"Everybody's acting like chickens," said Mr. Volel, whose brother Yves, a Presidential candidate, was killed near police headquarters before the abortive election. "They've been taught to do so. They've never been taught to fight dictatorship and fight it strong-

A Wall of Exhaustion

That has confounded the opposition The four leading presidential candidates have sought some way bring sup-porters into the streets. They have demanded that the Government resign and have vowed to boycott the election. But they have run into what appears to be a solid wall of exhaustion.

That has provided General Namphy with remarkable political latitude. This week, the Government issued a decree giving its appointed Supreme Court the unconstitutional and little final word on all election rules A cim

Law on Alies

By ROBERT PEAR

Special to The New York Times

WASHINGTON, Dec. 20 - A new im migration law has failed to stem the flow of illegal aliens from El Salvado to the United States, according to a con fidential cable from the American Em bassy there.

The report does not discuss pattern of immigration from other countries Mark W. Everson, Deputy Commis sioner of the Immigration and Natural ization Service, declined to commen on the cable. But he insisted, as othe Reagan Administration officials have that the law was working as intended to discourage illegal immigration over

The law, which prohibits the hiring o illegal aliens, temporarily reduced Sal vadoran migration to the United States for several months after it was signed by President Reagan in November 1986, the report says. But it says tha "illegal migration to the United States is increasing" and has "risen back to 1984-86 levels."

The main purpose of the law was to curtail illegal immigration by penalizing American employers who hire ille gal aliens. However, the cable concluded that the employer sanctions "are failing to slow illegal Salvadorar migration to the United States.'

Cable Cites Law's 'Loopholes'

Salvadorans have learned of "loopholes" in the law and delays in its enforcement, the cable said. They also know that the House of Representa-tives on July 28 passed a bill to suspend the deportation of Salvadorans living illegally in the United States, the cable said. The Senate is expected to consider a similar bill in the spring.

The House and Senate bills would

protect about 500,000 Salvadorans and 200,000 Nicaraguans. Members of Congress singled them out for special attention because of the civil strife, economic difficulties and reports of human rights violations in both coun-

These developments, taken together, appear to have convinced Salvado rans that the United States is not seri-

ous about enforcing its immigratior law" against them, the cable said.
The Salvadoran Ambassador here Ernesto Rivas-Gallont, said he gen erally agreed with the assessment ir the cable. "Immigration, legal and illegal, from El Salvador to the United States has not really decreased," he said in an interview. "Traffic through this embassy and through our seven consulates continues to be very substantial."

The immigration service often cites its apprehensions of illegal aliens as an indication of the level of illegal migration. Mr. Everson said the total number of illegal aliens apprehended along the United States-Mexico border declined 30 percent, to 1.1 million, in the fiscal year that ended Sept. 30. It continues to decline, he said.

Apprehensions of Salvadorans also dropped, to a low of 496 in April, but

AIDS Crisis Galvanizes An Army of Volunteers

By GEORGIA DULLEA

A single-engine plane landed on an |get." airstrip in rural North Carolina this week, carrying a New York woman with AIDS back home for the holidays. Her family was there to welcome her with hugs and kisses, which is how the pilot, Loren Sherman, likes such jour-

Mr. Sherman, a theatrical set designer, has made more than 30 trips in his plane since the AIDS crisis began, carrying emaciated patients on stretchers to hometowns within an 800-mile radius of New York City.

"It's sad to see them at the window as we leave New York and know it's

It may be a flight home, a meal delivered to a bedside or a teddy bear.

probably their last look," he said. "Many are about my age, early 30's, people who migrated to this city, a cultural mecca, to practice their professions and who now are going back to farmlands and small towns to die.

As the AIDS epidemic grows, so do the ranks of people offering personal services to those who are ill. In New York, Los Angeles, San Francisco and other cities hard hit by the deadly disease, volunteers are providing meal delivery, pet care, grooming and other assistance.

A Need to Do Something

Like volunteers in community-based AIDS organizations, those working independently express a need to "do something," however small, to enrich the daily lives of the dying. Many speak of relatives, friends and lovers lost to

In San Francisco, Ruth Brinker recalled the origins of the service she and several other people provide. It began when a friend contracted AIDS. "He had an army of friends," she said. "As he grew weaker, we got together and divided up the month to make sure he to people with AIDS. Impoverished by would get meals every day. It worked medical bills, some victims of AIDS well at first, but then people would for- can no longer afford to feed an animal. mal?'

One weekend, two summers ago, some of his friends went away to a resort. They returned to find he had died, hungry and alone. Shortly after Labor Day, with a few pots and pans and a \$2,000 grant from a Zen study center, Mrs. Brinker and seven others started Project Open Hand.

Today it prepares and delivers lunch and dinner every day to the doorsteps and even the bedsides of 300 victims of AIDS. Fifteen percent of them pay \$4.25 a day; the others pay nothing. Open Hand's projected budget for next year is \$500,000, to be raised mainly by private donations.

Inquiries About Program

A similar service, God's Love We Deliver, opened in New York about a year ago. Since then Open Hand has received queries from groups considering projects in Dallas and Portland,

Elsewhere, hairdressers are making house calls, accountants are filling out tax forms and, in Houston, teams of retired volunteers are driving patients to doctors and hospitals.

In New York, Debra Provenzano, a cosmetologist, holds weekly clinics at a People With Aids center. Using a makeup she developed at the request of doctors in California, she demonstrates how to conceal the purplish lesion of Kaposi's sarcoma, a rare form of cancer that is now considered an almost certain signal of AIDS.

"Try and get a cab to the doctor's with those purple spots on your face,' she said. "They take off in a flash."

Ward 5A of San Francisco General Hospital, a special AIDS unit, looks Christmasy right now, with decorations created by children at a local school and festooned by members of the Godfathers Service Fund.

The Godfathers are sponsored by a group of San Francisco bar owners and restaurateurs. A spokesman, Tony Treviso, said no one remembered how they got the name but every AIDS patient admitted to one of the city's eight major hospitals got a gift from the Godfathers: a velour bathrobe, slippers, toiletries and a teddy bear.

Care and Food for Pets

Pets are both a burden and a comfort



Jeffrey Fox, right, a volunteer for PAWS (Pets Are Wonderful Support) walking a dog belonging to an AIDS sufferer in San Francisco. Ken Clark, another volunteer, holds a dog that belonged to a man who died of AIDS. Mr. Clark has adopted the dog.

Debilitated by the disease, which cripples the immune system, some are too weak to walk the dog. Doctors warn cat owners who have AIDS to avoid cat litter, which carries a risk of infection.

Now there are groups like Pet Patrol in Houston and PAWS (Pets Are Wonderful Support) in San Francisco, half of whose 50 volunteers are themselves people with AIDS. There are also individuals, like Karen Richter, a Brooklyn schoolteacher who places pets in foster homes and arranges adoptions.

"I don't go into detail," she said. "If you tell them the owner died of AIDS, even some educated people will say, 'Oh my God, how can you touch the ani-

With a caseload of 350 pets and a monthly budget of \$5,000, PAWS provides free food, grooming, and veterinary services. Pets are boarded for hospital patients. Dog walkers are on call around the clock.

"It's a way for people who want to help with AIDS but can't get in the trenches," said Cappi Patterson, a public relations entrepreneur.

She and others at PAWS believe that pets help more than pills at this point.

"A pet," she said, "is never going to fire you from your job, throw you out of your apartment, turn on you or just simply not be there, which is what happens when people find out you have



Some of the 112 children who were rounded up in a 1984 predawn raid in Island Pond by Vermont state troopers.

quent and methodical physical abuse by adult members of the community' for "minor disciplinary infractions.

Richard A. Axelrod, the A.C.L.U. attorney in the case, said in today's hearing that court documents showed Vermont officials had consulted a psychologist and a pediatrician before the raid and that both had said it would harm the children.

At issue in the hearing, before Federal District Judge Albert W. Coffrin, was a pretrial motion to keep confidential the communications between the defendants, five former state officials, and the state attorneys on whom they commissioner of the State Department | mands and new technology, including

The defendants also contend that they should not be prosecuted for their actions as state officials. The responsibility for investigating allegations of child abuse, said Ritchie E. Berger, an attorney for three of the former officials, "is such a sensitive matter that those who do it must have absolute immunity in order to do their jobs.'

Judge Coffrin also heard arguments today on whether the charges should be dropped against the three men represented by Mr. Berger because they did not apply for the warrant used in the raid. They are John Burchard, who was

Changes and Challenge For the Naval Academy

ANNAPOLIS, Md., Dec. 24 (AP) — Midshipmen at the Naval Academy no longer have to march from class to class as they once did. They walk across campus, singly or in groups, like ordinary college students.

Lights no longer go out precisely at midnight in Bancroft Hall, the dormitory for all 4,600 midshipmen.

Physical hazing of plebes is prohibited. Upperclassmen may skip breakfast to cram for an examination. There is more leave time and more freedom in choosing classes. Chapel attendance is no longer mandatory.

In short, life at the 145-year-old institution on the banks of the Severn River is not what it used to be.

Are all these changes indications that the academy, as Navy Secretary Navy James H. Webb Jr. said recently, has "lost its guts"?

Not in the view of William Busick, a retired Navy captain who has observed the academy for 48 years, first as a midshipman, then as an officer stationed here and now as director of the United States Naval Academy Alumni

"I've seen this institution for a long time," Captain Busick said in a recent interview. "It gets better and better."

Mr. Webb, a 1968 academy graduate, created a stir with his comments about changes at the academy in a speech to the midshipmen in September.

In the Vietnam War, "when the military was being torn apart by vicious criticism, this institution apparently either lost its guts or its esteem," he said.

Time to Tighten Up

It is time to tighten things up, Mr. Webb told the midshipmen, from the summer indoctrination for new plebes to their graduation.

Captain Busick dismisses the complaints with a mixture of humor and bemusement. "Jim's just like all the rest," he said. "Every class thinks it was the last one to have a hard time."

But he said he does not understand Mr. Webb's use of the words, "lost its guts."

The Naval Academy was changing before Captain Busick arrived in 1938 as a plebe and has changed since, he said. Most changes, he added, were the natural evolution of an institution adjusting to new conditions, new de-

An academic overhaul was undertaken in 1969.

Midshipmen, who until then had followed generally the same course of study with few elective courses, are now allowed to major in various areas of study, including English, history and economics. The number of required courses was reduced.

Competing With Academe

The academic changes were made when applications for entrance to the academy were dropping and the dropout rate was increasing. The changes apparently worked, officials said. Voluntary resignations declined, and applications increased.

'We have to offer a majors program," Captain Kristensen said, "We have to be able to compete with other colleges and universities.'

The curriculum changes brought about another break with tradition, the

An alumnus bemoans a 'loss of guts.'

practice of midshipmen marching to classes. Captain Busick said: "People say, 'Why don't you march to class?' If you don't have everybody going to the same place, you can't have them march off together."

In his speech, Mr. Webb said he was particularly concerned with the lack of intensity in the plebe indoctrination.

Captain Kristensen acknowledged that the plebe program "does not have the physically demanding aspect it had when I was a plebe." He added: "You don't have plebes doing pushups in the shower. You don't have plebes doing some of the things that used to be jet called hazing.

But Captain Kristensen said plebes are still subjected to great pressures in their summer indoctrination so they 'will develop an understanding of what it means to work under stress.

2 Scots Die in French Alps

CHAMBERY, France, Dec. 24 (AP)

Science Times

Thriving Despite Hardship: Key Childhood Traits Identified

Ability to seek out a helping adult is seen as crucial.

By DANIEL GOLEMAN

WOMAN, a paranoid schizophrenic, ate all her meals in restaurants because she was convinced someone was poisoning her food at home. Her 12-year-old daughter developed the same fears and likewise ate in restaurants. Her 10-year-old daughter would eat at home if her father was there, but otherwise went along with her mother.

But the woman's 7-year-old son always ate at home.

When a psychiatrist asked the boy why, he said with a shrug, "Well, I'm not dead yet."

After several years, the older daughter developed paranoid schizophrenia like her mother. The younger daughter, while sharing some of her mother's fears, managed to go to college and adjust fairly well to life. But the son went on to perform brilliantly in college and in his adult life.

Success Against the Odds: A Chronology Manages responsibilities, such as a part-time job or major Some children flourish amid arduous conditions. Although no one trait is chores, despite a chaotic home common to every success story, several traits seem especially important Recovers rapidly from disturbances. Able to life. Socially adept; participates distance self from emotional turmoil. Autonomous in group activities. Plans rather and confident: a healthy skepticism. Finds adults fo than acting on impulse. Cheerful and guidance and help when parents falter; has a one enthusiastic. Seeks good relationship with at least one adult. At least Independent but slow help from adults average academic skills, but high social intelligence. to anger. Tolerates effectively. Flexible and Securely attached to frustration well in a persistent. mother, although she may disorderly household. become abusive or Alert and incapable later. attentive Childhood 31/2 years Teens 2 years At birth 1 year

The young boy is one of a group of children who are holding an increasing fascination for experts on child development: brought up under the most chaotic, abusive or impoverished circumstances, they go on to thrive. The data on how they thrive have been growing, becoming more specific and offering a cohesive picture of children who had been the

most baffling of enigmas.

There is no single set of qualities or circumstances that charactizes all such resilient children. But psychologists are finding that they stand apart from their more vulnerable siblings almost from birth. They seem to be endowed with innate characteristics that insulate them from the turmoil and pain of their families and allow

them to reach out to some adult — a grandparent, teacher or family friend — who can lend crucial emotional support.

Grinding hardship will leave even these children with psychological scars. But by and large they are able to thrive in circumstances that leave other children emotionally disabled.

"Such children flourish despite hor-

rendous conditions," said E. James Anthony, a psychiatrist at Chestnut Lodge Hospital in Rockville, Md., who interviewed the self-confident young boy.

Research by Dr. Anthony and other scientists is creating a composite view of trajectories resilient and vulnerable children seem to follow.

Some of the most recent findings on

the lifelong attributes of resilient children are from a study of nearly 700 children born in 1955 on the Hawaiian island of Kauai. All the children were born to impoverished families whose parents worked on sugar and pineapple plantations. One parent, and sometimes both, was alcoholic or

Continued on Page 22

MAN IN THE NEWS

Aggressive Researcher

Susumu Tonegawa

By GINA KOLATA

R. Susumu Tonegawa learned that he received the Nobel Prize in Medicine when he was called by a Japanese news organization at 6:30 A.M. yesterday. The news thrust into the spotlight a scientist described by colleagues as a very private man who is an aggressive, driven and brilliant researcher.

"He's a brilliant problem solver," said Dr. David Raulet, a colleague of Dr. Tonegawa at the Massachusetts Institute of Technology in Cambridge, Mass. "He's good at picking out the fundamental issue and figuring out a way to solve the problem quickly."

Colleagues said that Dr. Tonegawa has the unrelenting determination that often seems necessary for success in the competitive field of molecular biology. But several added that that combination of personality traits had not won him many friends. "He's stepped on a lot of people's toes, but, for him as an individual, that's what he had to do to win the prize," said Dr. Malcolm Gefter another immunologist at M.I.T.

On the other hand, Dr. Gefter said, immunologists and molecular biologists recognize that Dr. Tonegawa

richly deserved the Nobel Prize. "Scientists are extremely happy that he got the prize," Dr. Gefter said. Dr. Tonegawa's research demonstrated how the body can rearranged genes in antibody-producing cells to fight a variety of diseases.

At a press conference yesterday, Dr. Tonegawa said that he had not yet considered what he would do with the \$340,000 that accompanies the prize. "I'm still busy working on the immune system, T-cell immunity, immunity by virus," he said.

Focused and Intense

The 48-year-old Japanese scientist works long hours and tends not to socialize with his colleagues, said Dr. Harvey Lodish of M.I.T. "He is very focused and very intense. He is not very interactive." Dr. Lodish, who has known Dr. Tonegawa since he arrived at M.I.T. in 1981, did not even know whether Dr. Tonegawa is married.

In fact, Dr. Tonegawa married a former Japanese television reporter, Mayumi Yoshinari, about two years ago. His wife is now a graduate student in M.I.T.'s program in brain and cognitive science. The couple has a 9-month-old son, Hidde. This is his second marriage.

Dr. Tonegawa was born in Nagoya, Japan, and received a bachelor's degree from the chemistry department of Kyoto University in 1963. He went to California for advanced training and received a Ph.D. from the department of biology at the University of California in San Diego in 1969. He then did postgraduate work at the University of California in San Diego and at the Salk Institute in San Diego.

In 1971, Dr. Tonegawa went to the Basel Institute for Immunology in Switzerland and remained there until 1981. He had a position there that was the equivalent of an assistant professorship, Dr. Lodish said, and it was there that Dr. Tonegawa began his prize-winning research on the rearrangement of genes in cells of the immune system. "It was a one-man show," Dr. Lodish said.

From Basel, Dr. Tonegawa went to M.I.T. as a full professor. He runs a relatively small laboratory and focuses entirely on his research. Dr. Maurice Fox, chairman of the biology department at M.I.T., said he is attempting to involve Dr. Tonegawa in teaching. "I regard it as my responsibility to get him more involved," Dr. Fox said.

String of Experiments

Dr. Tonegawa is a member of the board of directors of Damon Biotech in Needham, Mass. Dr. Stephen Gillies of Damon Biotech, who was a postdoctoral fellow in Dr. Tonegawa's lab in 1981, described Dr. Tonegawa as "a night person." He added, "He would come in after lunch and work until 3 or 4 A.M., or even until 7 A.M."

Dr. Gefter said that Dr. Tonegawa's tenacity and aggressiveness had aided his quest for recognition in the hotly competitive field of molecular biology.

Long-Running Debate on AIDS: How Well Did Americans Respond?

By PHILIP M. BOFFEY

Special to The New York Times

ASHINGTON, Oct. 12 — Was the nation's initial response to the AIDS epidemic a remarkable triumph of modern science? Or was it a failure to mobilize against a disease that has primarily ravaged outcast groups like male homosexuals and intravenous drug users?

That question, the core of a long-running debate over whether the nation has reacted vigorously enough to control the AIDS epidemic, is surging to the fore again this month, which by coincidence has been designated AIDS Prevention and Awareness Month by the Federal Government.

Some medical experts have extolled the remarkable speed with which scientists and public health officials found the cause of AIDS, devised a blood test to protect the blood supply and discovered a drug that can prolong the lives of many patients.

But critics have responded that financing for AIDS prevention and education programs has been grossly insufficient and that even the acknowledged scientific achievements came late. They add that progress was slowed by indifference to the main victims of AIDS in the United States: homosexuals and drug addicts.

A Broad Indictment

Now, in the latest entry in the debate, a passionately written book by a



United Press Internation

In 1983, participants at a vigil in San Francisco listening as names of those who died from AIDS were read.

AIDS Epidemic," was written by Randy Shilts, who has covered the AIDS epidemic for the San Francisco Chroniclel since 1982.

It deals with charges accurate in many respects but overstated in others, according to several health experts who have not yet read the manuscript but are familiar with the long-running debate. The book is also vulnerable to complaints that it applies the wisdom of hindsight to a situation that was extremely confusing as it developed.

Documenting a Sluggish Response

Although charges of foot-dragging

AIDS virus could be transmitted through blood transfusions, belittled the initial evidence that such transmission was occurring and refused to implement crude testing procedures to screen out infected blood. This, Mr. Shilts says, was largely because they did not want to shake public confidence in the blood supply, lose an important supply of blood from gay donors or pay for costly testing. Only when the evidence became overwhelming and a better screening test was available did most blood banks take effective action.

9Dr. Arye Rubinstein, chief of pediatrics at the Albert Einstein College of Medicine in the Brony, was widely

PERSONAL COMPUTERS

Goodbye, Plain Vanilla

By PETER H. LEWIS

HOEVER decided to make computers beige ought to be condemned to eat nothing but raw bean curd for the rest of his or

Everybody makes beige computers these days. It's bland, it's boring, it's depressing and it stifles creativity. Some people believe that a computer ought to reflect the personality of its user. It used to be that one could display one's rebelliousness by buy-ing an Apple Macintosh, but now that the Mac is a respectable Fortune 500 tool, a more dramatic statement is required.

Aesthetics Technology of Palo Alto, Calif., offers a colorful solution. For fees from \$195 plus shipping (for a solid black Macintosh) to more than \$2,000 (for a custom design for your floor-standing PS/2 plus laser print

er), you can transform your drab little beige box into a thing of art.

The artists lovingly disassemble your computer to insure a perfect job your computer to insure a perfect job and to prevent paint from getting into the delicate workings of the machine. This technically voids the warranty of most computers, but even Jean-Louis Gassee, Apple's vice president, seems unfazed; he reportedly chose to have his Mac resemble a block of granite. All surfaces are sanded and scrubbed and sprayed with multiple coats of polyurethane paint.

Besides doing monochrome jobs in every color from basic black to candy apple red, the artists at Aesthetics Technology can also create stunning

trompe l'oeil masterpieces, fake m ble or granite, and even woodgrain so realistic it ought to be term proofed. How about camouflage, chrome? How about a Jackson F lack print? Silkscreening, compa logos, special effects — anything y can dream up, they can do, althouthe price can be daunting.

The standard prices (\$295)

The standard prices (\$295 colors other than black, \$350 for grite, \$895 for woodgrain and mark include the computer, the keybo and a mouse; peripherals are extr. For more information, and prestimates call 415 202 2020.

estimates, call 415-326-3936.

It's a good thing Aesthetics Te nology didn't start back in the 195 Computers were literally as big houses back then.

That thought was brought to m by the Compaq Portable 386 tha now sitting on my desk next to Mac. The Compaq, which is beige, pears to be slightly smaller lighter than the Mac — 20 pounds, portable package less than one cu

portable package rest foot in size.

Yet the Compaq is vastly m powerful than the most powe computer in the world in the ea 1950's — the 1,400-cubic foot Univa It's astonishing to see how far co puters have come since the 195 Perhaps more astonishing is speculation on where they are go and for that we turn to the Octo issue of Scientific American.

"The progress in computing s

Q & A

Q. What has happened to the people who contracted polio in the 1950's who were confined to iron

lungs? More than 100 polio patients still use iron lungs, usually A. More than 100 polio patients still use iron lungs, usually while sleeping, said Patricia Himes, administration manager for LIFE-CARE, a Colorado company that supplies equipment to polio patients under contract with the March of Dimes. The device, a metal case enclosing all of the body but the head, relies on changes in air pressure to alternately expand and compress the chest, drawing air in and out of the lungs.

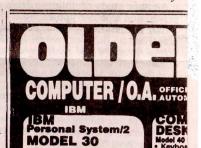
The iron lung was used in cases in which polio affected the patient's brain stem, destroying the breathing reflex. In most of these cases, patients were able to breathe on their own once the acute phase of the ill-own once the acute phase of the ill-ness passed, according to Dr. Paul Peach, medical director of the Roose-velt Warm Springs Institute for Re-habilitation. Others had tracheosto-mies so they could use ventilating machines; still others use "chest", portable devices that use air machines; shells," portable devices that use air pressure to compress and expand the chest, much as the iron lung does.

Some patients who do not need breathing assistance while they are awake may temporarily stop breathing while they sleep, a condition

called apnea. These patients may the shells or iron lungs while t sleep, Dr. Peach and Ms. Himes sa "Some few stay in the iron lung the time," Ms. Himes said. "Par that is fear of using any other kinequipment. I know of two or the who are permanently in iron lund refuse other kinds of treatmer Ms. Himes said LIFECARE refuse."

Ms. Himes said LIFECARE re iron lungs to a total of about 300 tients, most of whom require ten rary breathing assistance for p lems other than polio.

Readers are invited to submit q Readers are invited to submit quitions about science to Questions, ence Times, The New York Times, The New York And Street, New York, 1 10036. Questions of general interville be answered in this column, requests for medical advice carbe honored and unpublished letter annot be answered individually. cannot be answered individually.





Resilient Children: Key Traits Identified

Continued From Page 19

mentally ill, and, to add to the difficulties, the children themselves suffered a trauma at birth, such as oxygen deprivation or forceps delivery.

Each of these factors increases the odds against a child's emotional adjustment. And, over the years, many of the children have shown signs of psychological disturbance. But about 1 in 10 not only could withstand the difficulties, but also developed exceptionally well.

Substitute Parent

In findings reported last July in Tokyo at the International Society for the Study of Behavioral Development, data from the first 30 years of the children's life highlighted the importance of their ability to find someone who could help them face the world with trust.

"Without exception, all the children who thrived had at least one person that provided them consistent emotional support — a grandmother, an older sister, a teacher or neighbor," said Emmy Werner, a psychologist at the University of California at Davis, who directs the study. "These are kids who are good at recruiting a substitute parent who is a good model for them."

In interviews when they were 30 years old, many of the resilient children could recall a teacher from as early as the first grade who acted as a mentor, giving them a sense that they could achieve despite the difficulties of their childhood.

"The absence of a supporting adult in a child's life is seen over and over in a range of problems, from delinquency and drug abuse to teen suicide," said Norman Garmezy, a psychologist at the University of Minnesota, who has been at the forefront of the new research. Dr. Garmezy leads a network of research projects at different universities, financed by the MacArthur Foundation, which are are studying the factors that protect children or put them at risk.

Special Interests or Talents

In addition to a winning sociability that drew people to them, most of the resilient children in the Hawaii study also had a talent or special interest that absorbed them and gave them a feeling of confidence.

that absorbed them and gave them a feeling of confidence.

"They were able to use whatever skills they had well, even if they were not terribly bright," Dr. Werner said.

"For some it was simply being good at swimming or dance, for others being able to raise prize-winning animals. But these activities offered them solace when things got tough."

By age 30, the resilient children had

By age 30, the resilient children had gotten more education and reached higher economic levels than others in the study, Dr. Werner said. Among them were an architect, a district attorney and a composer.

Another study of children from deprived and troubled homes, by J. Kirk Felsman and George E. Vaillant, psychiatrists at the Dartmouth Medical School, tracked 456 men from early adolescence into middle age. It found that the more successful adults were set apart by industriousness and organization in early adolescence. Sometimes this meant working in a part-time job, taking on major chores at home or being intensely involved with a school club or team.

'Ability to Bounce Back'

As younger children, they showed a dogged persistence in the face of failure. "You can see their ability to bounce back in simple tasks, like building a tower with blocks," Dr. An-

The child's doggedness showed up in large and small ways throughout life.

thony said. "A less resilient child will stop when the tower falls, or not try to build it very high. But the resilient child keeps going each time it falls."

Some children have protective traits virtually from the beginning of life, according to Ellen Farber, a psychologist at the State University of New York at Buffalo, and Byron Egeland, a psychologist at the University of Minnesota. Their findings appear in "The Invulnerable Child," published last month by Guilford Press.

At birth, they found, the resilient children were more alert and interested in their surroundings than the



Dr. Norman Garmezy

1950's. The project focused on examining the ways children handled stresses — a divorce, a move, the illness of a parent — as they grew. Among the key traits of the more resilient children identified in that study was the ability to recover quickly from upsets, said Lois Barclay Murphy, a psychologist at the Menninger Foundation.

Being easygoing, which makes children less likely to become upset, may also protect some children because it keeps them from being a target of their parent's anger. Michael Rutter, a psychiatrist at the Institute of Psychiatry in London, writing in a recent issue of the American Journal of Orthopsychiatry, notes that children with difficult temperaments are more likley to become a parent's scapegoat than their more cheerful and mall eable siblings.

and malleable siblings.
Dr. Rutter, one of the pioneers of research on resilient children, also reports data suggesting that, in late adolescence, the more successful children tend to plan rather than make snap decisions.

One trait that seems to buffer children from their parents' troubles is the ability to create an emotional dis-

Some children showed protective traits virtually from the beginning of life.

tance. "A parent's stresses can be transmitted to the children," said Lawrence Fisher, a psychologist at the University of California at San Francisco.

Francisco.

"Those children who are closest emotionally to a distressed parent are the most likely to show signs of distress themselves. They will be more self-derogatory, anxious or depressed, or have physical symptoms" than their siblings who are more distant from the disturbed parent.

Subtle Psychological Cost

A similar finding emerged from a study by Dr. Anthony of the Chestnut Lodge Hospital of "superadjusted" children of psychotic parents. These children were able to maintain an emotional distance from their patents, while finding another adult — often a teacher — to provide emotional support.

Still, even resilient children may pay a subtle psychological cost for their deprived or abusive family life. In a study of children of psychiatric patients, researchers at the University of Rochester found that by late adolescence one group of children who ostensibly had adjusted well seemed to cling to a moralistic out-

"From a distance these kids look good, but up close, in their intimate relations, you find they are disagreeable and judgmental," said Lyman Wynne, a psychiatrist at the University of Rochester. "They put down their siblings who are not doing as well, but they themselves are constricted and overcontrolled. Their normality is based on being uptight straightshooters."

Another kind of psychological price for thriving was found by Dr. Anthony. As young adults, the resilient children of psychotic parents — particularly when the disturbed parent was of the opposite sex — often brought an emotional distance into their intimate relationships. Many had a history of breaking off relationships at the first hint of closeness. Others sought part-

The child's doggedness showed up in large and small ways throughout life.

thony said. "A less resilient child will stop when the tower falls, or not try to build it very high. But the resilient child keeps going each time it falls."

Some children have protective traits virtually from the beginning of life, according to Ellen Farber, a psychologist at the State University of New York at Buffalo, and Byron Egeland, a psychologist at the University of Minnesota. Their findings appear in "The Invulnerable Child," published last month by Guilford Press.

At birth, they found, the resilient children were more alert and interested in their surroundings than the others. At the age of 1, the children had a secure and warm relationship with their mothers, an experience researchers believe may be particularly important in helping them recover from abuse in later life, even when that abuse comes from the mother.

Independence and Enthusiasm

By the age of 2, the more resilient toddlers — most of whom were suffering abuse or neglect — were nevertheless marked by a comparatively high degree of independence, an easygoing compliance, enthusiasm and a high tolerance for frustration. And by 3½, these children were more cheerful, flexible and persistent than the others.

Perhaps most significantly, they also showed a clear ability to seek

help from adults.

A major difference between abused children who, as parents, abuse their own children and those who do not is that those who do not perpetuate the cycle of abuse had a supportive relationship with the nonabusing parent, according to Joan Kaufman and Edward Zigler, psychologists at Yale who published their findings in an article in the American Journal of Orthopsychiatry.

One of the first efforts to identify the qualities that set resilient children apart was begun at the Menninger Foundation in Topeka in the sity of Rochester found that by late adolescence one group of children who ostensibly had adjusted well seemed to cling to a moralistic outlook.

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Another kind of psychological price for thriving was found by Dr. Anthony. As young adults, the resilient children of psychotic parents - particularly when the disturbed parent was of the opposite sex — often brought an emotional distance into their intimate relationships. Many had a history of breaking off relationships at the first hint of closeness. Others sought partners with problems and then dedicated themselves to helping them. Still others threw themselves into consuming projects that required cooperation, but at a comfortable emotional distance.



Check the Theater Directory for Broadway & Off-Broadway shows... every day in The New York Times.

The great powers fight on Third World turf



By Jon Stewart Pacific News Service

War may be hell, as the general said, but the post-World War II record indicates that it's also a helluva habit.

What's more, despite the almost total confinement of war and lesser conflicts to the Third World in the last 35 years, the major powers of the Northern Hemisphere remain by far the world's most active employers of military force. The popular perception that the Third World is voraciously slaughtering itself is misguided in that it fails to recognize that the "Great Powers" at the helm of the United Nations are egging it on when not directly participating.

According to a new book published in London called War in Peace, some 35 million people have died in 130 military conflicts in more than 100 countries since the end of World War II. In the vast majority of these conflicts, the four original major powers of the United Nations Security Council — Britain, France, the United States and the Soviet Union — have played prominent roles, direct or indirect.

One thinks especially of Korea, which claimed 2.5 million lives and involved all the great powers but France; of Indochina, which involved all the great powers but Britain; of France's bloody colonial wars in Africa, which claimed several million, and of the ongoing slaughter between Arabs and Israelis, armed to the teeth with American and Russian weapons.

Indeed, one of the most notable facts about military conflict in this era of "peace" is that peace really has reigned among the major powers. None of the world's sightiest military

rations, all of which are nuclear powers, has crossed swords with any other member of the club, with the minor exception of the 1969 border skirmishes between the Soviet Union and China. They have made their own worlds safe through arms agreements so as to shadow box in the Third World.

This leaves the Western anti-nuclear weapons movement in a slightly embarrassing position; it not only fails to grapple with the real wars of the Third World, but it ignores as well the conventional weapons, which, in fact, have been used to kill people every single day since the armistice was signed in 1945.

The argument that these Third World wars are mostly the product of nation-building among backward and bloodthirsty societies simply doesn't wash. At least it doesn't explain why the four great powers, sworn to uphold the principles of peaceful resolution of conflict at the United Nations, have engaged in as many as 71 direct military interventions outside their own borders in the postwar period, all but four of which have been in the Third World.

A recent study by Professors Herbert Tillema and John Van Wingen of the University of Missouri and the University of Southern Mississippi, respectively, published in the academic journal International Studies Quarterly, concludes: "It is obvious that the world's major governments have not consistently behaved in strict accordance with contemporary international law."

They note that Britain leads the list of postwar great power military adventurists with a total of 36 foreign military interventions, up to and including the Falklands War. France follows with 18; the United States with 10, not including U.S. troops in El Salvador and Honduras, and the Soviet Union with seven. The 71 identified great power interventions since 1946 involve only those in which regular troops actually conducted military operations inside a foreign territory.

This limited definition rules out some of the more notable interventions, such as the U.S. Bay of Pigs attack on Cuba (irregular troops); the British occupation of Northern Ireland (not strictly a foreign territory); the U.S. overthrow of the Iranian government in 1953 and the Chilean government in 1973 (CIA operations), or the Soviet crushing of Solidarity in Poland (achieved without actual Russian troops).

Of course, even under strict interpretations of United Nations law on the use of military force, some instances of intervention fall within the realm of legality, such as hot pursuit, self-defense and retaliation for illegal acts. But United Nations law appears to have had little impact on when or where the presumed guarantors of U.N. law have used military force. Six out of 10 of the great power interventions against independent states in the postwar era were illegal by the strictest definition of United Nations law.

Half of America's uses of military force have been illegal. The British, ironically, have proven themselves to be both the quickest to the draw (responsible for fully half of all great power interventions) and the most law-abiding (84 percent legal under U.N. law). France, the second most active of the great military powers, is

the premiere outlaw; 83 percent of French interventions in the last 20 years have been flat-out illegal. Indeed, only 20 percent of the post-1968 great power interventions have been conducted under circumstances which do not call for U.N. sanctions against the invader. Thanks to the Security Council veto procedure, no sanctions ever have been levied.

It may be fairly charged that statistics such as these tell more the lie than the truth. But the lie, if there is one, is on the conservative side; it hides the full extent of great power militarism. It hides the fact that the great powers, along with Israel, Germany and other Western allies, have nurtured the world's appetite for war by making the production and sale of weapons the world's leading cash commodity, surpassing food. Arms sales to the Third World have nearly tripled in the last decade.

The statistics also hide another vital fact of great power warfare in the postwar period: those in the Big Four do not tread on one another's toes. Of the 71 postwar interventions identified by Tillema and Van Wingen, not a single one involved a territory in which two or more members of the club could legitimately claim to have clear military interests. In other words, the threat of any two great powers having to actually confront one another at the end of a nuclear gun barrel has been sufficient to restrict them to their own Third World "turf."

For this last fact, those in the great power states may count their blessings. Those in the Third World count their dead.

the sunset committee later this month.

Every recommendation the committee eventually suggests for "sunset review" — a look at its value in 1983 - is guaranteed to set off howls of protest.

Who are the "special interests" enjoying these special benefits?

Just about everyone in the state, in some way or other. There is, however, a difference in degree and, in some cases, in fairness which the sunset committee will be expected to consider when it makes a report to the 1983 Legisature.

Exemptions go back to 1854. Thirty-five years before Washington beaircraft tax is now lower than both Idaho and Oregon, the report says.

An exemption from the sales tax for farm feed, seed, fertilizer and pesticides costs the state \$68.3 million. Exempting semen for artificial insemination is worth \$143,000 to farm-

Guess who would suffer if an exemption for fuel used in aircraft research were to be ended? It is worth \$3 million. Exempting fuel used in urban transit costs the state another \$5.1 million.

exemptions range widely. An exemption for aluminum companies will cost \$1.6 million. Processors of meat are

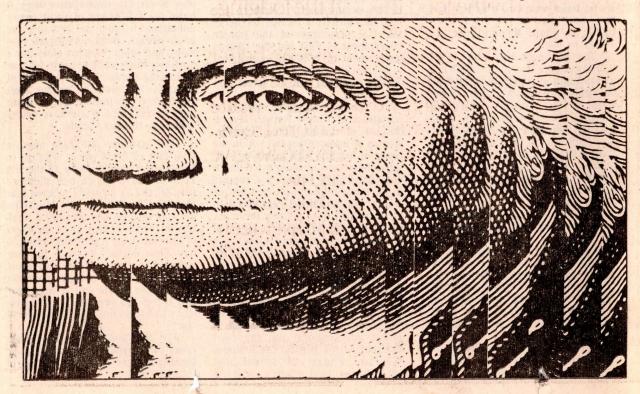
overs, money outer y baile. Should the apparel and shoe manufacturers be exempt from the B & O tax? "That would be unfair to in-state manufacturers," said Don Taylor, secretary of the Advisory Council.

Every exemption has its rationale and its defenders. There is no unified approach to examining them, however, and chopping off those that are no longer justified.

There should be.

"The business sector benefits from 60 percent of the direct tax savings resulting from tax exemp-Other business and occupation tax tions," says the report, "while individuals (those not engaged in commercial activity) will claim 30 percent."

There's a big battle ahead.



muddle-headed words, the United States has spent nearly \$3 trillion on arms since World War II. If inflation is taken into account, it has spent two or three times that amount. Indeed, those five words have virtually become an article of faith. Now, most Americans, even many of those who support a nuclear freeze, believe that "you can't trust the Russians."

Is it true? Of course it is. You can't trust any government, including the government of the United States. All governments lie or cheat when they consider it necessary. All governments act in their own presumed interest, regardless of abstract concepts of morality, signed agreements or international law. In fact, the founders of this country fought a revolution to establish the principle that governments are not to be trusted, that a democratic government must operate with the consent of the governed.

Many broken promises

The reason usually given for not trusting the Russians is that they have reneged on so many promises in the past. That's true. The Russians did not keep their word to hold democratic elections in Poland after World War II. And they did violate the United Nations Charter and various other pledges to recognize the right to selfdetermination of all nations - as witnessed by their military incursions into Hungary, Czechoslovakia and Afghanistan.

On the other hand, no less a hawk than Winston Churchill praised the Kremlin for living up to the agreement at Yalta consigning Greece to the British sphere of influence. Stalin, said Churchill, scrupulously avoided giving aid to Communist revolutionaries seeking to overthrow the rightist monarchy in Greece after World War II. And, to offer a more recent examload shipments of arms in 1949-50); and we have sent our troops to fight in Korea, Lebanon, the Dominican Republic and Indochina to insure the survival of governments favorable to U.S. business interests.

Geared to an arms economy

Actually, without the "you can't trust the Russians" litany conditioning them to fear the Soviet Union. many Americans would long ago have rejected their own government's militaristic policies. In the years right after World War II, when a wave of pacifism was sweeping Europe and, to some extent, the United States, Republican Sen. Arthur Vandenberg said that it was necessary to "scare the hell out of the country" in order to retain a large military force. Gen. MacArthur (no dove, he) told the Michigan Legislature on May 15, 1952. "Our country is now geared to an arms economy which was bred in an artificially induced psychosis of war hysteria and nurtured upon an incessant propaganda of fear."

At the heart of this "artifically induced psychosis" lies the official paranoia that "you can't trust the Russians." For the past 37 years, American presidents have consistently sidetracked disarmament negotiations by arguing that the Russians were unwilling to agree to "adequate verification." Since we can't trust them, and since they're bound to cheat, hundreds — maybe thousands - of monitors must be placed on Russian soil to check up on them. Even then, the argument goes, you can be sure there will be a few missiles hidden in a cow patch. Verification can never be adequate, hence there is no alternative but to continue amassing more and more nuclear warheads — and to cry more shrilly, "You can't trust the Russians."

There are two arguments that re-

Chion. Sumson knew that ituman didn't trust the Russians, but he also knew that trust was not the issue. Unless such a partnership was formed, Stimson wrote, there was sure to be "a secret armaments race of a rather desperate character." On the subject of trust, Stimson; a 77year-old former Wall Street lawyer, had this to say: "The chief lesson I have learned in a long life is that the only way you can make a man trustworthy is to trust him; and the surest way to make him untrustworthy is to distrust him and show your distrust."

Matter of national interests

Achieving peace is not a matter of the two superpowers trusting each other: it is a matter of their national interests. It is true that Washington and Moscow have innumerable interests that diverge. They take different positions on almost every international issue. But there is one overriding issue on which their interests converge - survival of the human species. Whether we do or do not trust the Kremlin leadership, the United States cannot continue to exist as a nation (nor can the Soviet Union, nor can any other nation) unless it joins with the rest of the world to eliminate the threat of nuclear incineration. We must work with each other just as two firefighters must work with each other — regardless of personal likes or dislikes — when the flames come roaring toward them.

The "you can't trust the Russians" theme, meaningless to begin with and totally useless in making intelligent foreign policy, serves only the interests of a coterie of leaders, military and civilian, who think that one fine day our scientists will develop a weapon that will force the Russians to cry "uncle." It is time we jettison their infantile notions and force them to end the unwinnable arms race.

New Jobs Are Far Away From the Urban Unemployed

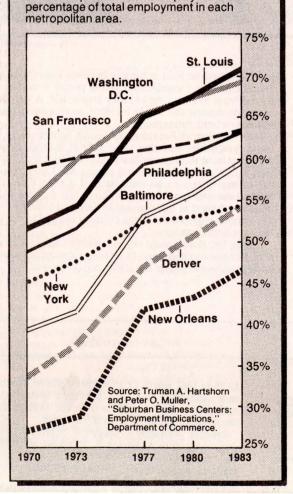
Beyond the Mall: Suburbs Evolving Into 'Outer Cities'

By WILLIAM K. STEVENS

Thappened incrementally, and for a long time few realized the magnitude and import of what was going on. But over the last quarter-century and especially in the last decade, the American metropolis has been transformed into something new and different. Suburbs, once dependent on the central city, have metamorphosed into vast, glittering, independent "outer cities" that rival and often surpass the traditional big-city downtowns as centers of economic power and vitality.

In a sense, the outer city is not really "sub" or "ex" anything anymore, but rather an urban entity all its own: an evolving landscape of skyscrapers, of-fice parks and retail palaces, arranged in formidable clusters that create a "there" in the suburban sprawl. Spectacular examples include Tyson's Corner, Va., west of Washington; the South Coast Metro Center in Orange County, Calif.; the City Post Oak-Galleria center on Houston's west side, and the King of Prus-

Job boom in the suburbs Suburban private-sector employment as a



sia-Route 202 complex northwest of Philadelphia.
These and many others are pushing ever outward into the countryside, redefining metropolitan America, surging headlong toward — what?

Some experts say the outer city represents a transition to a wholly new urban form. Others say the new form will never achieve the density and diversity that would allow it to flower fully. Too many outercity clusters are competing with each other, they say, and the competition ultimately will stunt them all.

Nearly everyone agrees that the outer city presents some serious problems. A recent study by the Urban Land Institute, a nonprofit research group, asserted that the new clusters tend to be "difficult, harsh, often uninteresting places" with little of the liveliness or the rich variety of institutions — libraries, community organizations, museums, colleges that exist in traditional downtowns.

In addition, urban analysts say, the outer city has created, or at least aggravated, a geographic mismatch between jobs and the people who need them. Almost without exception, the outer city - where most new jobs are now being generated, and where a labor shortage has developed — has grown up on the affluent side of the metropolitan area. Many, if not most, of the workers who might fill those jobs continue to live in the central city. But relatively few are commuting from the inner to the outer city, or, for that matter, are being encouraged to do so.

Widening the Gap

This "turning-inside-out of the employment geography of the contemporary metropolis" has contributed to "one of the nation's leading urban crises," the gap between haves and have-nots, said a study completed some months ago for the Department of Commerce. The study, by two geographers, Truman A. Hartshorn of Georgia State University and Peter O. Muller of the University of Miami, may be the first comprehensive examination of the new cities

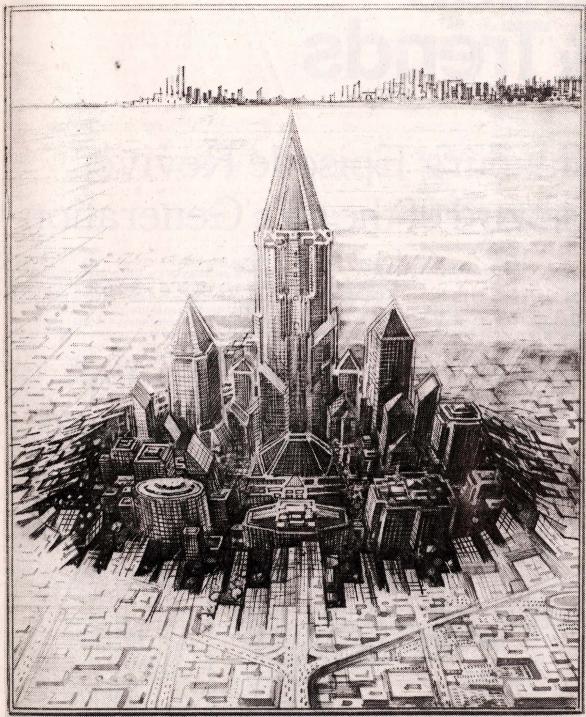
The outer city is a physical expression of the service and information economy, Dr. Hartshorn said, just as the traditional city was an expression of the era of manufacturing. "We're in a new city-building era," he said. "The last real surge of growth was a hundred years ago, with the manufacturing city. Now, with the service economy, it is really just mushrooming again." While the central cities are also feeling this, he said, the bigger beneficiary is the outer city.

What primarily distinguishes it from earlier

stages of suburban development is the density of its "downtowns" and its economic character. Drs. Hartshorn and Muller describe four basic stages in its

First, from about 1900 to about 1960, came the classic bedroom suburb. Then, in the 1960's, suburban shopping malls proliferated and in time far surpassed the traditional downtown as metropolitan America's retail center. The first suburban industrial and office

parks also appeared during this period.
In the 1970's, in the third stage, an economic "critical mass" was reached and the suburbanization of economic activity became, probably, irreversible. Regional and national headquarters of corporations moved to the suburbs, as did hotels, restaurants and such specialized functions as mortgage banking, accounting services and legal offices, once thought to be, in the words of the report, "geographically immovable bastions of downtown enterprise.'



The fourth and continuing stage, in the 1980's, has been the proliferation of high-rise buildings in suburban business centers, the expansion of high-tech activities, and the consolidation of those centers as rivals to traditional downtowns.

The form of the outer city has varied from locality to locality. In the newer cities of the South and West, it has achieved its sharpest character. Drs. Hartshorn and Muller consider Houston's City Post Oak-Galleria center to be the most impressive specimen, and the South Coast Metro Center in Orange County, Calif., to be a more diverse and balanced development that most closely approaches a true urban character.

In the older cities of the Northeast, they found, the outer city more typically has been grafted onto existing urban and suburban centers, as in Stamford, Conn., and White Plains. Tyson's Corner outside Washington and King of Prussia-Route 202 outside of Philadelphia are two exceptions to the Northeast rule, both having been created from scratch.

The future may already have moved beyond Tyson's Corner and similar centers, say some analysts, and they may have to undertake some redevelopment if they are to match the evolution of some newer clusters. That evolution, these analysts say, is toward more urban amenities - schools, hospitals, government centers, libraries, theaters and all the elements that together spell "community." Whether that ideal can be achieved, or whether the outer city's evolution will stall short of true urbanity, is a question

With Giant Dams All Built, Agency Seeks New Work

By THOMAS J. KNUDSON

OUCH water and you touch everything" in the West, John Gunther wrote in "Inside USA" in 1947. And the engineers of the United States Bureau of Reclamation did not just touch the West's great rivers, they transformed them, turning dry and dusty wastelands into a modern-day Mesopotamia.

For 85 years, the bureau tackled the big jobs many thought impossible. It harnessed the Colorado River, conquered the Columbia and shackled the Snake. It poured millions of tons of concrete, built more than 15,000 miles of aqueducts and developed enough hydroelectric power to serve 16 million people. The bureau was pure hydraulic chutzpah and because of its work, fruit blossomed in California, potatoes sprouted in Idaho and cotton grew in Arizona.

But the heady days of building such giant dams as Hoover, Shasta and Grand Coulee are over. Environmentalists and others (including Jimmy Carter) have been saying so for years, and last month the bureau formally acknowledged it.

After its current big projects — the Central Arizona Project and the Central Utah Project — are finished in the 1990's, it said, it would work at conserving resources, not developing new ones.

'By and large, the bureau has accomplished the mission it set out to accomplish - to reclaim the West,' said James W. Ziglar, the Assistant Secretary for Water and Science in the Interior Department. "We are taking the next step: to make sure our facilities are operated efficiently. Why spend a billion dollars to build another dam when for \$25 million we can do some redesigning that will give us a lot more production? Instead of saying 'Where can we build another dam?' we are going to take those projects that we spent a lot of money on and worked hard on and make them work hard for us."

The change is a recognition of political and economic reality. The price of dam-building is soaring; the cost of one nearly finished project on the Dolores River in southwest Colo-

Central Valley Project The bureau's largest by far, in terms of crop value **OREGON** Klamath R. **CALIFORNIA NEVADA** Whiskeytown Sacramento R Stony Gorge East Park Pacific Ocean American R. Monticello i **Folsom** Sacramento New Melones Contra Loma Friant Dams Irrigated project area

rado was projected at \$180 million 10 years ago, and \$450 million now. President Reagan, long considered a friend of the western rancher, provided no money to plan new projects in this year's budget.

Congress, which once protected projects ferociously against those who cried boondoggle, does not welcome them anymore, not with an enormous deficit straining the Federal budget. Even the rival dam-

building agency, the Army Corps of Engineers, which has more than three times the bureau's \$868 million budget and five times its personnel, is feeling the crunch.

In any case, the bureau's major mission, providing irrigation to increase crop production, makes little sense when huge surpluses fill Government storage bins to the brim. Some farmers, confronted with low prices for their crops, are choosing to use less of the Government's water, others are selling their water rights to booming Western cities, in a reflection of a substantial shift in demand. And the granddaddy of the megaprojects, California's Central Valley Project, is under recurring attack in Congress for providing wealthy farmers with millions of dollars a year in water subsidies at taxpayers' expense.

"I think the bureau realized that if it didn't change, it was doomed," said Marc Reisner, the author of "Cadillac Desert," a book about water development in the West. "The only way to survive was to change."

The scope of the change has caught many people by surprise, though. The bureau wants to move its headquarters from Washington to Denver, closer to its customers, though some in Congress are objecting to the cost of the move. More than half of the bureau's 8,000-member staff could lose their jobs within a decade, and one regional office, in Amarillo, Tex., will be closed.

'Revolutionary Change'

More important to many in the bureau is the loss of a sense of mission. The engineers who built some of the world's great marvels, Parthenons of concrete and steel, and made the desert bloom, must resign themselves to tinkering with the system.

"The most important question is whether this agency, which for so long was almost exclusively a construction company, can turn around and become an ecologically minded agency," said Donald Worster, Meyerhoff Professor of American Environmental Studies at Brandeis University. "I'm fairly pessimistic. I think it will be extraordinarily difficult for an agency that's been around as long as the bureau to carry out such a revolutionary change in attitudes and values."

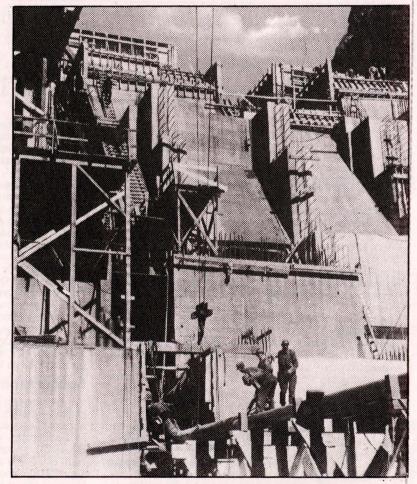
Mr. Ziglar said, "We are a public organization and public organizations should and must respond to the values of society. And clearly environmental issues are high on society's list of values."

Scores of new ideas are sloshing around the bureau, he said, including plans for relining old aqueducts to reduce seepage, rewinding hydroelectric generators instead of building new ones, using computer technology to better manage water flows and improve power production, repairing leaky dams and, perhaps most ambitiously, applying its engineering skills to complex environmental problems: Groundwater is being pumped out of aquifers so fast they could be depleted within a generation. Silt and mud are building up behind dams. Toxic wastes from industries, farms and military installations are contaminating soil. Salt and other contaminants are saturating irrigated farmland.

In some cases, the bureau will be

trying to patch up its own mistakes. A large wildlife preserve in California has been severely polluted with toxic sediment because the bureau drained irrigation water from the Central Valley Project into it, for example; runoff from another California project, in the Imperial Valley, has flooded properties on the shore of the inland Salton Sea. When many of the bureau's projects were built, said Mr. Ziglar, "we had no way of knowing that some of the adverse environmental effects that would occur."

"We now have the responsibility of trying to deal with that," he said.



Workers laying pipe at the base of Boulder Dam in 1934.

Esone & Lycers & Harold T. Parker (eds.)
Anternat il Haroldte of Histel Studies:
Contemp'y Research of Theory (westport, donn:
10 JEAN GLÉNISSON Greenwood Press,
1979)

France*

According to Henri-Irénée Marrou, history as it is practiced today in France is characterized by three main traits: the preeminent position occipied by historians whom it is customary to group together as the *Annales* school, inspired originally by Lucien Febvre, Marc Bloch, and Fernand Braudel; the widespread influence of a Marxism in its sometimes orthodox but more often popularized version—the purveyor, in any event, of specific research topics and a ready-made vocabulary; and finally, the increasing resort to computers and the science of statistics, whether this phenomenon is viewed—according to one's inclinations or one's convictions—as a simple surrender to the dictates of fashion or as a significant victory of "serial" history. At a time when the historiographical landscape is changing with singular rapidity, the above judgment, formulated in 1974, remains exact. It is borne out by the evolution of the ideas, methods, and practices of the two generations of scholars—heirs and successors of the great historians of the 1930s—who have dominated the academic scene since the end of World War II.

The 1930s: The Foundations of a School of History

After half a century, the *Annales* has itself become a historical subject (more often abroad than in France, it is true), and it is possible today to retrace the stages in the formation of this empire of scholarship.²

On 15 January 1929, "at a moment when the history of the world suddenly changed direction," two Strasbourg professors, Lucien Febvre (1878–1956) and Marc Bloch (1886–1944), launched their new journal, "no bigger than a toy ship on the broad Atlantic." Today, everyone is conscious of the prophetic timeliness of the occasion, the chosen title (Annales d'histoire économique et sociale), and the purpose, as set forth in a very brief note "To Our Readers" which introduced the maiden issue.

It was never a question of creating the official organ of a "school of histonography." The first generation of the *Annales* was above all the "open forum"

*Translated from the French by John Day.

of a historiography that sought to free itself from the constraints of a "positivism" represented, for the sake of polemic, by the coauthors of *Introduction aux études historiques* (1898), Charles-Victor Langlois (1863–1929) and Charles Seignobos (1854–1942). Overtures were made to foreign historiography for the benefit of French academics, immured in a scientific nationalism which was historically the result of Franco-German rivalry and of the humiliating defeat of 1870, and simultaneously to related disciplines previously ignored or abhorred the geography of Vidal de la Blache, the sociology of Durkheim, the science of economics.

The journal was not without precursors. The Revue de synthèse historique of Henri Berr, who died in 1954, had been pursuing similar goals in France since 1900. The new tendencies that it was intended to promote were also perceived in other countries. The Economic History Review was founded at about the same time as the Annales and was charged with an analogous mission. Lucien February and Marc Bloch were not by any means the only champions of a new departure in history in alliance with the other social sciences. They had a certain number of rivals: Henri Pirenne, who was also their friend and mentor, Johan Huizinga, Mario Praz, and above all Max Weber, none of whom published in the Annales, In France other scholars were marching to the same tune: François Simiand, who died in 1935, was busy studying business cycles, both in the present and in the past; Ernest Labrousse, the pioneer, together with Simiand, of serial history, but who never forgot that "the economic man is a pure abstraction"; and Georges Lefebvre (1874–1959), who breathed new life into the social history of the French Revolution.³ Moreover, Febvre and Bloch preached by example. Their own works nurtured the apostolate of their journal.

But it was the *Annales* itself that over the years undermined the positivist definition of historical fact, destroyed the taboo on unwritten evidence, imposed a dialogue with the sister disciplines, discredited the history of events, rejected the primacy of political history by insisting on its interaction with economic and cultural history, repudiated traditional biography which isolated the individual, and succeeded, finally, in making "sensibility" or modes of feeling the object of serious historical research.

In 1971 the Belgian historian Jan Dhont reminisced:

I left a university at the end of my studies where the students held to the orthodox conception of history as the study of facts in their uniqueness. I discovered, at the end of the war, a university where a mass of students were imbued with the spirit of the *Annales*. I never have discovered how that came about. It certainly had nothing to do with the professors. It must have just been something in the air.⁴

The Second Annales: The Age of Braudel

The professional historians were breathing the same air. The International Congress of Historical Sciences that met in Paris in 1950 was visibly under the

spell of the victorious ideas of Marc Bloch and Lucien Febvre. But only Febvre could savor that moment of triumph. Bloch was dead, executed in 1944. And the journal had changed its name. To the word Annales, which was already famous, had been added in 1946 three nouns that ring like a slogan from 1789—Economies, Sociétés, Civilisations—each clearly in its carefully assigned place, and it is no accident that they are all in the plural. If you were to append "populations," you would have the four cornerstones of one of the most fruitful periods in the history of French historiography, even if Fernand Braudel himself maintains that the golden age of the Annales was the decade from 1929 to 1939.

At the end of the war, Braudel was a newcomer to the editorial board of the Annales, but he was already a confidant and the chosen successor of Lucien Febvre. In 1946 he defended his thesis, now in print as La Méditerranée et le Monde méditerranéen à l'époque de Philippe II, which existed in outline in 1939 and was completed in a German prisoner-of-war camp. At the time of its publication in 1949, the book was greeted by Febvre himself as "a revolutionary new way of looking at history, an upheaval for our old liabits of mind, a historical mutation of the first magnitude." And it remains, in the words of its American reviewer, "a prodigiously innovative study of Mediterranean civilizations... probably the most significant historical work to appear since World War II."

But one did not have to wait for the revised edition of 1966, nor the English translation of 1972. From the early 1950s a new "model" existed in the world of historians, "a heritage," said R. Chartier, "of the human geography of Vidal de la Blache . . . a geo-history of past societies that promoted land, water, and climate to the front ranks." In Braudel's own words,

Everything converges across time and space to give rise to a history in slow motion, the mirror of permanent values. Geography in the new scheme of things ceases to be an end in itself and becomes the means to an end. It helps us to discover the slowest-moving of structural realities, to create a new long-term perspective.

It was on this interplay of space and time that Fernand Braudel based his conception of history. Time, one might almost say, works out its destiny through the history of mankind, whom it molds unmercifully to its purposes; "time the demiurge" whose power can never be grasped at first hand. At the level of everyday commonsense observation, only the short term (la courte durée), the "time of events," exists. The progress in history, its new orientation, its dialogue with the other social sciences, notably the science of economics, suddenly discloses behind the blinding light of events the existence of medium-term economic movements. A special expression soon suggested itself to the economists to designate this still rather breathless respiration of historical time that breaks up into medium-length fragments of ten, fifteen, twenty, or fifty years conjuncture. The long term (la longue durée), the conjuncture, and the short term for event) transformed history into a "dialectic of time-spans."

The vision of the world and of history that Braudel developed and refined over the years in the pages of the *Annales*, during the course of his discussions with Claude Lévi-Strauss, and in his other writings, assumes in retrospect a singular kind of majesty. Would it have carried the day with the same ease if he had not possessed an institutional instrument of extraordinary effectiveness: the Sixth Section (economic and social sciences), established by Lucien Febvre in 1947 as part of the old Ecole Pratique des Hautes Etudes? Traian Stoianovich has recently described the inner workings of that powerful lever of scholarly persuasion. It was there that Braudel's disciples were formed and sometimes employed while waiting for the traditional institutions of higher learning to open their doors to them, however reluctantly. It was from there that their ideas were spread abroad through the pages of the *Annales*. It was there, finally, that their own studies were published in numerous prestigious collections: *Affaires et gens d'affaires*, *Archéologie et civilisation*, *Démographie et sociétés*, *Les Hommes et la terre*, *Monnaies-prix-conjonctures*, *Ports-routes-trafics*.

The titles alone of these different series confirm the essentially economic orientation of what had come to be known (especially outside France) as the *Annales* school. At the same time, the goal of a "total" history, from economic history to the history of mental structures, was, within certain chronological and geographical limits, being realized. A truly impressive mass of business and financial records was sifted through. The technical resources of economics and statistics were utilized to study the past. *Annales* historians sailed the Atlantic of the treasure fleets or journeyed deep into the provinces of preindustrial Europe.⁸

The 1970s: History Dismembered

At the start of the 1970s the climate changed. An event occurred that produced a chain reaction in the academic hierarchy: Fernand Braudel reached retirement age. He abandoned his chair at the Collège de France and at the same time, his directorship of the Sixth Section and of the *Annales*. The Braudellian empire disintegrated. The moment of the succession was at hand, and a new generation of scholars seized the reins of power. Braudel retained his immense prestige, but the choice of personnel in the main sectors of teaching and research, the nominations to the scientific committees, and the selection of articles and books for publication in the *Annales* and in the scholarly collections now fell to his different heirs, for the responsibilities were henceforth divided. The unifying role played by the master of the *Annales* disappeared.

The Sixth Section was overhauled in order to conform to the academic system that emerged from the upheaval of May 1968. It gained its independence by seceding from the old Ecole Pratique des Hautes Etudes and was rebaptized Ecole des Hautes Etudes en Sciences Sociales. A new term was coined: "the New History." The expression is no less ambiguous than "Annales school."

It sometimes happens, as a matter of fact, that the two are confused to the point of assigning the origins of the New History to the days of Lucien Febvre and Marc Bloch. French scholars, however, cannot claim the invention, nor the monopoly, nor even the trademark. Lawrence Stone understands by the term "New History" a body of related historiographical currents which are dominant today in many Western countries. It is sufficiently vague in any case to guarantee its success. Historians of different generations and varying backgrounds have adapted it to their several purposes and use it indiscriminately in the various forums of scholarly intercourse where it has become the custom to raise questions concerning the methods, the value, and the results of recent historical production.

This epistemological effervescence is in fact one of the most striking characteristics of contemporary French historiography. Methodological inquiry has become a literary fashion: Paul Veyne explains "How History Is Written" (Comment on écrit l'histoire, 1971); Emmanuel Le Roy Ladurie republishes several of his articles on methodology in "The Historian's Domain" (Territoire de Phistorien, 1973); A. Casanova and F. Hincker edit their interviews between 1967 and 1973 with historians of various persuasions in "History Today" (Au-Jourd'hui l'histoire, 1974); Jacques Le Goff and Pierre Nora present three volumes of essays on "Making History" (Faire de l'histoire, 1974); Pierre Chaunu meditates on "History and the Social Sciences" (Histoire, Science Sociale, 1974); Michel de Certeau analyzes "The Writing of History" (L'Ecriture de Phistoire, 1975); Jean Chesneaux asks "Should We Clear the Decks of the Past?" (Du passé faisons table rase?, 1976). Only the principal titles have been cited here. The total output is astonishing. The Cahiers du Forum-Histoire has counted eighteen such works in four years (1973-1976), not including articles published in journals, which are even more numerous. Truly, we have come a long way since Lucien Febvre found the philosophical laziness of professional historians so disheartening. 10

Theoretical Positions

Diverse currents run through this prolific literature, and certain representative personalities stand out. Pierre Vilar is the respected spokesman for the classical Marxist position. At the opposite pole, Paul Veyne dares to defend with a literary verve nourished by impeccable erudition the historian's right to construct a "plot" using the "facts" with only "pleasure" as his guide. Between these two tradition-laden extremes, there exists no single body of doctrine. Perhaps, as Jacques Le Goff and Pierre Nora write, the historian is waiting for his Saussure. The self-proclaimed spokesmen for the New History dare not permit themselves the luxury of being openly dogmatic. The times we live in would not tolerate it. From their writings, from their numerous collective works, and from their Interviews with the press, a body of concepts and doctrine nevertheless emerges which might be considered, at the risk of oversimplification, a common ideology

openly embraced or unconsciously assumed by most French historians of our day.

The renunciation of all claim to objectivity (in the positivist meaning of the term) is one of the basic traits of this general attitude. The historian knows that innocence is denied him. Conditioned by his background, his times, his protessional milieu, and caught up in the system of production of historical literature, he tends to agree with Georges Duby that "the results of my inquiry are no doubt predetermined by a programming of which I am not fully conscious."

It is impossible to arrive at the facts. History is nothing more than a contingent reading of the past, related by witnesses who are themselves conditioned by circumstances. The historian moves in a world of relative truths. As Pierre Nora describes it,

Until recently, historians were conscious of a unifying principle in their writings. A royal chronicler wrote for the glory of the king. Bossuet's *Discours sur l'histoire universelle* was imbued with the sense of a historical oneness dominated by God. Voltaire knew that he was writing about human progress. Today's relativism has made historians more modest. Where is their vantage point? The heights of science? Who would dare to make such a claim?

Is it the diffused heritage of psychoanalysis, of German historicism, whose French spokesman is Raymond Aron, of the lessons of the early Annales with their censure of the certainties of positivism? Something of all of these and of much else besides which partakes of the spirit of a time that refuses to believe in the virtues of science, and having lost faith in progress, dreams of a happier age which it places in the past. This leads, as Philippe Ariès has remarked, to a sort of rehabilitation of premodern cultures thanks to the opportune mediation of historians. It finds expression in Michel de Certeau's new "time relationship": we have grown conscious of the fact that "tradition which we had consigned to the dead past thinking to exorcise it survives in the practices and ideologies of the present." People hunger for continuity. It is no longer a question of "that unyielding time, irreversible and understandable, which continues to advance in the face of every obstacle," but of a time that repeats itself, that twists and turns and retreats. The linear time of the positivists had been called into question by the "Bergsonian" Annales and replaced in the 1950s by Braudel's differential tempos of "what moves rapidly, what moves slowly, and what appears not to move at all."

But it seems that only the third of these, the long-term movement (*la longue durée*), has been retained. For one had to admit that the New History is hardly relevant to periods of rapid change like the present. It is appropriate, paradoxically, to the study of societies which change but little, as E. Le Roy Laduric, to whom we owe the concept of "motionless history," has observed. Pierre Nora, for his part, has resurrected the significant event, indispensable to the student of recent history. The medium term—the *conjoncture*—so dear to the

hearts of historians of the 1950s and 1960s appears to have been consigned to oblivion. The long term is the favorite time of anthropology and ethnology, disciplines that are repeatedly evoked by present-day historians because the organization of relations between history and the other social sciences is at the heart of the philosophical and epistemological "system" embracing the New History as practiced in France.

From the beginning, the Annales had advocated a dialogue with the related disciplines, particularly sociology—the primacy of history being taken as self-evident. But by the 1950s it was clear that economics was the new favorite, assigned to play the key role in the system of historical interpretation. That role is denied it today. Jacques Le Goff has protested against the "imperialistic designs of economic history." Georges Duby, who practiced it at the beginning of his career, no longer considers the role of economics decisive.

What bothers me about the idea of determinism which we seem condemned to live with is that it implies a causal relationship. The more my work as an historian progresses, the more suspicious I become of the quest for single causes. We should think rather in terms of a multitude of echoes, of interrelations, of a sort of river where the different currents all run together.

The influence of structuralism? Without a doubt. But who can deny that the antideterminism of today's historians is implicitly a criticism of Marxism? "What is at stake," write M. Grenon and R. Robin (who have not rallied to the colors of the New History) "is the concept of an ordered social hierarchy in social structures, and, beyond that, the place that Marx has assigned to the concept." "It concepts the concepts of the concepts of the concepts."

The radical antideterminism of the New History is of no small consequence. If you deny any kind of hierarchical organization to history, you reduce it to fragments. In practice it is partitioned into scores of genres and specialties with hardly any connection between them. The impression on reading Faire de l'histoire, a manifesto in three volumes of the dominant currents in contemporary French historiography, is one of profusion from which emerges, in fact, a swarm of "New Histories."

Formerly political in orientation, more recently economic and social, historiography today, in seeking to avoid the pitfalls of historical determinism, would dissolve into the common magma of the social sciences had it not discovered a unifying factor—a specificity. Thanks in particular to Robert Mandrou, Georges Duby, and Philippe Ariès, history disposes of various concepts—the "mental," the "imaginary," the "ritual"—which make it possible, if not to explain, at least to illuminate in a uniform light regardless of time and place the modes of being and behaving of human societies. For, writes Duby,

the sentiments that individuals and social groups feel concerning their different situations, and the conduct dictated by that sentiment, are not directly determined by their economic

condition but by their conception of it. This is never completely realistic but always modified by the play of an intricate body of mental images.

Thus was born the history of mentalities, the great specialty of French historians of the 1970s, so much so in fact that Lawrence Stone considers the word untranslatable into English. Judged in the "Rapport de conjoncture" of the Centre National de la Recherche Scientifique in 1969 as "filled with pitfalls and in danger of too hasty realizations," this type of history was not long in defining its field of action by instituting—so reads the report for 1974—a distinction between its own domain, which is that of daily life and long-surviving systems of value, and the history of the culture of the elites, which is creation and change. It presupposes that in principle every society possesses simultaneously diverse cultural milieux which are juxtaposed and interlocking and transmitted by language, myth, and upbringing.

Methodological Consequences

Every dominant ideology leaves its mark on methodology. From this point of view the New History sanctions a particular subject matter, a particular kind of source, and particular techniques.

SUBJECT MATTER Closely allied to anthropology today, but still bearing the deep imprint of sociology, economics, and demography, the New History is concerned almost exclusively with human masses and social groups at the expense of the individual princes, heroes, and leaders who had kept historians occupied for two thousand years.

sources As long as the star performers were kings, statesmen, ministers, prelates, generals, and revolutionary leaders, the rare or unique document relevant to their actions and motivations stood at the top of the documentary hierarchy that every type of history implicitly adopts. But the mass of humanity can be grasped only by studying a mass of sources: financial and judicial archives, property censuses, tithe accounts, parish registers. Written records, moreover, no longer satisfy the historian-ethnologist who has developed a taste for archeological artifacts and oral tradition. The historians of medieval "mentalities" have discovered that practically any kind of source can serve their purposes. Charters and registers are revealing not only for their content but also for their external aspects: narrative sources, neglected for a time; chivalric and courtly literature, works of art; coats of arms; tools and implements—all bear witness to a particular vision of the world.

TECHNIQUES The utilization of these masses of documents is beyond the possibilities of the single historian who once got by on "paper and ink and leisure time." Computer technology is needed to quantify, select, and decompose into

comparable elements the "millions of deeds" in Chaunu's hyperbole. The vogue of quantitative history, as opposed to literary or "impressionistic" history, is due to the existence in the past fifteen years of auxiliary electronic brains with infallible memories. "The historian of tomorrow will be a computer programmer or nothing at all," says Le Roy Ladurie. ¹³

Historical Production: The Favorite Topics

One of the chief characteristics of French history writing today is the rapidity with which ideological and thematic currents pass into the bloodstream of historical practice and production. This phenomenon is to be attributed first of all to the popular appetite for books and television programs on historical subjects: the professional historian has descended from his ivory tower in order to respond to the growing demand. Spokesmen for the New History have become public figures. They can draw attention to the particular points of view and fields of research. And the influence is reciprocal—historians are sensitive to the popular concerns and "fantasies" of the moment. Ecological history was born, for example, as an instantaneous response to the universal anxiety about the defilement of nature. The history of the human body and the history of sexuality, inconccivable in the age of Queen Victoria and Napoleon III, are clearly the fruit of today's "mentality." Thus the latest achievements of academic historians are transmitted almost without transition to the public by word and picture and through the diffusion of works—unencumbered by scholarly apparatus—which were once reserved for a small circle of specialists. Without question the existence of this new market stimulates and accelerates the production of popular history. The historian no longer addresses himself solely to his peers. 14

These circumstances help to explain a certain conformity evident among members of the profession who are inevitably borne along on the currents that enjoy the most favor with the public; all the more so, given the present organization of French research, which encourages such standardizing tendencies. The financial largesse of the Centre National de la Recherche Scientifique has made it possible to multiply the number of colloquiums, round tables, and scientific seminars that serve to assure the rapid diffusion of ideas and to introduce new works; the speedy publication of discussions and communications which is now the rule has also contributed to this trend. For innovations to become known and accepted it is no longer necessary to wait for the defense of a thèse d'Etat, a handmade masterpiece bulging with footnotes that takes at least a decade to produce. This doctoral dissertation, a key element nonetheless in the system of University appointment and advancement, still constitutes the foundation upon which the French historical school as a whole rests. At worst it represents the accumulation of a veritable treasure trove of information which nourishes or consecrates after a certain lapse of time the new trends in history. At best it creates these new trends themselves. The "Rapport de conjoncture" of the Centre National de la Recherche Scientifique for 1974 noted with regard to modern and contemporary history that the traditional index of scientific productive ity—the number of dissertations defended ("sanctioning a long-term individual commitment to which the Nation still attaches a certain intellectual and moral value")—had broken all records.

The Topics

More abundant than ever, historical production at first sight is multiform. It appears that every practicing historian is trying to stake out his own private reserve in the diversified domain called the New History. But closer inspection reveals that traditional categories and periodization have not lost their old vigor despite the widely declared intention to ignore them. There are still histories of the economy, of society, and of institutions. There are still histories of the ancient world, of the Middle Ages, and of modern times. It often happens that the new labels are simply affixed to the old merchandise. It is true, however, that the introduction of the concept of mentalité, combined with the use of quantitative methods, is beginning to stir things up. Cultural, technical, social, and political elements are interwoven to such a point that the old textbook divisions tend to disappear. It seems more appropriate to speak of historical topics, viewed in a different light, than of historical genres.

The primary domain of quantification naturally is economic history, which continues to flourish despite the loss of its former hegemony and a certain lassitude observed by Jacques Le Goff. Since 1961 we have witnessed the intrusion of professional economists into the field once reserved for the historian. Jean Marczewski and a group of scholars under his direction have launched L'Histoire quantitative de l'économie française and applied to past centuries the "model" of national income accounting. The historians who had criticized their efforts (P. Vilar, P. Chaunu, J. Bouvier) now recognize that the long work of retrospective econometrics has renewed the methods and results of economic history in a very positive way, particularly from the point of view of macroeconomics (as Denis Richet noted in 1973), but they regret the partial character of the proposed model. The professional historians, for their part, have also sometimes engaged in collective research, which has the merit of attacking problems of long-term economic movements without regard for the time periods of traditional history. But it is chiefly the eighteenth and nineteenth centuries that have been studied. "In France," writes Jean Bouvier, "economic history has barely entered the twentieth century." He lists the following principal subjects of French research in this field at the beginning of the 1970s: the history of banking in the nineteenth and twentieth centuries; industrialization and French economic growth in the nineteenth century; communications (the railroads, the Renault automotive industry); and foreign economic relations up to 1914.15

In economic history the vogue of quantification naturally favors the age of statistics. The interest in merchants, trade routes, and commerce in the prestatistical period (from the Middle Ages at least to the seventeenth century).

which flourished in the 1950s and 1960s, still survives, however, to some extent in medieval history: Robert Delort's study of the fur trade and Henri Dubois's history of the fairs of Châlons, to mention only these two, have recently enriched our knowledge of international commerce and commercial techniques at the close of the Middle Ages.

But as we well know, one of the main concerns of French historians is to preserve an intimate connection between social and economic history. On this terrain, where they are used to moving with particular assurance, the advance continues, as can be judged from the number of new thèses d'Etat and of multivolume historical syntheses, another French specialty. Thus the recently completed Histoire économique et sociale de la France, edited by Fernand Braudel and Ernest Labrousse, and the Histoire de la France rurale, published in 1975–1976 by Georges Duby and Armand Wallon, present the results of current research by leading specialists along with up-to-date bibliographies. ¹⁶ A reading of these works confirms the French taste for the study of sociological categories and their milieux.

A few recent examples representative of historical work in different fields can serve to illustrate this trend. "Sundering the procrustean bed of traditional mil-Itary history," Philippe Contamine has studied the armies of the kings of France between 1337 and 1494. "Ethnologist of a soldiering fraternity, anthropologist of the entire French society as mirrored in a single profession, he brings to life a heretofore little known institution, the permanent army of 10,000 men forged by the French monarchy, and, at the same time, a new sociological type, the career soldier"—a far cry in status if not in morals from the freebooting soldier of fortune of the mercenary bands. In La Noblesse bretonne au XVIIIe siècle, Jean Meyer describes how the nobility of Brittany transformed itself into a closed caste as the unforeseen consequence of an administrative decision: the census of the nobility ordered by Colbert, minister of Louis XIV, for the purpose of unmasking the false nobles trying to avoid paying taxes. For the contemporary period, Antoine Prost has studied the veterans of World War I, figures so familiar in French society over the last half century that one is surprised to discover that they are already historical subjects. They formed a coeval pressure group singularly lacking in social cohesion but subject to collective élans and hence a sort of human reservoir for the parties and political movements of the period between the two world wars. 17

Several recent works of history are devoted to the study of elites. Daniel Roche, for example, has analyzed the composition of the scientific academies in the French provinces in the age of the Enlightenment. And the medievalists have multiplied their monographic studies of noble families (the d'Albret by A. Marquette, the lords of Murol by P. Charbonnier, the Tonnerre by M. T. Caron).

At the other end of the social spectrum, the "active minorities" and their milleux are an object of interest that is particularly revealing of current attitudes as well as a further proof of their direct influence on historical production. Since Robert Mandrou's classic study of witchcraft during a period when the more

enlightened members of society (represented by the corps of magistrates) had turned their backs on autos-da-fé, the subject has attracted other scholars. ¹⁸ Together with Michel Foucault (who shares rather than inspires the curiosity of historians), a host of scholars has suddenly discovered the world of the social outcast, the criminal, and the rebel. Michel Mollat and his students have revealed how diversified was the universe of medieval proverty: underpaid wage workers, the hopeless poor, beggars and wayfarers, and the image of Christ on earth—the adepts of voluntary poverty, the disciples or imitators of Saint Francis of Assisi. Yves-Marie Bercé, like other acolytes of Roland Mousnier, has devoted himself to the study of the popular uprisings of the seventeenth century. He provides us with a typology of the revolts in southwest France from 1590 to 1790, which represented not so much disorderly outbursts as a predictable form of social behavior, and which were directed more against the state and its tax collectors, the billeting of soldiers, and the high price of bread than against the nobility.

The observer who is familiar with the usual categories of historiography brushes up against an uncertain frontier here. Does the history of deviant social groups represent the avant-garde of social and economic history or is it peculiar to the New History of mental structures? For in the process of illuminating certain forms of collective behavior, the authors are also clearly endeavoring to define and delimit social classes. The subject, seen in this light, cuts across the boundaries of recognized historical specialties.

One can say the same for two diversified multiform themes which are the current delight of a host of scholars: festivals and death. Today's historian is fascinated by ritual. He is determined to free it from the constraints of folklore and ethnology which tend to ignore its temporal dimension. It is necessary to distinguish between different levels of culture, for among festivals there were dynastic festivals, court festivals, and official festivals, such as the public rejoicing that greeted the entry of the kings of France into their *bonnes villes* and cost the local bourgeoisie a fortune for wine (which flowed like water from the public fountains) and for stage sets inspired by classical mythology. And there were revolutionary festivals, at once utopian and strictly codified—a permanent psychodrama and theatrical representation of the revolution. But what has most aroused the historians' interest is the popular festival in its relation to violence, religion, and the basic rhythms of the biological world.¹⁹

The history of death is the subject of a number of lengthy works just recently published. For Philippe Ariès, Jean-Noël Biraben, François Lebrun, Michel Vovelle, and Pierre Chaunu, death occupies a place, as Le Roy Ladurie remarks, at the center of historical interest "like the graveyard in the middle of the village." It is also located at a methodological crossroads, encroaching simultaneously on the traditional spheres of cultural, social, and demographic history. Michel Vovelle's work on the attitudes toward death among the population of Provence in the eighteenth century provides a good example of this complex kind of history. It demonstrates the utility of computerization in the history of

mental structures. An enormous mass of notarized wills was examined. The different formulas, repeated thousands of times over, were sorted out and classified: provisions for masses for the dead, the choice of a burial place (the church, the convent, the cemetery), bequests to the confraternities and to the poor. The analysis of all of these elements has disclosed how people probably behaved in the face of death: the native of Provence died a good Catholic around 1720 in the Baroque Age; he died a Jansenist around 1750, and a philosophe around 1780. The characteristic attitudes of the different classes also stand revealed: bourgeois detachment, peasant and aristocratic piety.

The originality of serial history à la française lies perhaps in this quantitative approach to the great shifts in popular modes of thought and feeling.

Some Final Remarks on Contemporary Historiography

My object in this paper has been to identify and illustrate the current trends in French historiography, not to provide an exhaustive bibliography, which would require many hundreds of pages. I am even less concerned with awarding impossible and embarrassing honors for excellence. Nevertheless, a few last touches should be added to this incomplete and perhaps unwittingly partial sketch of the currents that animate French historical writing today.

Production remains vigorous within the traditional time limits officially assigned to the different historical periods. There was once a time perhaps when the medievalists in the wake of Marc Bloch appeared to have a monopoly in methodological innovation. This is now mainly the prerogative of specialists on the seventeenth and eighteenth centuries (the sixteenth century having been virtually abandoned by professional historians). One of the causes of this shift is doubtless the sociological accident that oriented a number of first-class minds of the same age group toward the same field of specialization and similar careers. Another perhaps is the fact so often pointed out that the general trends in history and the unheard-of development of the tools at its disposal have encouraged the utilization of great masses of documents. Since everything now depends on quantity and numbers, historians of the modern period (ca. 1500-ca. 1789 in France) find themselves at a most strategic crossroads. In that pre-statistical age It is not impossible to lay one's hands on Chaunu's "millions" of documents. Series exist if only one takes the trouble to render the data a little more homogeneous. And yet everything is still on a human scale.

In the days of l'histoire événementielle it was permitted to turn the pages of a testament with a certain emotion; to daydream over a parish register. The emotion, fortunately, has not altogether disappeared. It humanizes mathematical calculations and penetrates as far as the "structures" themselves. It is enough to read Pierre Chaunu to be convinced of this. Like everything else in those days, eighteenth-century statistics could not help being likable. a far cry from the lifeless series churned out by modern bureaucracies, which are deliberately designed to be fed into a computer. Seventeenth- and eighteenth-century sources

leave room for the imagination and inventiveness of the historian, who despute determined efforts is not yet entirely transformed into a human calculating machine.

History in France—which surely cannot be accused any longer of chauvinism—is concerned essentially with the history of France. This is natural enough in a country whose archives are so rich and so well preserved. Most of the works mentioned in the present essay deal in fact with various aspects of the French past. But there are other countries in which French historians traditionally have shown a special interest, particularly Italy and Spain. Among the recent theses d'Etat in medieval and Renaissance history are those of Pierre Toubert (on Lastium), Charles de la Roncière (Florence), Elisabeth Carpentier (Orvieto), Pierre Bonnassie (Catalonia), Claude Carrère (Barcelona), and Bartolomé Bennassar (Valladolid). Certain historians of the modern and contemporary periods, like Claude Fohlen, Maurice Lévy-Leboyer, Frédéric Mauro, and Michel Devèze (these are only examples), have written on North and South America. Finally, the colonial and post-colonial past of the former French possessions in Africa and Southeast Asia is the object of numerous recent studies by specialists in the history of the Third World, notably at the University of Paris VII and the Ecole des Hautes Etudes en Sciences Sociales.

French academic historians were long indifferent to the history of history. But this trend has now been reversed. Charles Olivier Carbonell has studied the historical fraternity in the years that the positivist model, anathema to the Annales, dominated the field. Michelet and Mignet are the subject of recent biographics. With Philippe Joutard, the history of history abandons "erudite culture" in favor of the "historical mythology of the ordinary Frenchman." For him, it is a question of analyzing the memories and mental images of "great events," "heroes." and "villains" in history left over from his primary school education.

The vigor of local history (of provinces, towns, or villages) is one of the significant traits of French historiography today. The success of this specialty, described by Pierre Goubert, has varied with time. But it is certainly true that French historiography in the nineteenth and early twentieth centuries put the emphasis on the unifying activities of the state and the growth of the nation and usually only studied French culture and civilization from this point of view. neglecting the infinite diversity of the popular and regional cultures. The feverish activity that now reigns in this sector of history is a reflection of the surprising resurgence of regionalism in a country that once seemed to offer the perfect example of the unified nation-state. Certain well-conceived series, particularly the Histoire des provinces under the editorship of Philippe Wolff, have given a new lease on life to a genre which has not enjoyed so much success since the great age of erudition. The change in status manifests itself by an infallible sign the number of doctoral dissertations on regional subjects is on the rise.

The auxiliary historical sciences and the critical editions of source materials are also experiencing a revival, especially in the field of medieval studies. The history of historiography will take note of the obvious decline of French erudition

between 1914 and the 1950s, almost half a century during which the publication of narrative and nonnarrative sources almost came to a halt. At a time when writings on the auxiliary sciences were also increasingly rare, the scientific societies whose editions of texts were so numerous in the nineteenth century managed to survive only with the greatest difficulty. Various factors of a demographic, economic, and social nature doubtless help to explain this phenomenon. But one is also forced to recognize that beginning in the 1930s the victorious progress of the Annales school hastened the decline of an erudite tradition that was already faltering. Was it not said to be the purveyor of the very positivist historiography that was under attack? At a time when Marc Bloch was adding new luster to medieval studies, pure erudition, without which these same studies are doomed, seemed to have been irremediably compromised.

The situation has changed since then under the dictates of necessity. The stock of documents patiently accumulated in the course of the nineteenth century was being used up and had to be renewed and enriched. The publication of archival sources has therefore resumed. Auxiliary sciences that had been discredited as old-fashioned are enjoying a revival in the fresh light of the history of mental structures; heraldry, for example, is now infused with a certain nobility and sparkle thanks to the interest in symbolism. The computer has made it possible to constitute enormous banks of documents. The use of sophisticated scientific techniques revives the hope of being able to date and localize objects previously difficult if not impossible to interpret.

Conclusion

I am very conscious of the fact that contemporary French historiography does not have a monopoly on vigor and inventiveness. It is enough to read the works which are increasingly numerous, especially in the United States, on epistemology and the history of history to be convinced that the French current has joined the mainstream of Western historiography. The principal traits that I have endeavored to describe are to be found in America, in England, in Italy, and elsewhere.

Viewed from Paris, the undeniable strength of French historiography is a little surprising. It appears at a time when the teaching of history as a fully independent discipline is in the process of disappearing from the official curriculum of the elementary and secondary schools. History is now considered only one social science among many, and no privileged treatment is reserved for it. There are a number of historical reasons for this decline. It seems, however, a singular phenomenon at a moment when the general public has developed a taste for history that is something more than a collection of anecdotes or biographies of notable persons.

The historians who are struggling for the survival of their discipline in the schools are conscious of the dangers facing historical studies. Jacques Le Goff and Pierre Nora plead the cause of a return to historical synthesis or global history which refuses to let itself be submerged by the social sciences. We have come a long way since French historians proclaimed far and wide that theirs was the queen of sciences. They seem to feel the need nevertheless to preserve an independent status and a distinctive role in the life of the nation.

Finally, certain signs have appeared of a revolt against the hierarchy and ideology that now dominate the field of history. Groups of young historians, most of them from the far Left, have begun to question the concepts and practices, judged conformist and conciliatory, of a historiography in the service of the power structure. Several little journals of historical dissent have appeared on the scene: Cahiers du Forum-Histoire, Le Peuple français, Revue d'histoire populaire, Espaces-Temps. The Annales, in a different spirit, began life in the same way. But has a new Annales seen the light of day?

Notes

- 1. Henri-Irénée Marrou, "L'Epistémologie dans l'histoire en France aujourd'hui," in F. Engel-Janosi, G. Klingenstein, and H. Lutz, *Denken über Geschichte* (Vienna, 1974), p. 97; P. Goubert, "Sur trois siècles et trois décennies: passage des méthodologies," in *Mélanges en l'honneur de Fernand Braudel*, 2 vols. (Toulouse, 1973), I, 251–58.
- 2. On the Annales in general see Georg G. Iggers, "The Annales Tradition: French Historians in Search of a Science of History," chapter 2 of his New Directions in European Historiography (Middletown, Conn., 1975); and Marina Cedronio, "Profilo delle 'Annales' attraverso delle pagme delle 'Annales'," in Atti dell'Accademia di Scienze morali et politiche della Società Nazionale di scienze, lettere e arti in Napoli 83: 179-260. For the period 1929-1945 see L. Febvre, Pour une histoire à part entière (Paris, 1962); M. Bloch, Apologie pour l'histoire ou métier d'historien (written in 1941-42; published Paris, 1945); M. Bloch, Les Caractères originaux de l'histoire rurale française (Paris, 1956; first published 1931); M. Bloch, La Société féodale (Paris, 1939); L. Febvre, Le Problème de l'incroyance au XVIe siècle: la réligion de Rabelais (Paris, 1942); and H.-D. Mann, Lucien Febvre: la pensée vivante d'un historien (Paris, 1971).
- 3. See François Simiand, Les Fluctuations économiques à longue période et la crise mondiale (Paris, 1932), and Recherches anciennes et nouvelles sur le mouvement général des prix du XVIe au XIXe siècle (Paris, 1932); Ernest Labrousse, Esquisse du mouvement des prix et des revenus en France au XVIIIe siècle (Paris, 1933); and Georges Lefebvre, Les Paysans du Nord pendant la Révolution française (Paris, 1924), and La Grande Peur de 1789 (Paris, 1932).
 - 4. Jan Dhont, "L'Histoire recurrente," Diogène, no. 75 (1971): 26.
- 5. R. M. Andrews in the New York Times Book Review, 18 May 1975. On the Annales in the time of Fernand Braudel, see F. Braudel, La Méditerranée et le monde méditerranéen à l'époque de Philippe II, 2nd ed. (Paris, 1966; English translation by Siian Reynolds, New York, 1973); F. Braudel, Civilisation matérielle et capitalisme (XVe-XVIIIe siècles) (Paris, 1967); F. Braudel's collection of articles entitled Ecrits sur l'histoire (Paris, 1969); F. Braudel, personal testimony, Journal of Modern History 44 (1972); 448-67; J. H. Hexter, "Fernand Braudel and the 'Monde Braudellien...," ibid., 480-539; Robert Forster, "Achievements of the Annales School," Journal of Economic History 38 (1978): 58-76.
 - 6. Braudel, La Méditerranée, I, 21.
- 7. Traian Stoianovich, French Historical Method: The Annales Paradigm. foreword by Fernand Braudel (Ithaca, N.Y., 1976).
 - 8. See P. and H. Chaupu, Séville et l'Atlantique, 1504-1650 (Paris . 959-1960), and F. Mauro

Feuvaisis, de 1600 à 1730 (Paris, 1960); P. Vilar, La Catalogne dans l'Espagne moderne (Paris, 1965), and E. Le Roy Ladurie, Les Paysans de Languedoc (Paris, 1966). For a general survey of historical works during these years, see J. Glénisson, "L'Historiographie française contemporaine: tendances et réalisations," in Comité français des sciences historiques, La recherche historique en France de 1940 à 1965 (Paris, 1965), pp. xiv-lxiv.

2. Lawrence Stone, "History and the Social Sciences in the Twentieth Century," in C. F. Deleell, ed., The Future of History: Essays in the Vanderbilt University Centennial Symposium (Nashville, Tenn., 1977).

10. The following account is based on the works cited in this paragraph, all of which were published in Paris. In addition much that is of interest has appeared in interviews with the historians who are considered—and consider themselves—representatives of the "New History." Number 123 (April 1977) of the Magazine littéraire was devoted essentially to this subject. Participants in the discussion included Philippe Ariès, Michel de Certeau, Georges Duby, Jacques Le Goff, Emmanuel La Roy Ladurie, and Paul Veyne. Le Roy Ladurie granted a long interview to Lire, le magazine des livres, no. 23-24 (Summer 1977), pp. 31-53. See also the article "Histoire et historiens," Politique aujourd hui, no. 11-12 (1975); the special issue of Dialectiques, no. 10-11 (1975) on "Histoire et société"; and the chapter on history in vol. VIII of the Encyclopaedia universalis (Paris, 1970), by Paul Veyne, Robert Mandrou, H.-I. Marrou, G. Palmade, C. Higounet, P. Vilar, and C. Mazauric; and L'Historien entre l'ethnologue et le futurologue (Paris-The Hague, 1972).

11. A special issue of *Communications*, no. 18 (1972), was devoted to *l'événement*. E. Le Roy Laduric and P. Nora were among the contributors.

12. Michel Grenon and Régine Robin, "Pour la déconstruction d'une pratique historique," Didectiques, no. 11 (1975): 5–32. We have relied heavily on this excellent article, an intelligent eritique of the most recent essays on epistemology, devoted essentially to Faire de l'histoire. The attitude of present-day historians towards Marxism is carefully analyzed. In this connection E. Le Roy Ladurie writes: "All these different problems or subjects—social groups, élites, revolution, the poor—skirt Marxism without ever meeting it head on. Up to this point we only dimly perceive that great ideological system. Should we take the bull by the horns then? As a matter of fact every study of social history utilizes ipso facto certain Marxist (and sometimes pre-Marxist!) concepts such as social class, class struggle, and even mode of production. But whatever dogmatism, rigidity, and absurdity there is in the standard version (at least in the Latin countries) of Marxism-Leninism or crypto-Stalinism should be shunned like the plague. One wonders even if a perfectly non-Marxist history might not present a certain interest and certain advantages. I say this naturally with the feeling that I am walking on eggs and profaning the most sacred vases of our times." (Bulletin de liaison, 30, 3 (April 1978): 12.

13. On quantitative history, see F. Furet, "Le quantitatif en histoire," in Faire de l'histoire. I, 42-61; and E. Le Roy Ladurie, Le Territoire de l'historien. pp. 11-138.

14. The proof is the extraordinary success of E. Le Roy Ladurie's Montaillou, village occitan (Paris, 1976), a serious work of retrospective ethnology which was read by a large public. The magazine Histoire, founded in 1978 as "a permanent source of information on the entire field of historical research." has been well received by the public.

15. J. Bouvier, "Tendances actuelles des recherches d'histoire économique et sociale en France," in Aujourd'hui l'histoire, pp. 130-42. On the endeavor of J. Marczewski and his team, see Denis Richet, "Histoire quantitative ou économétrie rétrospective?" (communication to the Department of History of the University of Ottawa in November 1975). For an account of the French reactions to the "new economic history" see the introduction ("Le Dossier de la question") written by Jean Heffer for Ralph Andreano, ed. La Nouvelle Histoire économique: éxposés de méthodologie (Paris, 1977).

16. G. Duby and A. Wallon, Histoire de la France rurale, 4 vols. (Paris, 1975–1976): vol. I, Formation des campagnes françaises des origines au XIVe siècle (G. Bertrand, C. Bertrand, M. Glay, G. Fourquin); vol. II, L'Age classique des paysans 1340–1789 (H. Neveux, J. Jacquard, Le Roy Ladurie); vol. III, Apogee et crise de la civilisation paysanne. 1789–1914 (M. Agalhon.

her perceptions and perspectives. The story has numerous emotional ups and downs as Dian is harangued by her parents and lovers about giving up her work at Karisoke, as she falls passionately in love and then is disappointed and abandoned by various men, and as she persists in her battles with poaching and the red tape of an African bureaucracy. Above all it is a story of a passionate devotion to the mountain gorillas of Rwanda.

A continuing theme during the second half of the book is the series of continuous conflicts between Dian and the ORTPN (Office Rwandais du Tourisme et des Parcs Nationaux), and the several established conservation bureaucracies with interests in the Parc National des Volcans and the gorillas. It becomes obvious during the second half of the book that Dian had little understanding of bureaucratic procedure, which she often perceived as deliberate obstructionism, and even less of conservation organizations that spent more effort on infrastructure than on what she called "active conservation." The Mountain Gorilla Project, started by Dr. Alexander Harcourt (who had worked at Karisoke for some time as a student) became the bane of Dian's existence. While the MGP had been set up to aid the conservation of gorillas, the bulk of its donated funds went into the Rwandese infrastructure, in particular to ORTPN, and to providing habituated gorilla groups for tourism. And most heinous, in Dian's view: virtually no funds were spent to curb poaching. Fossey's own conservation work was very direct and aggressive. She harassed poachers on every possible occasion, destroying their traps and simulating local signs of witchcraft to frighten poachers away from "her" areas of the volcanos.

Late in the book, Mowat presents the situation as it appeared to Dian during 1985, when she discovered that gorillas were dying from the effects of introduced human parasites, particularly Necator americanus, human hookworm. This parasite has been distributed over much of the world during the past four centuries through human activity and is now common in Africa. Mowat suggests that an unspecified researcher who was in the habit of defecating in the presence of gorillas might have been the source but neglects to consider other possibilities. This brings the reader to a point of possible quandary—does the continuing exploitation of the gorillas as a source of tourism revenue spell their eventual doom from anthroponoses (diseases contracted from humans)? Dr. Amy Vedder of the MGP reported at the 1986 meeting of the International Primatological Society that the population of mountain gorillas stood at an estimated 240 individuals, based on a total survey of the region and a physical count of 214. With so few individuals remaining, what are the chances for long-term survival of the mountain gorilla?

The story of Dian Fossey is complex. In contrast to the in-depth portrayal of her motivations, Mowat's book fails to explain why she generated such hostility in people who had once been friends. Many of the students who worked at Karisoke became alienated from Fossey, and several then went on to become major figures in the Mountain Gorilla Project. The puzzle of her murder is still unsolved, though Mowat points a possible finger at one of her exemployees, Emmanuel Rwelekana, working as agent for larger corporate interests. Rwelekana was convicted of the murder, along with the fugitive Wayne McGuire, by a Rwandan court. He has since died in custody. Mowat's suspicion about a larger involvement will probably never be finally confirmed or refuted.

Is the book worth reading? To this I must answer a resounding yes! For those outside of primatology, it provides a valuable though biased view of the discipline; for those within the field, it clarifies much that was a mystery about this woman who was one of the hard core of really dedicated field workers.

Reviewed by **James D. Paterson.** Mr. Paterson is a behavioral ecologist experienced in the study of primates in tropical rain forests. He is the former head of the department of anthropology, University of Calgary, Alberta, Canada.

Conservators of Hope: The Horace M. Albright Conservation Lectures. Foreword by Michael Frome, preface by Horace M. Albright, and introduction by Dennis E. Teeguarden. Moscow: University of Idaho Press, 1989. xxii + 568 pp. Tables, graphs, maps, footnotes. \$27.95.

Upon accepting the assignment to review Conservators of Hope, I went immediately to my mantelpiece to inspect a ten-inch, bone-handled loving cup inscribed: "With all Good Wishes To Our Companion Of The Mather Mountain Party, Frederick H. Gillett, July 14-29, 1915." Then Speaker of the U.S. House of Representatives, my grandfather Frederick Gillett joined a group of national political and conservation leaders headed by prospective National Park Service director Stephen T. Mather, to inspect outstanding scenic areas and lay the groundwork for passage of the Park Service's organic act a year later. Among the other names inscribed on the cup was that of Horace M. Albright, then an assistant to

Interior Secretary Franklin K. Lane. As Dennis Teeguarden observes in his introduction to *Conservators*, Albright, who was charged with preparing and securing the enabling legislation for the Park Service, successfully bridged the worlds of preservation and utilization while displaying a highly effective form of political pragmatism (p. xix).

Conservators of Hope is a collection of essays written by twenty-four prominent conservation leaders, assembled by the University of California at Berkeley, and published by the University of Idaho Press. The essays are faithful reproductions of the annual Horace M. Albright Lectures delivered at Berkeley from 1961 to 1984. Their value, as Teeguarden comments, is as a "fascinating and provocative study of conservation thought and action in a period when public concern with environmental quality had greatly intensified" (p. xxi). In the preface, written shortly before his death in 1987 at the age of ninety-seven, Albright himself stresses the importance of context in appraising the lectures: "Let them stand as delivered, to be identified as expressions of extremely talented individuals at a particular point in time, and to be taken together as a panoply of ideas that spread over a quarter of a century" (p. xiv).

As a collection of lectures, Conservators is inevitably a mixed bag. Individual essays range from twelve to fifty-four pages in length—long enough to be thought provoking, but too short to offer material in depth. Some are truly cameo pieces, such as Marston Bates's observations on what constitutes the human environment, Stephen Spurr's forthright views on wilderness management, René Dubos's account of the genius of place, and Max Nicholson's call for a new renaissance based upon ecological principles. Other essays offer helpful summaries of important areas of conservation interest and concern. In this category, I would place John McGuire's history of the national forests, Ian Cowan's account of the development of the wilderness movement in the United States and Canada, Ellis Cowling's informed summary of the effects of airborne chemicals on forests and other natural resources, Harold Wilm's factual presentation on water and recreation, and Kai Curry-Lindhal's status report on the global national-park movement.

But the volume contains highly personal contributions as well. One such example is Ansel Adams's views on the role of the artist in conservation. Another is Horace Albright's own lecture in 1961, in which he provides personal glimpses of the individuals he met and worked with who might

and collapses, imperial interests and technological advances. This engagingly written narrative by Austin Coates, a former British civil servant with long experience in Southeast Asia and several books to his credit, tells the story of the natural rubber trade largely from the viewpoint of the British merchants of Singapore, a focus in keeping with Coates's commission from the Singapore Chamber of Commerce Rubber Association.

The initial chapters review the European discovery of rubber, its adaptation to industrial use, and the transfer of the plant from its Amazon habitat to Southeast Asia through the farsightedness of a few servants of the British empire. Here the author's predilection for a rousing good story and his somewhat skimpy bibliography lead him, at least in the area of this reviewer's competence, to deal in imprecision and puffery.

The author swallows whole the fantastic self-promotions of rubber-seed collector Henry Wickham, who suggested that he had stolen the initial seed stock under conditions of great danger and haste. In truth there was no danger, because there was no law against the export of rubber seeds -Wickham himself had sent some out by mail on an earlier occasion. And if Wickham was moving fast, his only motivation was extreme penury: he had to gather enough seeds to pay home passage for himself and his wife. No wonder only 3 percent of the seeds germinated. The myth is well served here; it lives on to satisfy once again the need to believe in the superior daring of the empire builders over the natives.

Coates is more reliable in telling the story of the development of Singapore as the center of the world market in rubber. He gives the history in fine detail, with sources that evidently include reminiscences from many of the trade's pioneers.

Largely because of the ever-present threat of competition from synthetics, rubber was a roller-coaster commodity. The control of its price was a major source of friction between the United States and Britain between the wars. Coates's account presents in sharp relief the conflicts among the colonies, and within them, concerning the advisability of price controls.

Rubber was produced by an extraordinary patchwork of growers, from large multinational estates to peasants with a few trees in their backyards, all bound together by a complex network of dealers, shippers, and agents. Coates focuses on the capacity of European directors to shape the rubber trade, as seen in their mobilization of wretched masses of workers from far-off India and Java (an aspect of the trade that the author prefers to say little about), but it appears that they may not have had the trade sewed up all that well. The first Asian

rubber was planted by resident Chinese, and Asians were a powerful force in the trade from the beginning. Japanese producers owned plantations, docks, and ships and never had to go through Singapore at all. Furthermore, Dutch colonial officials proved incapable of controlling Indonesian smallholders and shippers. Coates's final chapters chronicle the long, slow fade-out of British imperial interests in the rubber trade, dealing primarily with political events of which the West was only too sketchily aware. The first blow was the Japanese invasion – although the invaders oddly did not bother to tap the captured plantations because they had already stockpiled great rubber reserves. The next blows were the long and bitter anticolonial war in Indonesia, then the vicious Communist insurrection in Malaya, followed by the crises of independence, federation, and Sukarno's attempts to swallow the rest of Borneo. At the end came the anti-Sukarno coup and the massacre of Communists in Indonesia. All these events kept the trade in a turmoil and allowed more leeway to native, principally Singaporean-Chinese, operators at the expense of Westerners. The resulting rubber trade was a wary balance of financial, commercial, and cultural forces.

Miraculously, during all this bloodshed, rubber kept coming out of Southeast Asia. Not only that, but it held its own against the increasingly perfected synthetics. It achieved its success by improvements that Coates only sketches—improvements in rubber tree breeding, worker productivity, processing, and distribution.

The extraordinary history of natural rubber deserves special attention. This study offers an extremely important perspective, but other possible perspectives abound. The story of rubber might be told from the viewpoints of the Dutch, the French, the Chinese, the Thais, the Japanese. . . . conference anyone?

Reviewed by **Warren Dean**. Mr. Dean is a professor of history at New York University. His latest book is Brazil and the Struggle for Rubber (Cambridge University Press, 1987).

Woman in the Mists: The Story of Dian Fossey and the Mountain Gorillas of Africa. By Farley Mowat. New York: Warner Books, Inc., 1987. xiv + 380 pp. Published in Canada under the title Virunga: The Passion of Dian Fossey. Toronto, Ontario: McClelland & Stewart Publishers, 1987. Illustrations, maps, index. \$19.95.

The murder of Dr. Dian Fossey at the Karisoke Research Center in Rwanda on 27

December 1985 made headlines around the world. In the epilogue to this book, Mowat quotes from interviews with two researchers associated with the Mountain Gorilla Project (MGP). Bill Weber argues that Fossey "didn't get killed because she was saving gorillas. She got killed because she was behaving like Dian Fossey. . . . She mistreated everyone around her and finally was done in." Kelly Stewart states: "It was a perfect ending. She got what she wanted." With an awareness of these perceptions, it is appropriate that the title of this book when first published, in Canada, was Virunga: The Passion of Dian Fossey. The analogy to the passion of a martyr is quite deliberate, and appropriate to the story of a strong woman who was more passionate advocate than detached researcher, who had a series of passionate affairs with men but always went back to the mountains and those with whom she felt most comfortable, the gorillas.

Mountain gorillas are the largest species of primate and one of modern man's two genetically closest relatives. Their fearsome, and quite undeserved, reputation made them prime game animals during the first half of this century, though in reality shooting a gorilla is about as "sporting" as shooting a teddy bear. Gorillas play important ecological roles in spreading the seeds of more than 150 species of plants in the montane forest, and their foraging opens up meadow and nettle carpets for the regeneration of forest, as well as slowing the spread of bamboo. Their importance to the ecology of the montane forest has been little examined as yet. I was privileged to explore this environment for a day in late 1970, climbing with a guide from the Traveller's Rest at Kisoro, Uganda, and though we did not encounter the gorillas, I remain impressed by the special qualities of the

Despite having no direct experience of African conditions, Mowat occasionally produces a vivid image of the environment in which Dian Fossey lived and died. In major part, this vividness comes not from Mowat, but directly from Dian herself. Dian Fossey seems to have been a compulsive letter writer and journal keeper. The result of this is a set of documents labeled the "Fossey Archives," which form the basis for this biography. Because Mowat was writing for a popular press his book lacks all citation of sources. I certainly hope that sometime in the next two or three decades, someone else will write a dispassionate and footnoted biography of Fossey. But in the meantime, Mowat's version, which quotes Dian herself at length, must serve. Since the story depends so heavily on her letters and journal entries, it is colored and biased by

merit the label of "great American conservationists" (p. 1). And during the Reagan years, such Albright lecturers as Thomas Kimball, David Brower, and Hazel Henderson were quick to utilize the lectureship as a bully pulpit, scorning administration officials as the "Reagan wrecking crew" (p. 485) and terming their programs "the Politics of the Last Hurrah" (p. 500). I will be forever indebted to Brower for his characterization of 180 degrees as "the facesaving angle" (p. 488)—an angle that permits one to change direction completely and still go straight!

Looking at Conservators more substantively, there is much in the lectures that remains thought provoking even today. Here we find Stewart Udall's attention to "the areas of quiet crisis in resource management" (p. 49), Stephen Spurr's call for "concordance" between wilderness preservation and management (p. 119), Joseph Sax's advocacy of "an engagement with nature" as the true goal of outdoor recreation (p. 353), Russell Train's accurate prediction of the international arena as a coming area of conservation concern (p. 140), and Raymond Dasmann's revolutionary but reasoned call for a redevelopment and resettlement of America in the interest of becoming ecosystem people once again (p. 348).

Yet the volume has its limitations. Its information, in many instances, has been superseded due to the passage of time. Material composed to be spoken is not always as persuasive on paper. One searches in vain for connective tissue between the individual lecturers, or even a word in the introduction that would attempt to bridge their time and ours. It would have been helpful to have had more information on why certain lecturers were invited and the process followed in making the selections. A simple chronological listing of the lectures by date would have relieved the reader of speculating as to when each took place. There is much about parks, wilderness, and environment in the subject matter presented, but less about renewable natural resources. The area of soil conservation, for example, seems to have been missed entirely. I could find only a lonely contrarian to the prevailing environmental tone -Kenneth King's observation that "alarmist philosophies and prescriptions are often those of individuals who seek a transient popularity" (p. 395). Nevertheless, Conservators deserves a prominent place on any library bookshelf if for no other reasons than to facilitate a nostalgic journey through recent history and to gain a reminder of how far conservation has come in such a short span of time. For me, it was also an affectionate opportunity to revisit and pay my respects to old friends.

Reviewed by Charles H. W. Foster. Mr. Foster, currently an adjunct research fellow at Harvard's Energy and Environmental Policy Center, is a former state natural resources

and environmental administrator and a past dean of the Yale School of Forestry and Environmental Studies. He is the author of three books on bioregionalism.

Letters

The following letters were written in response to the special July 1989 Journal of Forest History (volume 33, number 3) on "The Uses of History by Ecologists."

James E. Wilkinson of Barre, Vermont, writes:

Norman Christensen's article on "Landscape History and Ecological Change" (July 1989) was stimulating reading. He made a sound case for the importance of understanding history in forest ecology, land use planning, and management.

History usually relates to mankind and the actions and events of the past, and their effects on the present and future. Applying this to ecology is appropriate. Reading Christensen's essay called to mind the works of George Perkins Marsh and his volume Man and Nature, first published in 1864. Marsh had a remarkable vision and understanding of the relationships between man and nature. Some of his ideas have been proven inaccurate with the progress in scientific methods since his times; yet we can benefit from his intellectual curiosity and skillful writing. Marsh's broad interest in what we today call the "environment" led to his observations on the effects of man on "The Woods," "The Waters," and "The Sands" of this world. Truly he was a pioneer in recognizing "landscape history" as important to our understanding of nature. Although he was no scientist, he was a scholar and diplomat who left a legacy for those of us who share his concern with and interest in our relationships with nature, of which we are a part.

Jack V. Thirgood of Northumberland, England, writes:

Guest editor Norman Christensen is to be congratulated on his introduction to FCH readers of historical ecology, which to date has attracted relatively little attention from North American forest historians, foresters, or ecologists.

However it is unfortunate that he confined his attention to recent North American developments. Readers may be left with the mistaken impression that historical ecology is a recent advance in ecological science. I am sure that Christensen would not wish to leave this impression.

At least through the second half of this century there have been strong schools of historical ecology in Europe. In Britain alone notable contributions have been made by Rackham (cited by Christensen), Peterken, and others. These people have significantly increased our understanding of woodland structures, their evolution, and their management.

G. F. Peterken, quoting from John Harper's Population Biology of Plants (1977), commented in his Woodland Conservation and Management (1981) that the founding fathers of British woodland ecology were preoccupied with ideas of natural succession and climax and therefore tended to interpret the current state of a woodland as a "stage on the way to something," and to explain their observations by references to an ecosystem's "destiny" rather than its history. Many of the papers published by these writers before 1940 have lasting value. But since the 1940s there has been a shift in emphasis. Many British ecologists now try to understand and explain woodlands in terms of their history, relying on known or deduced past events rather than on developments that may or may not occur in the future.

The forester, conservationist, or land manager charged with forest management undoubtedly needs to know how a system works, but it is arguably more important to know how woodland got to where it is than to speculate about where it might be headed in the unlikely event of its being left alone. As Peterken has also remarked, "Disaster Theory" is a melodramatic label for the perception of ecosystems as natural responses to past events, but it is nevertheless more relevant to those who manage woods than is the theory of the remote natural climax. Rarely is the climax forest the management objective.

In short, the role of the silviculturist is not to preside passively over the majestic unfolding of the tapestry of nature, but to intervene actively, albeit sensitively, and so modify the natural system in order to achieve stated management objectives for the tract under his care.

It is to be hoped that Alice Ingerson's editorial will encourage both forest historians and ecologists to direct their attention to the forces that have influenced the biological forest and that determine silvicultural treatment, and that their efforts may find a place in the journal alongside histories of institutions, organizations, and policies.

Biblioscope

The FHS Computerized Archival **Guide & Bibliography**

As of the October 1989 issue of this journal, the "biblioscope" is prepared entirely by the Forest History Society's library staff in Durham, North Carolina. All of the information in the "biblioscope" is added each quarter to our online databases, along with other archival news and citations supplied by readers or found too late for listing in the journal. The library staff welcomes information about relevant publications that we may have missed, including books, theses, and dissertations; photocopies of relevant articles are particularly appreciated. Readers interested in obtaining a full list of archives or citations on a specific subject should contact us in Durham, either by phone or mail.

Archival News

Two collections of business records significant to the history of lumbering in Maine have been obtained by Fogler Library, University of Maine-Orono: The records of S. W. Pope & Co., 1856-79, John K. Ames, 1879-99, and Machias Lumber Co., 1899-1950, include day books, journals, and other documents encompassing enterprises that were at the heart of the state's economy for nearly one hundred years. A similar collection of the records of Ebeneezer Coe and the Coe Family documents timber cutting by a group that managed extensive timberlands in northern and eastern Maine.

Books

Some of the following volumes will be reviewed at length in future issues of FCH. Prices are provided here when supplied by publishers.

Andrews, Malcolm. The Search for the Picturesque: Landscape Aesthetics and Tourism in Britain, 1760-1800. Stanford, California: Stanford University Press, 1989. xvi + 269 pp. Illustrations, maps, index. Traces the origins and evolution in eighteenth-century Britain of the idea of the countryside as "picturesque."

Benson, Barbara E. Logs and Lumber: The Development of Lumbering in Michigan's Lower Peninsula, 1837-1870. Mount Pleasant, Michigan: Clarke Historical Library, 1989. xv + 309 pp. Illustrations,

maps, footnotes, bibliography, index. Forestry was the leading industry in mid-nineteenth-century Michigan, and consolidation of the state's sawmills helped it to become the nation's leading supplier of lumber.

Borden, Carla M., ed. Contemporary Indian Tradition: Voices on Culture, Nature, and the Challenge of Change. Washington, D.C.: Smithsonian Institution Press, 1988. xvi + 412 pp. Illustrations, color plates, biographies of contributors. See especially section four which focuses on conservation and environmental challenges facing India, primarily 1970s and 1980s.

Bradley, Lenore K. Robert Alexander Long: A Lumberman of the Gilded Age. Durham, North Carolina: Forest History Society/ Distributed by Duke University Press, 1989. xiv + 233 pp. Index. Long (1850–1934), the founder of the Long-Bell Lumber Company, made his fortune from Louisiana pines before moving his operations to the Pacific Northwest.

Brown, Robert. Robert Brown and the Vancouver Island Exploring Expedition, Edited by John Hayman, Vancouver: University of British Columbia Press, 1989. xiii + 211 pp. Illustrations, maps, notes, appendixes, index. The journals and articles of Brown, the commander of the 1864 expedition, provide an account of the island's botany and aboriginal culture.

Bunyard, Peter, and Edward Goldsmith, eds. Gaia: The Thesis, the Mechanisms, and the Implications. Camelford, England: Wadebridge Ecological Centre, 1988. viii + 251 pp. Illustrations, graphs, tables, list of participants, biographies. Reception, since its publication in 1979, of Joseph Lovelock's theory about human and ecological evolution.

Burrill, Gary, and Ian McKay. People, Resources and Power: Critical Perspectives on Under-Development and Primary Industries in the Atlantic Regions. Fredericton, New Brunswick: Acadiensis Press, 1987. 281 pp. A collection of seventeen articles on primary industries in the Maritimes, several of which describe the history of forest industries.

Carey, Alan, and Sandy Carey. Yellowstone's Red Summer. Flagstaff, Arizona: Northland Publishing, 1989. xiii + 114 pp. Illustrations. Examines the causes (both human and natural), progress, and consequences of the

wildfires that raced through the crown jewel of America's national park system in 1988.

Cohen, David William, and E. S. Atieno Odhiambo. Siaya: The Historical Anthropology of an African Landscape. Athens: Ohio University Press, 1989. viii + 152 pp. Illustrations, maps, bibliography, index. Religious and cultural landscape and subsistence farming among the Luo of Kenya since the seventeenth century.

Collard, Andrée, and Joyce Contrucci. Rape of the Wild: Man's Violence against Animals and the Earth. Bloomington/Indianapolis: Indiana University Press, 1989. xvii + 187 pp. Illustrations, footnotes, index. Feminist perspective on the history of man's relationship with nature, since ancient times.

Csányi, Vilmos. Evolutionary Systems and Society: A General Theory of Life, Mind, and Culture. Durham, North Carolina: Duke University Press, 1989. xiv + 258 pp. Illustrations, graphs, tables, notes, bibliography, index. A second version of the author's theory of evolution, in which he attempts to fit his study of evolutionary processes into the framework of the general systems theory developed by Bertalanffy and others.

Delcourt, Paul A., and Hazel R. Delcourt. Long-Term Forest Dynamics of the Temperate Zone. Ecological Studies no. 63. New York: Springer-Verlag, 1987. xiii + 439 pp. Illustrations, maps, tables, graphs, bibliography, index. Examines the paleoecological evidence for forest community development in the temperate zone of eastern North America over the last twenty thousand years, using fossil-pollen data from 162 radiocarbon-dated paleoecological sites.

Doughty, Robin W. Wildlife and Man in Texas: Environmental Change and Conservation. College Station: Texas A & M University Press, 1989. xv + 246 pp. Illustrations, maps, bibliography, index. How people altered wild animal populations in Texas after ca. 1820.

Ewing, Andrew J., and Raymond Chalk. The Forest Industries Sector: An Operational Strategy for Developing Countries. Washington, D.C.: The World Bank, 1989. Technical Paper No. 83: Industry and Energy Series. viii + 83 pp. Tables, graphs, glossary, appendixes. Examination of changes in the world's forest industries, 1955-85, with projections for developing countries.

One Cow, One Vote

A Strenuous Session in the Montana Legislature

by Margaret Scherf

Houter's, 16-6

It was a historic occasion—the last before reapportionment, and the last in which the voice of the Angus and Hereford could be heard in the ballot box.

On the last day of the 1965 session in the Capitol in Helena, as we legislators took our hacking coughs and our masses of bills and correspondence to our cars, we said goodbye with "Never again!" But now, come spring, the old firehorses are beginning to prick up their ears. Not long ago I met a couple of them cheerfully planning this summer's campaign. Even the chairman of Fish and Game, who developed a distinguished ulcer, is willing to go through it all again. And those members of either house who saw themselves written off by reapportionment were deeply hurt and full of gloom.

What attracts men to the legislature? The pay is \$1,200 for a sixty-day biennial session, with duties that continue during the off years. Since the legislature meets during January and February, a member has to fight from fifty to five hundred miles of icy roads to get home to tend to his own affairs. One lawyer estimated it cost him more than \$5,000 to serve in two sessions. Winter in Helena is bright, beautiful, and often 30 degrees below zero. The Capitol is heated to a toasty 90, so every lawmaker has at least one revolting cold.

It isn't the charm of Helena that lures them. The Helena *Journal* of 1891 described the capital as "the richest city on earth per capita," and "the magnificent banking houses that line Main Street" as "superb specimens of the architects' and builders' skill," but today the center of Helena—Last Chance Gulch—is moribund. Gone is the splendor of the old Broadwater Hotel with its pink marble and gold-inlaid bathtubs. The town's iron fences and red-brick turrets and towers, built by the mining and banking millionaires of the 1880's, are quaint and amusing for an afternoon, but gradually the dismal decay of most of these old mansions, including the building once occupied by our Governors, becomes depressing.

So it is not the pay nor the luxury of life in the capital that brings men back session after session, and adds new recruits in each election. There are, of course, personal ambitions, special axes to grind, and always there is party loyalty. The Republicans come to Helena to fight the Democrats. The Democrats come to fight the Republicans and "the companies." The ultraconservatives come to fight the federal government on the last available battleground. But I believe there is something more than these usual incentives. We seem to have an old-fashioned faith in the importance of state government.

Montana, which became a state in 1889, is no more Wild West now than New Rochelle or Dayton. It is churchy. We have a goodly number of alcoholics and a high divorce rate, but it's the

solid Lutherans, Methodists, Catholics, Presbyterians, believing in the simple virtues, in progress, in individual effort, who set the tone. Our largest cities—Billings and Great Falls—are well under 100,000, and most of us live in small towns or on farms and ranches. The legislature reflects this earnest, middle-class respectability.

This respectability has been growing since I first observed a session a decade or more ago. At that time there was a casual air about the House—feet on desks, spittoons, big hats, open newspapers, and the gavel grasped by a "company man." As a writer I was keenly interested, but had no thought of putting my own neck on the block.

Listener, Prober, Crook, Fool

In 1964, the Democrats needed four candidates for the House in my county, and they had only three. Would I run? "You won't have to do a thing," the county chairman promised. "Just file."

I was skeptical, but I filed. Our county is roughly sixty miles wide and seventy-five long, runs north to Canada and east to the top of the Rockies. Early one summer morning I put my dog and a sandwich into the old red Plymouth and set out to see the voters. I stopped in front of a farm gate bearing a large sign: BEWARE OF VICIOUS DOG. As I debated the wisdom of getting out, a large Springer came trotting down the road, his red tongue flapping and his brown tail wagging. He escorted me to the door. Campaigning, once I overcame my initial fright, was rather like that. People were nearly always friendly, wanted to talk. They told me their country school was overcrowded, or their boys couldn't find work in the winter, or property taxes were too high. There was a good deal more poverty than I had suspected. I began to see the candidate, as I later saw the legislator, as a listener, a prober.

National candidates appear at large meetings, dinners, rallies. They make TV appearances, talk strategy with party leaders, shake many hands, but they haven't time to listen for an hour or two to a logger injured in the woods who is unable to collect from the Industrial Accident Board. It is the legislative candidate alone who can be button-

Before her election to the Montana legislature in 1964, Margaret Scherf had been writing mystery novels; she has had 21 published. She grew up in New Jersey, Wyoming, and Montana, went to college in Ohio, traveled round the world during the Depression, and worked in New York in publishing before she settled down to write.

holed and complained to, scolded, instructed. He is on the voter's level.

We had to be screened by the Taxpayers' Association, the Timber Haulers, Wildlife, REA, MEA, the Sawmill Workers' Union, the Carpenters' Union, and half-a-dozen PTAs. We passed out cards in the supermarkets, went to dozens of teas and coffees, ate our way through mammoth church and grange dinners, shook hands and ate midnight lunches in country bars and taverns. Three days before the November election, the chairman called me at eight in the morning. "Be over at the high school at eleven," he said. "English class, room 12. You can discuss Medicare, Kerr-Mills, public power, and federal aid to education. You'll have about twenty minutes." That same afternoon, a party member said reproachfully, "You should be working, you know. Get out and ring doorbells."

I came through with a triumphant twelve-vote landslide. My opponent called for a recount and we both spent the next three weeks in a chilly old potato warehouse, watching every ballot as the County Commissioners tallied. I held onto ten points of the margin, and was the first woman to represent our county in the legislature in fifty years, and the only mystery writer who ever served. As my weight went down and my color approached that of a boiled cauliflower, I kept asking myself why I had left a comfortable typewriter to get into this fight. And yet at the lowest point in the session I wouldn't have gone home, even if it had been possible. Because I did not feel that this was a meaningless fight, that the endless, exhausting caucuses and committee meetings and debates were about nothing. They were about the things that mattered, and the divisions reflected fundamental differences in philosophy.

The job could be made less of an ordeal for the legislator by lengthening the session and chopping out some of the accumulated underbrush. It is impossible to take care of the business of the state in sixty days every two years.* There is no time to study and reorganize our obsolete boards and bureaus, so that each session merely adds its own bandages. The constitution forces the legislature to waste its time on minute details: Is the fox a predatory animal? How much shall a city fireman be paid?

Another frustrating factor is the constant ridicule from the press. We spent many weary hours on heavy issues, but the reporters gleefully seized on one bill intended to force the owners of

^{*}See Senator Joseph D. Tydings' article in *Harper's* (March 1966): 31 state legislatures meet only once every two years.

pets to furnish shelter, called it the Cat House Bill, and tried to make its sponsors look like idiots. The presentation took perhaps fifteen minutes in each house, but readers back home were led to believe we were spending most of our time on trivia. There was little press enthusiasm for the long hot battles over air pollution, education, minimum wage, investment of state funds, mental health, reapportionment, and how to raise the money.

Newsmen are of course cramped by their editors' caution. They didn't report that on the minimum-wage bill certain dubious characters were consulted, made demands which enraged the labor members, and helped to scuttle the bill. Leaks from caucuses on this topic would have made lively reading but were ignored. This timid editorial thinking didn't begin in recent years when our small papers were sold to the chains. The socalled independent hometown paper was never really that-it would have starved to death in the old days without subsidies from the railroads and other corporations. Nor is the amused condescension of the press a matter of one-party domination. Montana has only one Democratic paper-the Great Falls Tribune-but it isn't the Democratic sessions alone that suffer. The legislature is treated habitually as a gathering of crooks and fools. But we were too busy with the battle to worry about the snipers in our midst.

Before the session began, it looked as if reapportionment would be the big job. Actually, it played a minor role in the House, where it was accomplished, and only in the Senate, where it finally expired, did it consume much time.

Reapportionment in Montana, as elsewhere, was far more lethal to the Senate than to the House. The House committee went rapidly through hearings on a device called the "weighted vote" and disposed of this last hope of the condemned small counties, then turned to population maps for other plans. There were halfhearted efforts to roll back the Supreme Court decision—two resolutions regarding Constitutional Amendments—but a majority conceded that Petroleum County with 894 people didn't deserve the same representation in the Senate as Yellowstone with 79,016.

We were well along with our work in the House before we met with the Senate committee. They sat with stony faces and folded arms while we displayed our merchandise. We pleaded that if the legislature, rather than the court, did the job we would have something to say about how it was done. No response. At last one of the Senators said, "If I have to have my throat cut, I'm not going to hold the knife."

"What you Senators really believe in is one cow, one vote," a House member accused.

The maneuvers that followed in the Senate, drowning and resuscitating the same bill over and over again, meant nothing. The members in cowboy boots, representing the beef, wheat, and oil counties with small populations, had made up their minds before they came to Helena that the first order of business was to kill reapportionment. It took them fifty-five of the sixty days to do the job. They told us frankly they would not act on Congressional redistricting either, so we did not attempt that.

In July the U. S. District Court handed down a temporary reapportionment plan for the legislature and the Congressional districts which seems to have aroused no great resentment. Although some astute and valuable members will lose their seats, there will also be a welcome pruning of dead wood. Theoretically, the Democrats should benefit from the new plan, but some of the strongest opposition to the change came from Democrats in the Senate.

Lobbyists with Angora Mittens

Montana is a huge state (147,000 square miles), immensely rich in timber, oil, waterpower, beef, wheat, minerals; and yet our average personal income is below the nation's. Stocks in our big enterprises—St. Regis paper, Anaconda Copper and Aluminum, Montana Power, the oil fields—are largely held outside the state. We have areas of great prosperity, like Cut Bank, where garage doors open by electric eye and houses are designed with a bathroom for every boy, but these are balanced by pockets like Martin City, a leftover from the construction of a mammoth federal dam, where many families must accept welfare as a way of life.

For decades it has been accepted Democratic party doctrine that "the companies"—the Anaconda Copper Mining Company and the Montana Power Company—are to blame for our lagging economy and our failure to attract industry and population. We still ship our wheat, timber, beef, and minerals to other states for processing. Probably the two companies prefer the status quo, and undoubtedly they aid substantially those candidates who will be kind when it comes to regulation and taxation. They have, in the past, had their fingers in many pies, including higher education. But what could the companies do if the voters were not so easily divided?

The wheat and cattle men have a deep distrust of Butte and labor; Butte has no love for agriculture and its problems; the urban population resents the grip of farmers, stockmen, and oil men on state and local government. These divisions are handy tools for the company lobbyists. Add to this the fact that news coverage is shallow and meager; we are better informed on affairs in Paris and Sacramento than we are on the business and politics of our own state.

Anaconda and Montana Power-though they use different lobbying methods-seem to cooperate to achieve the same objectives: to keep things as they are and to allow the Democrats a Governor or a legislature, but never both at the same time. A shrewd lobbyist knows that threats and bullying are not nearly so effective as a few well-planted seeds of fear. To frighten a legislator, a lobbyist need only tell him a certain bill will hurt his county-where the votes lie. The easy ways to kill a bill are to spread the fear that it will (1) hurt the farmer, (2) ruin business on Main Street, (3) throw men out of work, or (4) raise local property taxes. When Anaconda was threatened by a netproceeds tax, word went around that this bill would close every small mine in the state.

At present Anaconda has such a skillful and agreeable lobbyist in Glen Carney that a legislator is ashamed of his suspicion that the old dragon is still there, wearing angora mittens. There are signs that officials of Montana Power would like to dispel its public image of the wicked fairy with a wand in every stew—they recently took on a smooth and pleasant young lobbyist who had been working for Great Northern.

The big two are not the only powerful lobbies. The railroads, Northern Pacific and Great Northern, are Madison Avenue in their approach. Their decorous young men take a legislator to lunch, attempt to arouse sympathy for their cause by earnestly describing the legal tedium that follows a meeting between a steer and a locomotive. One drink, a little chicken à la king, and back to the mine. Dull stuff compared with the days when hundred-dollar bills were tossed over transoms in the Placer Hotel.

Pacific Power and Light flooded us with uniform wires and letters on the REA "territorial integrity" bill. The Timber Haulers are well organized and alert to such threats as higher taxes on diesel fuel, truck weights, truck licenses. When the air-pollution bill came up we felt tremendous pressure from lumber, pulp, sugar-beet, and paper-mill interests.

Montana, with more fresh air per person than almost any other state, has pockets of contamina-

tion as aggravating as that in Los Angeles. Missoula's air contains five tons of measurable contamination per day per square mile, according to Elmer Flynn, author of the bill, and every twenty-four hours the average person inhales as much Benzo-a-pyrene (a cyclic hydrocarbon found in cigarette and wood smoke) as he would in smoking fifty-six cigarettes. The day the legislative committee visited Missoula to inhale some of this controversial air, the industry guilty of pollution had been shut down and the sky was an innocent bright blue.

When the Party Gets Rough

After a long, hard fight, not on party lines, the air-pollution-control bill went through both houses, and was flushed down the drain by Governor Tim Babcock's veto. The nurses' collectivebargaining bill, vocational education, and sixteen other bills met the same fate. The Governor's attitude toward the legislature was one of continuous pain and surprise. He seemed affronted by our very presence in Helena, and scolded us almost daily for doing nothing-and for passing so much ruinous legislation. It is one of the strange contradictions of Montana politics that the state sends Mike Mansfield to the U.S. Senate, yet elects a Governor who could not bring himself to proclaim UN Day, and was, until the chances looked bad, a proud supporter of Goldwater.

The fight over the minimum-wage law was the bitterest political battle of the session. Montana has no general minimum-wage law, and a modest proposal to start with one dollar raised howls of pain from small restaurant and grocery owners, some of them members of the Assembly. The wage picture is chaotic. The scale for plumbers is \$4.75 an hour, while a mechanic may get as little as \$1.50 from a farm-implement dealer. Retail clerks in the variety stores average 80 cents an hour; unskilled workers in hospitals get 75 cents. Farmhands, unorganized and often itinerant, were until recently among our poorest-paid workers, but the elimination of the Mexican braceros has improved this area.

Everyone agreed that a minimum-wage law was a fine thing, in principle, but everyone seemed to have a friend whose business would be ruined by it. The lawyer for the Yellowstone Park Company pleaded that a dollar an hour would be disastrous, and anyway the college students had so much fun making beds and waiting on table and seeing the park from the hotel windows that they shouldn't expect an exorbitant reward in cash. This com-

pany and Glacier Park Inc. have guaranteed monopolies largely because the National Park Service doesn't want to bother with more than one concessionaire in each park. Students work an eight-hour day, receive about \$100 a month, and pay room and board out of that.

While the minimum-wage bill was being dragged in and out of committee, debated on the floor, fought over in caucuses and bars, Mel Engels, the Republican State Chairman, rode it daily in his radio talks, calling it the baby-sitters' bill and making a mountain lion out of what appeared to be a pretty tame house cat. When the bill reached the Senate so many exceptions had been tacked on that it was scarcely even a gesture. The last straw, for the chairman of the Senate Labor Committee, was the exemption of employers in towns of under 2,500 population. He moved to table the bill.

Where Do We Get the Money?

The Governor's budget included \$17 million for a building program for the institutions and the University System. There was little doubt that even more was needed. The geology and physics buildings at the University of Montana (Missoula), housing over \$1.5 million in equipment and collections, were declared unsafe more than twenty years ago. The prison, built in 1869, has never had any major improvements. The correctional school for boys and the home for the mentally deficient are overcrowded and outmoded. Everybody wanted help. The question was how much help we could give, and where we would get the money.

The battle over money for the institutions centered around Francis Bardanouve, husky rancher from Blaine County, and chairman of Appropriations. He takes a passionate interest in our neglected custodial centers. He appeared one afternoon at the state hospital, said he would like to look around. When he didn't come back to say goodbye, the administration was puzzled. Next morning they discovered he had set up camp in a vacant room and had no immediate plans for leaving. He stayed a week, studying the hospital, the prison, and the other nearby institutions.

Usually gentle and forbearing—Bardanouve can't vote to put an animal on the predatory list—he was not so gentle when he faced the minority after their plea for a suddenly generous building and repair program. "The institutions have been living on jackrabbits for decades," he declared, "but it's only when a Democratic majority can

take the blame for increased taxes that we get these crocodile tears from the Republicans over their sorry state." Right here a split developed in the Democratic majority. Haunted by past experience, a block of Democrats opposed any increase in taxes, no matter how worthy the cause, but finally members willing to run the risk of defeat in the next election prevailed.

Experienced members deplored these caucus fights, but as a freshman I found them exciting, revealing, useful. In anger there is frankness. Of course the divisions were an embarrassment to the leadership. The Democrats were much harder to hold in line than the Republicans; they had a plethora of generals. During one caucus an aggressive member commanded, "Watch me on the floor." The leader asked with a rueful smile, "What about me?"

It is important for a new member to size up quickly these jockeying prima donnas, decide who can be trusted on taxation, education, conservation, etc. No one is equipped to judge more than six hundred bills in sixty days, and if you don't want to make an ass of yourself you'd better locate the experienced and reliable minds. You must learn to discount charm—and also the lack of it.

In spite of all our difficulties, a quantity of progressive legislation went through both houses. A mental-health center was allocated \$1,300,000. Kerr-Mills had no opposition. Vocational education was to be expanded. Driver education carried its own revenue provision—a tax on traffic fines and 5 per cent of drivers' license fees—but nearly everything else required a slice of the budget, and one of the largest slices was increased state aid to schools.

There was general agreement we would have to raise more money. The question was, how?

The Republicans, led by the Governor, wanted a \$5 tax on every individual income tax return, even if the return called for a refund, plus the use of an existing cigarette tax to finance the building program. The cigarette tax had been imposed to pay for veterans' bonuses, and the Democrats argued that it was illegal to divert it to a new use without the permission of the voters. Eventually both houses agreed to a modest increase in the individual income tax, and earmarked 5 per cent of the income tax and corporation license tax revenues to a long-range building program.

The debate on money raising was bitter and hard to endure because it came at the end of the session. We were by that time working seven days a week, taking an hour off for dinner, and coming back in the evening.

"Why doesn't somebody say how much we need,

so we'll know what tax increases have to be put through?" I asked an old-timer. For answer I got a tolerant smile, and at the last I understood that these pragmatic approximations are inevitable because no one knows until the closing days what the session will vote for, either in taxes or appropriations. To the committees in charge it must be like preparing dinner for an unknown number of guests from an unstipulated quantity of roast.

Tempers flared occasionally, attention lagged sometimes, especially in the late afternoon, and the assembly had moods, like a person. There were moments when almost anything would go through, and moments when nothing would. Late one afternoon a bill to make possible the investment of state funds in common stocks went over to final reading without debate, had to be hastily hauled back later.

Each of us had his own private anguish. The afternoon I climbed the stairs to a gloomy committee room on the balcony to defend my billboard-regulation bill I found forty outdoor-ad men from all over the state. It was not David meeting Goliath; it was the lamb chop meeting the wolf.

I noticed, as the weeks went by, how much I had to learn, particularly as a member of the State Administration Committee. We studied the fees and duties of architects, the regulation of well drillers, new concepts in mental health, Montana's ailing exhibit at the World's Fair. I discovered for myself the massive bureaucracy of the highway department, almost a fourth branch of government, so well nourished as to be largely independent of public opinion. This fat in a lean state budget is laid on by our assumption that all gasoline taxes must go to the highway department. Montanans never complain about the cost of roads. We love distance, the moving landscape seen from a fast heavy car. We still drive four hundred miles just to have lunch; our fishing and hunting enthusiasts, as well as the ranchers, want good roads. Now and then a brave but foolish legislator starts an investigation of the highway department, usually the payments for right-of-way, begins with headlines, subsides into the back pages like a damp firecracker.

It Was Not All Grim Toil

Although there was scarcely a night when I didn't go to sleep thinking about a bill, and wake up to think about it again, there were entertainments and sideshows. Each big lobby gave us a dutiful dinner, but the Helena people, old hands

at this business, gave us the sort of soothing evenings we needed, like the one at Henry Loble's amusing old Victorian house. We were always fed roast beef, as if they feared our blood count was down. At Henry's, amidst the flowers and soft lights, as at every other party, we talked about bills.

Some of the entertainment required more patience than a committee hearing. I think we all hated the sound of the human voice after the first week, and one or two parties included speeches. Then there was the ordeal of the Governor's ball. Shy wives worried over what to wear, but experience showed that the best costume would have been a coating of Havoline 20 to facilitate passage through the crowd. We had our orders—Senators to the north and Representatives to the south end of the ballroom, for the Grand March. A baffled milling about took up the time before the Governor and his lady arrived. The music began. The men believed that to a march, one marched. The ladies preferred to walk. The effect was lumpy.

The Montana Club, just off Last Chance Gulch, where the private rooms once harbored the florid intrigue of the Copper Kings, was a favorite spot for dinner and dancing. But nothing equaled Tracy's as a final gathering place at night. Coming into it for the first time down the steep back stairs, I thought I was on stage for a grim Sartre drama. The place had a mysterious drawing power for legislators too tired to go to bed. Perhaps they liked it because they couldn't hear what anybody else was saying.

Along with the other entertainment should be included a maneuver of the Governor's. He had, during the final days, become so disenchanted with us, so anxious to have us gone, that he must have decided to pretend we were no longer there. He sent his veto of a minor bill to the Secretary of State rather than to the Speaker. Rage and threats from the Democrats, hasty telephoning by the Republicans, and just before midnight the bill was exhumed from the Secretary's office and rushed to the House.

Gusts of humor helped us through some heavy days in the chamber. After he had explained a bill, Francis Bardanouve told us, "Now, if you're not confused you haven't been listening."

Vivid figures walked on and off stage. Our Chief Clerk, holding a long cigar and wearing vestments of hunting red or Good Humor white, leaned on the podium and let us know what he thought of our votes when he intoned the count. The Speaker displayed a passionate and inexplicable interest in daylight saving time for Butte. Two ex-Governors were busy in the corridors—

John Bonner and J. Hugo Aronson, the affable Swede who came to Montana as a boy on a freight train and prospered in the oil fields around Cut Bank. Aronson told me with a twinkle, "Old Governors don't just fade away, they become lobbyists."

There were a few sideshows put on by alcoholic or amorous members, but the legislature is much less a holiday from marriage than it was in the old days when a few earnest souls carried on the business while the rest drank and roared in the lobby and the hospitality rooms. Now the wives come along, bring their knitting, sit on the leather lounges on either side of the House and listen to their husbands' speeches, take them to task later for what they said or didn't say. It is a domestic, carefully watched scene. There are always school-children and voters from home in the gallery. This tends to make the sessions a good deal more businesslike.

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Is It Moribund?

As soon as I began to campaign I saw the legislator as a sort of meat grinder or Univac, into which are fed the demands and complaints of the citizens, and out of which is supposed to come something useful in the form of law. The legislator is a mediator, a listener, an adjuster. He discovers sores, needs, inequities he had no idea existed. Who is to act on these frictions if not the legislature? Shall we dump all the business of fifty states in the lap of Congress, ask the Senate to decide, while it is debating foreign policy, whether Fish and Game or the Highway Department shall supervise Montana parks?

There has been some harsh talk about state legislatures, some students of the system stating flatly that they are "dead and ripe for burying."* This blanket condemnation, it seems to me, is unrealistic. The things these gentlemen find wrong with the state legislature are the things that are exasperating in the democratic process wherever we study it—the snail's pace, the trial and error, the wrong decisions made because their proponents have the gift of persuasion, the occasional corruption. These flaws are the inevitable lice on the hide of Democracy. Shall we butcher the beast to get rid of the lice?

If we throw out the state legislature, we lose more than its lawmaking function. As national legislation is on the whole more progressive than state legislation, so I believe state legislation is more progressive than local thinking. It is largely

Demise of a Party-People

by Brother Luke M. Grande, F.S.C.

The life of every yuk-yuk glad hands across a crowded room cigar-smoked diamond-studded brotherhood, to all he doled his heart: a joker's dribble cup.

Punch-lines rehearsed amid debris of fun and games he sits alone in stunned surprise and dies of thirst.

because of the crusty viewpoint of some of our city fathers that we have burdened the legislature with such matters as city salaries and pensions, air pollution, safety in swimming pools. Further, during the session a legislator learns where his state stands in the national picture—is it above or below the national average in income, education, institutional methods, economic growth? He must indicate, by his vote, what he believes should be done about the shortcomings. A live legislative session helps a state to reconcile its thinking and its aims with national thinking and national aims.

The assembly serves to reveal to the state its pockets of eccentric opinion. In this session there were ultraconservatives who professed a fierce allegiance to states' rights, but given the power they would have made state government impossible because they were never for anything. They voted No except on small favors for their own counties. They were full of fears, especially of federal aid, which they saw as the cheese in the trap of federal control. Less timorous members argued that we are entitled to all the federal aid that's going because we educate most of our young people for export to other states.

I should not like to see any state legislature disappear, but in Montana where the sparse population is divided by miles and mountains, this is a forum, a battleground, a town meeting we must have. Its creaking machinery, its tedious debate, its insane rush at the end, may impede but do not cancel its primary function, which is to voice and deal with the stresses and the needs of the people of Montana. In our state, the legislature is very much alive.

^{*}Newsweek, April 19, 1965.

Trembling the Inner Wall

by Esther Gurewitz

This summer, the sun is a frog black and ocean huge he swallows the sky.
His tongue, miles long whips pain around the world.
The clock ticks blindness is the constant blow of a blunt axe white eyes bite raw each hangnail hour trembling the inner wall the clock ticks.

In the hospital
I zoom into orbit
on a carpet of words
the air is hugely owned and fouled
by dialed sound
like vermin flurrying
from wall to floor,
radio and screen
brimble and mamble.
In this obscene jangle
gentle silence hides.

Voices are colors that clothe and alter the inner wall. A brown balloon, a silver tree, a shrilling horse with slashing hoofs and hating teeth plunging ever toward me.

My bones are withered weeds the sea has long disowned.

Velvet hands fold me into a bed with a golden coverlet. To make a lap the bed sat up placebo bosom forward thrust.

The nurse is a silver tree
"Are you all right
little dear?"
she says to my gray hair
tweaks my toes and disappears.

In shrouded space I hang
with no floor, no wall, no ceiling.
From no door or window will light ever enter.
Time hangs.
Will this noose kill or loosen?

A tray slides toward me to feed me two aides hover my seeing hands flutter. "Tell me what's here or let me discover." They disappear.

"Do your headaches affect your vision?"
The intern, three weeks new, says,
his voice a brown balloon.
"How can they?
I'm blind."
To cover his confusion
he floats away.

Having no shower cap
I ask for a plastic bag for my hair
there is none
I'm told.
While I shower a head thrusts in
"You must never be alone,"
I'm told.
Beside my bed
a plastic bag lines the wastebasket.
When I'm home
I remember
death can be discovered
in a plastic bag.

In a chair of man-made leather in leaf and living green he sat.

My seeing hand gropes for a whisper of shelter. His hands lay limp and silent on his lap neither clasping nor disowning mine.

"When I knew I'd be blind I longed for cancer. Cancer kills," I say.

"Don't get analytical,"
his voice held flint.
He needs no limp leech to cling to him
a shimmering sword slashed a sharp line
cleaving his hand from mine.

Senses of the **Natural World:**

Recent Works in the Philosophy and History of Science

Science and the Revenge of Nature: Marcuse and Habermas. By C. Fred Alford. Gainesville: University Presses of Florida, 1985. x + 226 pp. Footnotes, index. \$24.50.

Deep Ecology: Living as if Nature Mattered. By Bill Devall and George Sessions. Salt Lake City, Utah: Gibbs M. Smith, Inc., 1985. x + 267 pp. Annotated bibliography. Cloth \$15.95, paper \$9.95.

Dreamtime: Concerning the Boundary Between Wilderness and Civilization. By Hans Peter Duerr. Translated by Felicitas Goodman. New York: Basil Blackwell, Inc., 1985. xi + 462 pp. Illustrations, footnotes bibliography, index. \$24.95.

The Natural Alien: Humankind and **Environment.** By Neil Evernden. Toronto, Ontario: University of Toronto Press, 1985. x + 160 pp. Index, footnotes. \$19.95.

The Eagle's Nest: Natural History and American Ideas, 1812-1842. By Charlotte M. Porter. University, Alabama: University of Alabama Press, 1986. xii + 251 pp. Illustrations, footnotes, bibliography, index. \$24.95.

Respect for Nature: A Theory of Environmental Ethics. By Paul W. Taylor. Princeton, New Jersey: Princeton University Press, 1986. ix + 329 pp. Bibliography, index. Cloth \$37.50, paper \$12.50.

Darwin's Metaphor: Nature's Place in Victorian Culture. By Robert M. Young. New York: Cambridge University Press, 1985. xvii + 341 pp. Footnotes, bibliography, index. Cloth \$44.50, paper \$15.95.

What is nature and what does nature mean? We all have a sense of nature existing out there, physically real, autonomous, other than ourselves. And yet we all understand ourselves as existing within nature

too. We are at once apart from and a part of the natural world. It is difficult to speak of nature, either as idea or as environment, without at the same time (at least implicitly) addressing the question of human nature.

"Environment is never isolated from belief," writes Neil Evernden in his Natural Alien. "Our perceptions and expectations of environment are inseparable from our moral commitment to particular beliefs and institutions" (p. x). This essay reviews part of the recent literature on beliefs about nature - and therefore about humanity. The books selected all discuss different senses or meanings of the natural world and are written from a variety of perspectives: anthropological, historical, ethical, and philosophical.

Our beliefs find active expression in our behaviors, which is why works that examine our beliefs about nature have practical, social, and not merely "philosophical" importance. Does anyone seriously doubt that our ideas and attitudes concerning nature have done much to create our current environmental crisis, for example? The ancient Jewish prophet might have been peering into the late twentieth century when he

The earth mourns and withers, the world languishes and withers; the heavens languish together with the earth. The earth lies polluted under its inhabitants; for they have transgressed the laws, violated the statutes. broken the everlasting covenant. Therefore a curse devours the earth, and its inhabitants suffer for their guilt: therefore the inhabitants of the earth are scorched, and few people are left.

-Isaiah 24: 4-6 (Revised Standard Version Bible)

We've got nature by the throat, and it's more than suicide we're committing. Even apart from the harm to us from destroying the world's rainforests, testing nuclear weapons, poisoning lakes, depleting the ozone layer, and producing toxic wastes and acid rain the question remains, amid the dying species and mutilated landscapes: how does nature itself suffer? Will we learn to recognize, in the midst of our assault upon creation, that nature has value in and of itself and does not exist for our sake alone?

On the one hand nature, whatever else it may be, is a social product. Many people, including scientists, have assumed a direct, immediate, one-to-one correspondence between scientific theory and natural reality. But scientific theories map natural reality, and as we all know, the map is not the territory. Nature is always richer, subtler, and

more fecund than its incomplete scientific representations. Before it was called "natural science" the theory and practice of that form of power we know as scientific was known as natural philosophy, natural magic, natural history, and natural theology. Strands from all these proto-scientific disciplines were woven together to create what only a few positivists persist in believing is now a body of pure and disinterested knowledge. Knowledge of nature is human and therefore personal knowledge. Scientists have interests, beliefs, presuppositions, and commitments, both private and public, both tacit and conscious. Science is a valueladen activity, inherently political (in the widest sense), whether or not the scientists acknowledge their values and political assumptions.

On the other hand nature's order is larger than the "natural laws" discovered and invented by scientists. The very casting of natural phenomena in terms of law is revealing. The term "natural law" derives originally from political and ethical theory and from theology. Acknowledging the term's own history makes clear its hierarchical and coercive connotations. When scientists refer to "natural law" they are using a metaphor, not a transparent description. "The wild" or "wilderness" are two other metaphoric terms for nature that highlight the intersection of ecological, religious, and ethical perspectives on the world, "Wilderness" conveys the idea of something ungoverned. Etymologically, the term "wilderness" derives from "will-of-the-land" in primal Indo-European thought (see additional readings). This metaphysical sense of nature ascribes to wilderness intrinsic value and volition, wholly independent of any human use or control. This belief embedded in the word reminds us that ancient peoples sometimes set aside wilderness areas as sacred groves and sanctuaries, in recognition of nature's worth.

Dreamtime, by Hans Peter Duerr, is an anthropological exploration of (as the subtitle puts it) "the boundary between wilderness and civilization," the world of ecstatic experience and sacred presence. In the harsh, blistering landscape of Australia's outback, invisible pathways cross the earth—the "songlines," the routes that aborigines walk in imitation of their ancient totemic ancestors. And as they walk, they sing the songs with which the First Ones sang the world into existence: one rock, one tree, one animal at a time. The songlines belong to the world of "dreamtime," a primal place/time where/when humans behave like wild animals, and moral and social norms are violated. This primal world, as experienced by archaic, nonwestern peoples, has been dismissed as superstitious fantasy, religious myth, drug-induced illusion, or neurotic projection. Yet *Dreamtime* reminds us that as we become better observers of nature—or at least those of nature's aspects amenable to scientific examination—we forgot what it once meant to participate directly in the world.

Duerr's book aroused both popular and academic interest when first published in German in 1978. His humor is dry, his wit self-deprecating, with a taste for eyebrowlifting irony—all qualities preserved in the English translation. The book remains a groundbreaking ethnographic study that ranges from old Norse sagas to aboriginal initiation rites, from the life of Jesus to fertility-cult practices, shamanism to politics, ethnopharmacology to psychopathology, comparative religion to philosophy of science, witches to werewolves and back again. Both fascinating and sheer fun, this is a vivid tour through the strange world "beneath" human culture, past and present, in the tradition of James G. Frazer and Lynn Thorndike (see related readings).

Dreamtime's approximately 110 pages of primary text is dwarfed by its scholarly apparatus; there are more than twice as many pages of subtext in the endnotes (some of which are essays in themselves). The book has 26 plates and an 86-page bibliography—with 38 items listed under "Z" alone!

Duerr argues that reality for us is what is enclosed by the cultural fences we have erected to keep the wilderness out. Across the fence lies mystery, a wild place at the heart of the world, discernible only by the sense of wonder; for the eye of scientific reason cannot see it. What we are cannot be fully known until seen from that outside; for underneath our civilized surfaces we are "savage"—a word stemming from the Latin silvaticus, "of the forest," i.e., wild. To walk the wild side is dangerous. But the journey makes sense of all the folkloric stories and rituals wherein and whereby humans "become" other creatures, for to the archaic mentality, self-recognition, self-awareness, and self-understanding come by confronting what a person both is and is not. Simply crossing "the boundary between wilderness and civilization" does not impart knowledge. Rather, knowledge only "awaits the one who returns from the wilderness," forever and profoundly affected (p. 74).

The existence of dreamtime raises disturbing questions. We view and interpret the world through cultural categories and frameworks of belief (e.g., the idea of natural law). Believers in the omnicompetence

of scientific naturalism say that anyone who claims to speak with spirits, or become a nonhuman being, is simply hallucinating. "Primitive" people, in their anxiety over nature's silence (we think) populate the world of wilderness with creatures that simply *do not exist*. Against this view, a Tuscarora Indian affirms that the "uncounted voices of nature that for the whites are dumb, are full of life and power for us" (Duerr, p. 90).

In his conclusion, Duerr quotes an aboriginal Australian:

White man got no dreaming Him go 'nother way White man him go different Him got road bilong himself (p. 125).

We have left nature's road, a road that many have believed was God's road too. Our road "bilong science"—which is both curse and blessing, a way of seeing and of remaining blind. Most histories of science concentrate on what has been gained. Duerr invites the reader to consider what we may have lost.

The Eagle's Nest, by Charlotte Porter, is a study in the history of natural history. In the United States, the systematic study of natural history emerged during the three decades following the War of 1812. Historians have not often dwelt on this period, but it was a key time of transition from the independent efforts of individual naturalists to the organized gathering and institutional control of nature's artifacts and the rise of peer-reviewed publications.

Philadelphia in the first half of the nineteenth century was the nation's scientific center, bringing together institutions (museum collections, reference libraries, scientific societies) and people (explorers, naturalists, painters, and publishers). The Quaker city nurtured an educated reading public eager for elegantly illustrated, stylishly written and produced natural history books. Prominent authors of such books - and early members of the city's Academy of Natural Sciences-included Thomas Say and John James Audubon. Added to these Americans, the arrival of gifted foreign-born naturalists such as Nuttall, Troost, Rafinesque, and Le Sueuer, along with the generous patronage of William Maclure (who was responsible for the nation's first geological survey and for a notorious experiment in atheistic utopianism – the New Harmony project) created an enthusiastic group of researchers dedicated to the study of specifically American natural history in all its aspects, from conchology and mineralogy to botany, and from entymology to ornithology and mammalogy.

Naturalists in the new world filled their notebooks with descriptions of dark, brooding cloudscapes, roaring cataracts, rocky terrain, and majestic mountain forests. They shared with the Romantics a passion for the aesthetics of the sublime and the infinite; but unlike many of their early nineteenth-century British and German colleagues, their nature was less deeply mysterious and potentially dangerous wilderness than a coherent, albeit untamed, creation. Travellers tried to bring order to their observations of new geological formations and plants and animals unknown in the old world by applying tools such as the Linnaean system of classification.

Another related image for nature in the new republic was the garden. America was conceived as a kind of biblical Paradise in which naturalists lived and worked at home and in harmony with flourishing plants and harmless animals. It was as if the scientific Americans were in innocent and "peaceable possession of an eagle's nest" (Porter, p. 10; the phrase is from Titian Peale who studied western natural history, and after Audubon, was the foremost American painter of birds). Edward Hicks, the Quaker folk artist, produced a body of paintings between 1820 and 1849 known as the "Peaceable Kingdom" series. The title is an allusion to Isaiah 11:6; characteristically, beautiful children are depicted standing at rest among unlikely groupings of docile beasts, feline predators reclining with lambs and large oxen. Though this utopian vision of the American landscape as an "uncontaminated gift" (p. 175) was religiously inspired, it also illustrates the popularization of American biological research and the links between the art world and Philadelphia's scientific community. (Maclure's New Harmony farms in Indiana were a shortlived and secularized attempt to realize Hicks's pastoral idealism.)

During 1809–10, the ornithologist Alexander Wilson serially published "The Foresters," a poetic commemoration of his visit to Niagara Falls, with its "stunning tumult thundering on the ear." It is worthwhile quoting a few lines of this work, which epitomizes a prevailing early nineteenth-century American view of nature:

Above, below, where're the astonished eye Turns to behold, new opening wonders lie, This great o'erwhelming work of awful Time In all its dread magnificence sublime, Rises on our view, amid a washing roar That bids us kneel, and Times great God adore (p. 164).

Porter's account of early nineteenthcentury science in the U.S. is clear, focused, and scholarly; the book is well-grounded in the primary sources, including not only the contemporary published natural histories and archival manuscripts, but poetry, paintings, and museum specimens.

Specialists will be interested in her brief discussion of the botanist Asa Gray's early career. Gray's search for a new method of "natural" classification and for professional standards for scientists led him eventually to Britain and to Charles Darwin. Porter's story ends in 1842, when Gray joined the faculty at Harvard; after 1859, he became America's leading scientific and Christian evangelical defender of both Darwinian evolution and "natural theology," that mode of thought that saw in the details and general order of nature the presence, power, and wise purposes of God.

The "creation-science" controversy has led many to think that religion and science inevitably conflict. Darwin's Metaphor, by Robert Young, helps us to understand the complex historical connections between evolutionary biology and social and religious beliefs. It was long thought that Charles Darwin's version of evolution substituted the operation of chance and natural selection for divine design in nature. Recent historians, however, have established Darwin's deep indebtedness to the British empiricist tradition of natural theology, which from the days of Newton and Boyle moved relentlessly from nature up to nature's God (see related readings).

One of the best clues to the religious roots of Darwin's science can be found in his use of metaphor. Metaphors such as the "tree of life," the "face of nature," and the "entangled bank"-not to mention the basic ideas of "natural selection" and "struggle for existence"- are evocative and allusive, rich with connotations. Darwin found it difficult to avoid the language of personification, a language that clearly implied intention, volition, and conscious agency. On page 84 of the first edition of the Origin of Species (London: John Murray, 1859) Darwin wrote that natural selection acted "only through and for the good of each being" and that, indeed,

natural selection is daily and hourly scrutinising, throughout the world, every variation, even the slightest; rejecting that which is bad, preserving and adding up all that is good; silently and insensibly working, whenever and wherever opportunity offers, at the improvement of each organic being in relation to its . . . conditions of life.

Darwin's process of natural selection was not only metaphoric, it was virtually mythic and godlike; even his own circle of friends recognized that his language effectively deified a putatively natural mechanism.

Robert Young's book, Darwin's Metaphor, is subtitled "nature's place in Victorian culture." It is a collection of six groundbreaking essays written originally in the late 1960s and early 70s and presented here with a new preface and chapter postscripts and an updated, comprehensive bibliography. Young's work has yet to be superseded by the hyperactive Darwin Industry of the late 1980s – partly because he refused to avoid the large, messy questions that some historians overlook in their examination of minute particulars. So Young provides the reader with clear, vivid, and provocative studies of Darwinism in context, rooted in the primary documents, and concerned with the links between social and biological theory, between natural theology and evolutionism.

Young is interested in the deeper continuities underlying the very real changes Darwin wrought - and so he urges that "orthodox accounts which stress the growth of scientific naturalism as a development away from traditional theological and social doctrines must be fundamentally reconsidered" (p. 199). Science, for instance, did not replace God; rather, "God became identified with the laws of nature" (p. 240). At first, Darwin believed the laws of nature were designed; naturalistic explanation in science explicitly exalted God. Darwin died a muddled, half-agnostic theist, whose deity was wholly immersed in nature. The one theological question that he seemed unable to avoid was "theodicy"-how could evil in nature be justified by its imagined good purposes or consequences? In the Origin, Darwin provided the rudiments of a new, evolutionary theodicy when he argued that out of the "war of nature" and the subsequent weeding out of the weak, even "higher" and more "improved" forms of life could arise (see pp. 79 and 490 of the first edition of Origin of Species).

In his approach to the subject, Young shows how science can mystify as much as it can make clear. The post-Darwinian controversies were not really about evolution vs. creation, or the defeat of religion at the hands of science. Young argues that "the evolutionary debate," far from signaling a secular triumph over religion, "produced an adjustment within a basically theistic view of nature" (p. 16). There was a hidden agenda shared by all participants in the debate, i.e., the rationalization of existing social and political arrangements and the reconciliation of people to the way the world is and "has" to be.

Take the essay after which the book is named, "Darwin's Metaphor: Does Nature Select?" In this subtle account Young shows how ambiguous and ideologically loaded

the term "selection" could be. Darwin's prose virtually invited all those theistic and racist and capitalist and militarist explications of evolution that emerged after the Origin. "Social Darwinism" is not inaptly named, though Darwin himself would have been dismayed at how easily blacks, women, fetuses, the poor and the handicapped, Jews and others were later designated as unnatural or less fit.

"Science is a social activity, born of society, and mediating its structures and values, at least as much as it is born of nature," Young writes (p. 186); and all attempts to know nature "are inescapably mediated through human consciousness, and consciousness is a sociopolitical and ideological mediator" (p. 214). When nature has been presented as the expression of God's will, when laws describing what is are taken to prescribe what ought to be, an unjust social status quo has often been made sacred and therefore been made to seem unchangeable. Nature in Darwin's time, no less than in ours, has normative and political, as well as physical dimensions.

Neil Evernden is one scholar who seeks to join together (again) what modern science has often torn asunder: value and nature, humanity and environment. The fatal flaw in many arguments for environmental concern is the appeal - either explicit or covert-to self-interest. Many antipollutionists are more alarmed by threats to human health than by harm done to the earth itself. The question "What is nature for?" denies nature's intrinsic value by assuming that humans are "the sole bearers and dispensers of value" (Evernden, p. 12). And this objectifying defense of the environment is ultimately self-defeating. What is actually accomplished in "preserving" a mountain gorilla, for example, in a zoo? Only a package of gorilla-genes unable to interact with its native habitat, including other gorillas. As Evernden notes, "A solitary gorilla in a zoo is not really a gorilla; it is a gorillashaped imitation of a social being which can only develop fully in a society of kindred beings. And that society in turn is only itself when it is in its environmental context" (p. 13).

In Natural Alien Evernden draws on both biology and phenomenology to interpret the relation between mind and nature and to reconceive the relation between humankind and environment. Humans, he says, are homeless "natural aliens." But there is hope for a new self-understanding of ourselves as persons-in-the-natural-world, using the work of such philosophers as

Husserl, Merleau-Ponty, and Heidegger. Phenomenologists tend to deny the divisions we are used to making between fact and value, self and world. So perhaps scientists are kidding themselves in proclaiming their objectivity; perhaps science misses something in devaluing and avoiding the subjective.

Natural reality precedes our conceptions of it, but because the relationship between nature and our ideas of it is not simple, direct, and complete, it is also true that our conceptions and expectations precede natural reality-as-known. That is, sometimes nature is made to conform to our ideas and methods of inquiry, rather than vice versa. During the scientific revolution Galileo and others used mathematics to describe and analyze physical objects and events. This proved to be a very powerful way not only of knowing but of censoring nature. For if something was not quantifiable, it became - given the narrow focus of scientists' aims, axioms, interests, and methodssomehow less real. An apple's mass or velocity was hard, quantified knowledge; its taste, as a mere "secondary quality," was no longer of scientific interest.

The *methodological* exclusion of God, human values, or social interests in the practice of science is essentially sound. But science practiced in this way cannot justify *metaphysical* claims that, for example, science disproves God, values have no role or relevance in science, or scientists are unaffected by society. Looking for the physical and chemical factors that produce biological phenomena usually makes good scientific sense. But science turns into ideology if it claims that physics exhaustively accounts for biological phenomena.

The presuppositions found in scientific naturalism since the seventeenth century impoverish reality, reducing lived-in and cherished "place," say, to merely physical "space." In contrast, phenomenology attempts a deliberately naive encounter with the world-as-it-is. As Evernden writes, "Phenomenology requires a return to the things in themselves, to a world that precedes knowledge and yet is basic to it, as countryside is to geography. . . . [This may seem a backward way of proceeding] for we think of knowledge as something achieved through observation and analysis, not as something which precedes it. Yet this notion presupposes an observer who surveys the world and questions it" (pp. 57-58).

Although phenomenologists distinguish physical reality from our knowledge of that reality, they nevertheless reject the model of disinterested observers passively acquiring objective knowledge of an external, signal-emitting world. The world for phenomenologists like Heidegger is the domain of the

understandable, the reality humans experience as bearing meaning and significance. To be a human person is to be surrounded always and everywhere by what John Wild has called a "field of care" or "world-field" (see related readings). To perceive nature only as "resource," to see the wooded slopes as a "forest of timber" is to deny nature its worldhood, says Evernden, and to "simultaneously deny ourselves access to it as home" (p. 66).

For Evernden, our detached view of nature is the "ultimate act of the vivisectionist," for what we have done is "severed the vocal cords of the world" (p. 16). This disturbing image is taken from the French father of experimental physiology, Claude Bernard, who noted in the 1860s how, when cutting into living animals, it was sometimes necessary to sever the vocal cords so that the horrible cries of pain could not be heard. Bernard himself-absorbed as he was by the pursuit of ideas—wrote that as a scientist, one no longer heard the animals that screamed, one no longer saw the blood that flowed. The scientists according to Bernard saw only the idea of the animal – a scientifically available creature concealing

How did this essentially alienated scientific worldview come about? What the authors of the seventeenth-century scientific revolution called the "Book of Nature"-the Book of God's Works, as distinct from the Book of God's Words - was a world deprived of life, a mechanized world. The human mind, feelings, values, experiences, hopes, and meanings were all subtracted from scientific reality. As Evernden rightly comments, "It is more than a little strange to think of people accepting as normal a view of nature from which they are excluded" (p. 18). Nature-what had been understood as God's loving handiwork, or God's body, or the theater of God's glory, the material and spiritual home of all creatures great and small-was reduced to valueless matter, dead and silent. Nature, God's good creation, the coplayer with humanity in a cosmic drama of covenant, fall, and redemption, became estranged and impersonal—what the poet Coleridge sadly and angrily called "the natural alien."

In Evernden's usage it is we who are alienated from nature, rather than nature from us. He wants us to reimagine the world in all its depth, meaning, and astonishing wonder. Amen.

In *The Revenge of Nature*, C. Fred Alford thoughtfully relates fundamental debates in critical theory to current environmental questions. Specifically, he asks

whether the ecological crisis does not reveal something essentially wrong with modern scientific reason as practiced and, in turn, cast doubt on the viability of the whole "modern project."

What Alford calls the "revenge of nature" has two aspects: (1) the revenge of physical nature, the consequences of our environmental violence, and (2) the revenge of *human* nature on a scientific and technological "progress" that systematically represses the human need for peace and joy and sees nature as an object for domination. The "revenge of human nature" produces angry, objectified, devalued, and socially unrooted individuals especially vulnerable to mass political and economic manipulation.

Alford examines the respective analyses of science by two leading social and critical theorists, Herbert Marcuse and Jürgen Habermas. He relates their works to the new philosophies of science created by Thomas Kuhn, Paul Feyerabend, Mary Hesse, and others.

Marcuse, who has been accused of flirting with "nature romanticism," sees the structure of science as historically conditioned and therefore relative. For him, a revolutionary change in social and economic relations would entail a concomitant revolutionary body of technological and scientific knowledge and practice. Habermas describes Marcuse as promising the "resurrection of fallen nature" (Alford, p. 5).

By contrast, Habermas himself understands the basic structure of science as given by the objective character of all human labor. Science is a mode of "instrumental action"—just an intellectually sophisticated kind of work, not essentially different from digging a ditch or building a boat. Both science and labor are aspects of the same human struggle to wrest existence from an ungiving and unforgiving natural world.

Alford believes that both Marcuse and Habermas make some mistaken assumptions about science. Both build on the critique of instrumental reason developed the Frankfurt School of critical theory. According to this critique, science is one aspect of a wider way of thinking—instrumental reason—which came to dominance during the eighteenth-century Enlightenment. Instrumental reason saw nature (including human nature) as an object to be not only explicated and controlled, but overcome, exploited, conquered.

Habermas has claimed that nature must always be approached as the object of present and future manipulation. That is, the world is humanly constituted (made knowable, as opposed to being felt) in terms of two interests: the technological interest in control and the practical interest in communication. In other words, we can know nature in only two ways: as an object of human labor and as a place for social

All this has vital implications for creatively understanding the relationship between humanity and its environment. Friendly critics of Habermas have worried that his system does not sustain ecological responsibility. If nature is necessarily an object of the human "will to power" then how can the human/world relation be anything but severely adversarial?

For Habermas himself, nature is still to be treated with respect and dignity, even if it cannot be regarded as what the eighteenthcentury philosopher Immanuel Kant called an "end in itself." Kant distinguished between ends and means, persons and things; for him a "rational being" such as a person had value in and of itself and was therefore an "end in itself" that could not be used arbitrarily, merely as a means or as a thing. Habermas argues that an instrumental view of nature as a mere thing does not rule out what he calls compassion for and solidarity with creatures in their suffering. Animals, therefore, have ethical significance (see Alford, p. 145). Indeed, a strictly instrumentalist approach to nature does not necessarily lead to environmental damage. As pointed out above, it is entirely possible to argue that in our best self-interest (apart from any possible rights or interests of trees, lakes, and fish) we should stop the biological and even architectural havoc being wreaked by acidic and toxic precipitation.

The Revenge of Nature, though insightful, and well-argued and researched, may seem obscure for those who do not ordinarily read much philosophy. Alford, too, is less concerned with the natural world per se than he is with human nature, and with issues in the philosophy of science. By way of conclusion, nature, for Habermas, "remains closed to us" since it finally is "the other with whom no reconciliation is possible" (p. 92). Alford himself prefers a neo-Marcusian vision of reconciliation with nature.

Radical environmental ethicists, long comfortable with the notion of animal rights, have condemned in print the ancient art of bonsai as torture (see J. L. Arbor, "Animal Chauvinism, Plant-Regarding Ethics and the Torture of Trees," Australasian Journal of Philosophy 64 [1986]: 335-39). Yet this attitude toward nature as a person is not confined to radical groups. In April 1988 the press referred to as the "Temple Square Massacre" the wrongful felling of

four trees by a person or persons unknown in downtown Brooklyn. And a contractor who was convicted of having "ripped up 26 trees - oak, poplar, sassafras and sycamore maple - on the Cross Island Parkway, clearing a view of Little Neck Bay from two homes being built on 218th Street" agreed, in one of the largest settlements in such a case, to supply New York City with 180 young trees valued at one hundred thousand dollars. As Parks Commissioner Henry Stern declared: "The Bayside 26 shall not have died in vain" (New York Times, 14 May 1988, p. 35).

The term that describes this attitude toward nature is "deep ecology." The deep ecologist believes that every natural thingforests, mountains, bugs, beavers, lakes, whales, owls, and eagles - has an intrinsic rather than merely instrumental value, an inherent worth independent of any human use or appreciation. The distinction between radical or deep ecology and reformminded or shallow ecology was first made by the Norwegian philosopher, mountaineer, and environmental activist Arne Naess in 1973 (see related readings). Shallow ecology regards nature as made up of resources requiring responsible stewardship, management, and conservation. Insofar as respect for nature surfaces in the political world—as in the acid rain debate—it is of the shallow type. That is, it is fundamentally anthropocentric; the world has a built-in hierarchical moral order, with humans "naturally" on top. Ultimately, "environmental protection" is pursued in the interests of human welfare. Deep ecology, on the other hand, advocates ecological egalitarianism. Deep ecologists understand the world as a web of naturally interdependent entities embedded in various social communities, in contrast to the collection of discrete individuals and physical environments seen by shallow ecologists.

In Deep Ecology Sessions and Devall have provided a very informative, though loosely organized, introductory handbook to what is both a new worldview and a social movement. The book combines scholarly analysis, partisan polemic, poetry, quotations from ecological saints, and various appendixes. The annotated bibliography and address list of deep ecology action groups add to the work's usefulness. By turns historical, scientific, political, ethical, metaphysical, and religious, the coauthors/ editors offer a thorough critique of the reigning human-centered, shallow ecological attitudes displayed by most governments, businesses, churches, and wildlife or wilderness groups.

Deep Ecology is designed to aid the reader in "cultivating ecological consciousness." This involves "becoming more aware of the

actuality of rocks, wolves, trees, and rivers." We must learn "to appreciate silence and solitude," "to be more receptive, trusting, holistic in perception." All this is grounded in a vision of "nonexploitative" science and technology and requires taking responsibility, clarifying intuitions, acting from principled consciences, and questioning the dominant worldview (p. 8). Sessions and Devall seek not simply more knowledge about nature, but wisdom in communion with nature. Deep ecology, finally, is a quasi-religious ecosophy, a way of living. There is no distinction between the sacred and the profane. Ultimately, nature is valued as godly, even godlike.

From a feminist perspective, it is possible to see deep ecology as a spiritual quest-in an age of barren, modern secularity-for wholeness on the part of self-estranged males. (Why is the intellectual leadership of the movement so masculine?) Deep ecologists generally seem unaware of the deeper sources in patriarchal culture of the dualisms, the hierarchies of domination, and the alienation they criticize. In their desire to produce via ethical abstractions an alternative consciousness and a perfectly harmonized social-and-natural order, deep ecologists are rationalistic and technocratically utopian. Some "ecofeminists" have argued that deep ecology is just another self-congratulatory reform movement rather than a genuinely radical feminist "transvaluation of values" through the acceptance and affirmation of women's experiences and ways of knowing (see related readings).

The total democratization of value in nature advocated by Devall and Sessions (and by Taylor - see below) strikes me not only as irrational but counterintuitive. I've heard it seriously argued that humans, cats, and mosquitoes simply cannot be distinguished on the basis of their intrinsic worth. Each species has the same natural rights as every other. There is an irony here, for ecological egalitarianism is, after all, a human construction. The very existence of such an attitude is perhaps evidence itself of humanity's difference (I avoid the term "superiority") in degree of value and in the capacity for richness and intensity of sentient experience, for intelligence, and for moral sensitivity. There is even a whiff of "species-ist" patronization and pride detectable here. For why should humans-especially deep ecologists - figure they have the best environmental ethic? Why should we not accept the assumptions and priorities of other species? (This could be self-defeating: wolves and whales might well decide the world is better off without humans.) On the other hand, other species' moral visions may be obscured by sheer prejudice. If field mice were the reigning ethicists, the world might be

bereft of barn owls - diminishing the natural diversity some of us cherish deeply.

Nevertheless, if we truly are completely implicated in the natural order, it will have revolutionary consequences not only for our self-understanding but for our relationship with nature. Sessions and Devall make a very good case against classical anthropocentrism. While they do not advance a new theory of environmental theology or ethics, they do seek to convert their readers into environmental activists by showing them how to apprehend intuitively human whole. ness and unity with/in the natural world. And incidentally they confirm suspicions that science is not objective, neutral, and value-free. They are at least half-aware that scientists are not disembodied minds uncontaminated by ideology and unaffected by wider social interests.

In Respect for Nature, Paul Taylor presents a clear, careful, and comprehensive case for an axiological theory of environmental value. That is, as a philosopher he addresses the question of how we might attribute intrinsic value to the natural world. His view is not human-centered but lifecentered; it is truly an environmental ethic, and not merely an ethic of human (or humane) care.

In chapter 2, he argues that respect for nature is not a moral principle requiring explanation and justification in terms of some more fundamental morality; rather, it is itself an "ultimate moral attitude" (pp. 90-98) grounded in what Taylor calls "the biocentric outlook on nature" (see chapter 3). First, we can accept biocentrism as a faith; then we can shape our "world outlook in accordance with it." Within this belief-shaped worldview, "respect" is "the only appropriate [stance] toward nature" (p. 99).

Taylor distinguishes among intrinsic value, inherent value, and inherent worth. Humans attribute intrinsic value to natural things, events, or experiences as "enjoyable in and of" themselves (p. 73). We perceive inherent value in natural things and places that we believe should be preserved not for any commercial reasons, say, but "simply because [they have] beauty, or historical importance, or cultural significance" (p. 73).

Taylor's analysis of inherent worth is more radical and controversial. Inherent worth is prior to and independent of any human valuation; it concerns the objective good of being itself. According to Taylor, a being has inherent worth when it's possible to say that being is good (or not) without reference to any other being. For Taylor, all animals and plants are "beings that have a good of their own" (his emphasis, p. 66).

Every individual creature is a "teleological center" of life and value in its own right; each living thing is a moral subject.

Moral persons who respect nature are said to "hold themselves accountable" to a "set of normative principles"-including "basic rules of right conduct"-consistent with the respectful attitude (p. 169). Taylor spells these moral rules out in chapter 4. First is the rule of "nonmaleficence," defined as the "duty not to do harm to any entity in the natural environment that has a good of its own" (p. 172). The second rule is that of "noninterference," not to interfere with the freedom of individual organisms or of whole ecosystems. Third is "fidelity," our duty not to "deceive," "betray," or "break faith" with any individual wild animal. This rules out everything from fishing (which makes use of deviously attractive lures) to shooting ducks from behind blinds (pp. 179-86). Fourth is the rule of restitutive justice: our duty to right wrongs we as moral agents have done to moral subjects (pp. 186-92). Besides rules, Taylor spells out the "standards of virtue" for environmentally ethical behavior (pp. 198-218).

Taylor parts company with deep ecologists and animal liberationists in not attributing moral rights to animals - though he argues in chapter 5 that all living things have inherent worth and are therefore owed duties (as Kant could have said, but didn't) as ends in themselves.

In his sixth and last chapter, Taylor addresses the problem of "competing claims and priorit[ies]," i.e., of how to resolve the inevitable conflicts between human and nonhuman interests. Clearly, there are many practical questions to resolve in learning to respect the life and autonomy of all other living creatures – especially as we must use these creatures in order to live. It would require a separate article to justify this opinion, but I do not think that Taylor succeeds in providing priorities and principles that could sustain such all-equal-and-inclusive moral democracy.

Taylor says that for the sake of conceptual clarity, he is ready to value only individual organisms (see pp. 69–70). But do we not have obligations to species, populations, and even ecosystems (not to mention future generations)? Taylor replies that only individuals possess a good or a value—yet he does include the duty not to interfere with "whole ecosystems and biotic communities" as part of his ethical system (p. 173). As he states it this rule prohibits any attempt to manage or modify natural ecosystems, even if motivated by the desire to protect a threatened population!

"To respect nature," writes Taylor, "is to be willing to take the standpoint of each organism, no matter what its species, and

view the world from the perspective of its good" (p. 179). In this vision, all living entities have the same inherent worth. Thus, we must not intervene or display any preference for host organisms over their parasites, even when the latter cause disease (p. 178). But how can we humans live in such a brave new world - a world in which medical care is immoral, in which every roadside weed and backlot seedling has not only intrinsic value but deserves roughly equal moral consideration alongside each of us?

Taylor explicitly denies any inherent moral superiority to humans (see especially pp. 129–55). The good of a human person, he says, does not outweigh the good of any other living thing. For Taylor even vegetarianism is morally problematic, scarcely more virtuous than eating meat. But surely we must eat if we cannot photosynthesize our food; surely priorities must be set and distinctions made in a world of inevitably competing interests.

Deep down, one suspects, deep ecology is shallow-at least in the absence of coherent metaphysical and theological foundations. Various candidates for such have been proposed, from Buddhism to pantheism to native American spiritualities, but none has found wide enough acceptance to achieve some sort of consensus.

One of the best possible foundations for environmental ethics (inadequately understood and too easily dismissed in Sessions and Devall's Deep Ecology) is the postmodern "process theism" based on the work of Alfred North Whitehead and Charles Hartshorne. "Process thinking" uses a hierarchy of natural value to make moral distinctions among creatures. To use the vocabulary of Paul Taylor's book, Whitehead's cosmology sees all actual entities as existing and commanding respect not only for themselves but for others as well. Every thing in the world has both intrinsic and instrumental value; every thing in the world is deeply related to every other thing. This prompts the question: can an individualistic notion of value-in-itself, such as is advocated by Paul Taylor, be truly ecological? Things become, and exist, and have value within a whole seamless web of natural and social relationships, where complete autonomy simply does not appear.

Perhaps that medieval doctor of the Church, Thomas Aquinas, had it right when in his Summa Theologiae (part 1, query 47, article 1) he wrote that God

brought things into being in order that His goodness might be communicated to creatures and be represented by them; and because His goodness

could not be adequately represented by one creature alone [i.e., humankind], God produced many and diverse creatures so that, what was wanting to one in the manifestation of the Divine goodness, might be supplied by another. . . . hence the whole universe together participates in the divine goodness more perfectly and represents it better than any single creature.

Nature has throughout human history been the object of wonder, interest, and even worship. Artists, engineers, scientists, industrialists, mystics, farmers, and theologians have all variously valued the natural world, our habitat and home. Over the past century, the careers of evolutionary ethics, social Darwinism, and Nazism demonstrate that the idea of nature has had its explicitly political and even demonic uses (see related readings). We are wise to be suspicious of any facile translations of the natural is into an ethical *ought*, for nature is notoriously ambiguous, and humans notoriously selfdeceiving. "Nature" cannot teach us our social roles or moral rules. Historically, all manner of ideologies and behaviorspreviously and independently arrived athave been construed as "natural" and justified as therefore good and right. (Advertisers have cashed in on this human tendency with a vengeance.) But nature is as much about genetic diseases and intestinal parasites as it is about achingly beautiful northern lakes and playful Labrador pups. In the natural world, birth and extinction commingle, both savagery and tenderness abound. Nature is both garden and desert, paradise and wilderness, cathedral and death-camp. Yet for all of nature's wellknown ambiguity and occasional terror, humans in all times and places have deeply sensed in the world a worthiness, a holiness, an otherness-that-is-kin.

How can we have natural knowledge apart from our personal, even "subjective" experience of nature? The books surveyed here have all dealt with various aspects of the natural world as humanly experienced and comprehended. Without getting too "mystical" I believe that nonobjective and nonobjectifying understandings of nature need to be taken seriously. We should not lightly dismiss as "unscientific" Wordsworth's experience in nature of

A presence that disturbs . . . with the joy Of elevated thoughts; a sense sublime Of something far more deeply interfused, Whose dwelling is the light of setting suns, And the round ocean and the living air.

-"Lines Composed a Few Miles Above Tintern Abbey" (1798), lines 94-98

Our recognition of nature's intrinsic value, and the theory of value erected upon that recognition, require some fundamental understanding of natural existence. For me, construing nature as creation supplies this. Western religious tradition, in spite of its often less-than-admirable influence on our interpretation and use of nature, is too promising to abandon.

David Ehrenfeld has argued (in The Arrogance of Humanism [Oxford University Press, 1978], p. 208) that only a transcendental perspective can consider nature as "the present expression of a continuing historical process of immense antiquity and majesty." One appropriate response to this process is awe, reverence before and communion with "creation"- an oft-perverted word that signifies nature's bestowed existence, aboriginal value, immanent goodness, and living wildness. It is in God's world, in nature the "body" of God, that we live and move and have our being and our becoming.

The world, wrote Henry Bugbe (in A Series of Essays, 1958-1974 [University of Montana Press, 1974], p. ii-2) is "always in the building . . . it cannot lapse from dawning and formation. It appears as that which dawns and is in dawning. So world does appear as world-without-end, and creation with respect to world is continuous creation." The natural world as creation is worthy of our respect, our keeping, and our care. Nature is not God, but many can affirm that it is in God, and in some sense of God. The Canadian singer/songwriter Bruce Cockburn wonders "If a tree falls in the forest, does anybody hear?" ("If a Tree Falls," from his album Big Circumstance [True North/CBS Records, 1989]). Which is the artist's way of asking "does anybody care?" The American writer Alice Walker has one answer: "I think it pisses God off if you walk by the color purple in a field somewhere and don't notice it" (The Color Purple [New York: Washington Square Press, 1982], p. 178).

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Related Readings

Other studies related to the concerns of this essay include: Suzanne Fries Liebetrau, "Trailblazers in Ecology: The American Ecological Consciousness, 1850-1864, Ph.D. thesis, University of Michigan, 1973; Linda H. Graber, Wilderness as Sacred Space (Washington D.C.: Association of American Geographers, 1976); Elisa K. Campbell, "Intimations of Ecology: Some Victorian and Edwardian Friends of the Earth," Ph.D. thesis, University of Massachusetts, 1980; Neal S. Burdick, "The Evolution of Environmental Consciousness in Nineteenth-Century America," Ph.D. thesis, Case Western Reserve University, 1981; Arthur Anthony Costantino, Jr., "Religiousity, Man's Relationship to Nature, and Environmental Concern," Ph.D. thesis, Pennsylvania State University, 1981; John Polkinghorne, Science and Creation: The Search For Understanding (Boston, Massachusetts: Shambhala, 1988); David Ray Griffin, editor, The Reenchantment of Science: Postmodern Proposals (Albany: State University of New York Press, 1988). See also my unpublished paper prepared for the Toronto School of Theology, "Valuing Nature: A Preliminary Exploration of Whitehead's Theistic Cosmology as a Foundation for Environment Ethics" (1988), and Beldon C. Lane, Landscapes of the Sacred: Geography and Narrative in American Spirituality (Mahwah, New Jersey: Paulist Press, 1988), an interdisciplinary study of the ways in which people's perceptions and relationships to nature have shaped their experience of God in five American religious traditions. I have offered a critique of the idea of stewardship of nature in an unpublished paper prepared for the Toronto School of Theology titled "For Nature's Sake: Stewardship—or Justice?" (1988).

More specifically, on wilderness as a concept, see: Jay Hansford C. Vest's articles, "The Philosophical Significance of Wilderness Solitude," Environmental Ethics 9 (Winter 1987): 306, "Nature Awe," Western Wildlands 9 (1983): 39-43, and "Will-ofthe-Land," Environmental Review 9 (1985): 323-29; Roderick Nash, Wilderness and the American Mind, third edition (New Haven, Connecticut: Yale University Press, 1982), pp. 1, 12. By way of contrast, see John Prest, The Garden of Eden: The Botanic Garden and the Re-Creation of Paradise (New Haven, Connecticut: Yale University Press, 1981), a well-illustrated historical survey of nature domesticated. Duerr's handling of wilderness recalls the classic works of James G. Frazer, especially The Golden Bough, revised edition, 13 vols. (London: Macmillan, 1911-15, 1936), and Lynn Thorndike, whose History of Magic and Experimental Science (New York: Columbia University Press) appeared in eight volumes between 1922 and 1958. The hard-headed positivist statement of faith, quoted in Duerr, p. 90, is from J. Tennekes' 1971 book, Anthropology, Relativism, and Method. On the European reception of Dreamtime, see Rolf Gehlen and Bernd Wolf, editors, Der Gläserne Zaun: Aufsätze zur 'Traumzeit' Hans Peter Duerr (Frankfurt am Main, 1983).

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Other recent and important studies of Darwin and his ideas include: Dov Ospovat's article, "God and Natural Selection: The Darwinian Idea of Design," Journal of the History of Biology 13 (1980): 169–94, and his book, The Development of Darwin's Theory: Natural History, Natural Theology, and Natural Selection, 1838–59 (Cambridge, England: Cambridge University Press, 1981). See also John Hedley Brooke, "The Relations Between Darwin's Science and His Religion," in Darwinism and Divinity: Essays on Evolution and Religious

Belief, edited by John Durant (Oxford, England: Basil Blackwell, 1985), pp. 40–70; and Frank Burch Brown, *The Evolution of Darwin's Religious Views* (Macon, Georgia: Mercer University Press, 1986). James C. Livingston, "Darwin, Darwinism, and Theology," *Religious Studies Review* 8 (1982): 105–16 is a perceptive discussion of studies from the late 1970s and early 1980s. Of the studies following and extending Young's analysis of metaphor in Darwin's prose, one of the best is Gillian Beer, *Darwin's Plots* (London, England: Ark, 1985).

John Wild discusses the concepts of "world-field" and "field of care" in his Existence and the World of Freedom (Englewood Cliffs, New Jersey: Prentice-Hall, 1963).

On Coleridge's use of the phrase "natural alien" to describe the soulessly mechanistic interpretation of nature see M. H. Abrams, *Natural Supernaturalism: Tradition and Revolution in Romantic Literature* (New York: Norton, 1971), p. 267.

Foundational texts by Whitehead and Hartshorne include Whitehead's *Process and Reality: An Essay in Cosmology* (1929; see corrected edition, David Ray Griffin and Donald W. Sherburne, eds. [New York: Macmillan/Free Press, 1978]) and Hartshorne's *Reality as a Social Process* (Boston, Mas-

sachusetts: Beacon Press, 1953). See also Daniel A. Dombrowski, *Hartshorne and the Metaphysics of Animal Rights* (Albany: State University of New York Press, 1988).

For more on deep ecology, see Arne Naess's articles, "The Shallow and the Deep, Long-Range Ecology Movement: A Summary," *Inquiry* 16 (1973): 95–100, and "A Defense of the Deep Ecology Movement," *Environmental Ethics* 6 (1984): 265–70. See also Michael Tobias, editor, *Deep Ecology* (San Diego, California: Avant, 1985); and John Rodman's 1981 essay, "Four Forms of Ecological Consciousness Reconsidered," reprinted in T. Attig and D. Scherer, editors, *Ethics and the Environment* (Englewood Cliffs, New Jersey: Prentice-Hall, 1983).

On the relations between feminism and ecology, see: Ariel Kay Selleh, "Deeper than Deep Ecology: The Eco-Feminist Contention," *Environmental Ethics* 6 (1984): 339–45; and Warwick Fox, "The Deep Ecology–Ecofeminism Debate and Its Parallels," *Environmental Ethics* 11 (1989): 5–25.

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The Little Blackout

A. B. Guthrie, Jr.

Scena Club Bulletin april-19 ay 1967

A teacher of creative writing who won the Pulitzer Prize for distinguished fiction in 1950, A. B. Guthrie, Jr., is the author of The Big Sky, The Way West, These Thousand Hills, The Big It, and The Blue Hen's Chick.

ALL DAY the wind roared, even between the gusts that brought to its many throats the shrieks of sopranos. The cabin complained, its old logs moaning into new settlements like sleep disturbed. From the windows came the keening of weather-stripping I had just fitted tight. Snow finer than dust blew under the kitchen door and ran out in grateful trickles that would have to be mopped up. Seen distorted through the iced-over pane above the sink, the thermometer shimmered at twenty below.

With a thumb I bored a hole through the ice on the small picture window by the table. Outside, the snow ran and eddied and gathered in drifts that broke and ran again. The trees thrashed, the aspens and jackpines in sight did, their worry joining with the shrill whistles of eaves and corners and the long song of the wind. They tried to straighten, only to flatten again, and surrendered dead limbs to the gusts. But here was endurance. They had known wind before, so long before and so often that the pines slanted eastward even on a calm day and the aspens grew clumped for common protection. A leaning and mustered country, this eastern apron of the Rockies, one of pitched if passive resistance. A strangled radio voice reported gusts of sixty miles an hour and more.

I walked over and turned up by a notch the 220-volt heater I used to warm the back flank of the cabin when too busy or lazy to lay a wood fire in the old Monarch range that I had rescued from a dump and restored. On the drain board there was thawing a trout caught and frozen last summer. It would be ready for the electric plate before long. I'd have tartar sauce with it and boiled potatoes and string beans seasoned with chopped bacon and a bit of canned milk. Cooking would not take long. It was remarkable how speedy electric stoves had become.

Like an arm of the wind, dusk was invading the cabin, but before I flicked on a light I put my palm against the picture window and melted a larger peep-hole and looked out. There were the sweeping snow and the tortured trees and the gathering dark that alone told me the sun was going over the hill. The power lines that led to the cabin swung and bellied and

circled to the wind like skip-the-rope, wobbling the poles to which they were strung.

What happened to my animals in weather like this? The cottontails would have taken to brush shelters, the blue grouse probably to beds in some covering snow. The dull-witted porcupines perhaps swung in the giddy treetops. The tramp black bear of last summer long since would have holed up. The doe and the half-grown fawn that often licked the salt block on the knoll at least weren't fleeing hunters now that the season had ended. But what of the birds, of the woodpeckers and magpies and chickadees surely too frail to hang to their perches? In imagination I could see them, big birds and little, swept like rubbish to some shore where the wind ended.

I punched on a light and sat down at the table to read, and it was then that the power went off. One waits when it does, waits expectant for the quick re-illumination that nearly everywhere has come to be the illumination, the resumption, of life itself. But the dark thickened, passing from the cloak of twilight to night's starless hood; and the hour of no wind, that time of the sun's setting, went by, annulled by preemption. As a person deprived of one sense sharpens another, so without sight, I heard more than ever the screech and hollow and boom of the wind.

No doubt someone from up the canyon or along the frozen valley of the Teton River had notified the Rural Electric office. Someone always did unless the trouble was sequestered and unknown along the line, but I felt my way to the multi-party telephone just in case. It was dead. So was my radio. Progress had left me without a transistor, by which I might have known what to expect.

Another man, I thought, might drive the 23 miles of country road into town, there to enjoy company and perhaps Montana Power Company lights. My car was just outside. In the way that matters well known slip from awareness only to dart back, it struck me that I couldn't go to town if I would. The road had drifted closed before today's blow.

In half an hour the kitchen was cold, cold with that solid yet pervasive cold that closes in on bones and, like a turned damper, stifles internal heat. There was nothing else for it then.

From my chair I reached over and found in the corner two old barn lanterns. Their stiff wicks answered slow to the repeated touches of kitchen matches, but I got them going and adjusted and put one at the side of the sink and left the other on the table. The woodbox, which should have been full, was half full. I laid a fire in the antique range, using for kindling the dead twigs of aspen trees that I had made it a habit of gathering when I walked through the groves. They saved axe work and saved money, too, being almost as good for starters as the kerosene all of us called Boy Scout juice. If need be, I thought, maybe I could make a fire without matches. I had done so in younger days.

But I would need more wood, a lot of it, if power weren't restored. I doubted, hearing the wind. I put on a storm coat, a

hood, mittens and overshoes, knowing the storm would freeze me, or parts of me, if I did not. I opened the kitchen door. The wind bullied me back, whistling its white breath into the kitchen. I braced myself and, crouching, pushed into it, going by memory more than by sight, turning to snatch for air when my lungs locked. The woodpile was ample though on the lee side drifted with snow that had to be kicked and pawed aside. I loaded up. It took six trips or more to fill up the woodbox and pile a reserve on the porch adjoining the kitchen.

The range was perking up. It felt good to the fingers rubbed over it.

Light and heat. Then water, of course. What little was left in the dead pipes of my water system would not suffice. I went out again, this time with two galvanized buckets, and scooped them full of clean snow in the drifted aspen grove and emptied them into the reservoir of the range, knowing that this trip and the next were a beginning. Hard snow is stingy with liquid dividends. No matter. There was plenty of stock outside.

Light, heat and water now, though not enough water to operate the flush toilet. Again no matter. There was the outside privy which some atavism in me had insisted on retaining when the water system went in.

It was satisfying to know I had all the facilities.

I was about to sit down when it occurred to me that candles would enhance my private festivity. I lighted a couple out of the stock always carried and set one in the window on the off chance that some lost and freezing wayfarer would see it and struggle to haven. Ranchers used to do that when ranches were far apart, farther apart than the four miles that separated me from my nearest neighbor, the four miles that were close enough for both of us though we were friends.

I put a pan of water on the stove, intending soon to drop potatoes into it. The fish and beans would come later.

Warmed, I sat down then and took stock. The pantry shelves held food enough for a siege. Drawing from the days of my childhood in Montana, when even village people bought sugar by the hundred pounds and flour by the fifty, I always purchased my supplies in plenty. On pantry floor or shelves were potatoes, onions and rutabagas, those easy-keepers, and rows of canned stuff. In the deepfreeze, which the weather would take care of if electricity wouldn't, were cuts of beef and a chunk of venison that a friendly hunter had given me. All up and down the canyon, I knew, people in my fix were fixed like me.

It was good to be self-sufficient. It was almost good, I thought, to be cut off from all sources of supplies, from all communication, good not to be dependent on alien, impersonal and uncertain assistances. I felt as cozy as Mr. Robinson of the Swiss family, though my habitat could not boast such diverse creatures as grizzly bears and ostriches or my fund of knowledge embrace all things in heaven and on earth as his did. He was some man, that Robinson, a man who could hardly wait to convert his Eden into New Switzerland.

After supper I would read for a while. A man alone with a good book—no, a man alone with a book—was never alone. Then I would go to bed and listen to the wind. I would sleep assured. No place in the world was so safe as my cabin, no place so assuring. Let the snow sweep and the gale rage and the old logs moan and the power stay off. Tonight I was where I wanted to be.

I have just been reading "The Night The Light Went Out," *The New York Times*' stories of what is called the great black-out, or outage, on the eastern shore. It all seems far away, distant by the fifty years in which I've not kept pace with progress.





Top photo, by Homer Gasquet: an example of "multiple use" in Tongass National Forest, Alaska. Bottom photo, by Don Halloran: billboard urging "multiple use" of Boundary Waters Canoe Area. Secretary of Agriculture Freeman, who closed the area to "multiple use," is under heavy pressure to open it again to timber cutting and mechanized access.

Florence Journal

City Is of Two Minds On Digging Up the Past

By ROBERTO SURO

Special to The New York Times

FLORENCE — "This city is like a very beautiful woman who gets nausea everytime someone takes a long look at her." That alarming diagnosis came from a man who is single-handedly giving Florence a prolonged case of upset stomach, Francesco Nicosia, Tuscany's Superintendent of Archeology.

Taking advantage of a street repair project to do some digging of his own, Mr. Nicosia uncovered a major archeological site beneath the Piazza della Signoria, the glorious square where Florentines have made history and taken strolls for more than 600 years. Now the superintendent wants to create an underground museum to display his find, while many of the town fathers would just as soon cover it up and pretend it was not there.

Most cities would delight at learning they possessed a buried trove with rich strata dating back thousands of years, but Florence has not taken the news graciously, viewing the find as an unwelcome addition to

The fate of a famed piazza is becoming a fixation.

its already enormous burden of monuments.

Mr. Nicosia's shovels hit pay dirt just as the city was experiencing one of its periodic identity crises, and the piazza's fate is becoming a fixation. In the past, Florence's capacities for self-examination and dissent have contributed mightily to Western civilization. Although the stakes this time are not as weighty as when the Renaissance was born, the result may influence the fate of what Italy calls its Cities of Art.

The Past Imperfect

"Florence is sick of being described in the past tense," said Mayor Massimo Bogianckino. "The people here are proud their city is a museum, but they want a chance to live in the present and be part of Europe's future."

Mr. Nicosia's discoveries have caused a major physical disruption in the center of town by transforming the piazza into a construction site and threatening to keep it that way for years to come. An even greater pyschological disruption seems to have taken place because Florence is in the midst of anxious debate over a

bevy of projects aimed at modern economic development.

Florentines worry about becoming so dependent on the money spent by the six million tourists who visit each year that their city will end up like Venice, with no other real economic base. And many get angry at the thought that tourism rather than culture has become the criterion by which their heritage is managed.

Now the city is experimenting with a plan for eliminating cars from the historic center. It is analyzing proposals for a huge office and conference center to be built in an old industrial park. Florence University wants to put up a new science campus in the suburbs that would attract commercial research activities.

But as it woos high-tech laboratories, Florence is borne back cease-lessly into its past.

'It Is All Absurd'

Many local scholars and some conservationist groups have protested the development plans. Sir Harold Acton, the British historian and a longtime resident of Florence, said: "I am against all this stuff. It is all absurd. Florence already has its fame and its identity as a city of art and it doesn't really need any more." No clear battlelines have emerged

No clear battlelines have emerged as different local interest groups, like the tourism operators, back some projects and oppose others. And there is wide agreement on some goals, such as preserving the city's historical identity, but great bickering on methods. "The destiny of Florence," said Mayor Bogianckino, "is to suffer long and violent internal contradictions. It was a more charming tradition when debates could last a decade at no cost but times have changed even if Florence hasn't."

Immobilized with dissent over the piazza dig, proud, independent Florence has had to ask the national Government in Rome to decide the fate of a landmark so revered that any modification to its appearance inflames emotions and inspires scholarly tomes.

The Piazza della Signoria is where Florence reinvented democracy at the end of the Middle Ages, where Savonarola was burned at the stake as a heretic in 1498 and where Michelangelo first put his David. And so it took 13 years to decide that the worn and unsightly paving stones needed repair.

During the long debate, Mr. Nicosia laid claim to any archeological remains that might be uncovered when the stones were picked up. An agreement was reached under which the archeologists would dig to a limited depth and document their finds while



An archeological site in the Piazza della Signoria in Florence. The building at rear is the Palazzo Vecchio.

each section of pavement was being refurbished and then the excavations would be carefully refilled with inert sand before the paving stones were put back in place.

"The idea was to conduct a research effort and then to restore the piazza with the knowledge that if anyone wanted to excavate again in another 20 or 100 years everthing would be there perfectly preserved," said Mayor Bogianckino.

With finds that have proved richer than expected, Mr. Nicosia has already proclaimed his intent to keep exploring an exceptional monument that he insists must be kept on public view. "This is a unique opportunity to explore and document the very heart of a living city with more than three thousand years of history," he said.

In the excavation site, stones of different ages lie jumbled beside one another, giving an an eerie sense of time's passage. The foundations of a medieval defense tower lie alongside the vats belonging to a Roman wooldyeing plant, which indicates Florence was a textile center around 150 A.D.

"There is a whole world down there," said the Mayor, a bit forlorn by what he has on his hands. Regardless of the disruption, the town government has agreed that the rest of the piazza should be fully explored and documented. The only real issue in dispute at this point is the long-term future of the piazza and the ruins beneath it.

The Mayor suggests reburying the ruins except for a small part that would be covered with a translucent material so it could be viewed from the piazza. Mr. Nicosia's plan is to suspend the floor of the piazza above the excavation with pillars and to create a huge underground museum.

As the city debates its future, Flor-

As the city debates its future, Florence's delicate and argumentative psyche seems overburdened by its vast heritage. And Mr. Nicosia keeps prodding. "Florence should accept the fact that it is not making history anymore," he said, "but that it will be judged by how it looks after its past."

As Protests Go On, 2 More Palestinians Are Killed

By JOHN KIFNER

Special to The New York Times

JERUSALEM, Feb. 23 — Two 13year old Palestinians, a boy and a girl, were shot and killed as protests continued today in the Israeli-occupied West Bank and Gaza Strip.

As international criticism and internal debate over the Israeli Army's use

of beatings to put down the disturbances continued to grow, Palestinian lawyers in Gaza said they had evidence of a second case in which soldiers had buried Palestinians alive. An army spokesman said tonight that an investigation had been ordered.

Despite wet, chilling weather, which in some places turned briefly into a

Occupied LEBANON SYRIA by Israel Baraachit ISRAELI **SECURIT** HEIGHTS ZONE Yamun Baqa al Sharqiya JORDAN

rently with Jewish settlers. Ma-13-year-old Palestinian boy, was the West Bank village of Yamun.

South Lebanon

United Nations truce supervision organization before he was seized last Wednesday near the southern port of

Private radio stations here today quoted security sources as saying that Amal militiamen have captured three gunmen who took part in kidnapping Colonel Higgins. The three were not identified by name, but were linked to the pro-Iranian Moslem fundamentalist group known as the Party of God.

The reports said the three men did not provide useful information about the kidnapping.

fession 'Illegal'

he led hijacking, during which the plane was blown up after passengers and crew were taken off the aircraft.

Although Judge Parker declined to rule that the arrest was illegal, he concluded that the F.B.I. deliberately kept Mr. Younis aboard the Butte for four days to obtain a confession in "a clear abuse of the obligation to bring the desnowfall, demonstrations and clashes broke out in several areas in the West Bank and Gaza Strip.

At dawn, employing a tactic that is relatively new, the army closed off and entered the West Bank village of Yamun. An army spokesman quoted the unit commander, a lieutenant colonel, as saying that the troops were met with barrages of rocks, firebombs, metal bars and potatoes that had been studded with nails.

The soldiers fired and a 13-year-old boy, Mamoud Hoshiyeh, was killed. Two Palestinians were wounded.

In a clash overnight that apparently involved Jewish settlers, Rawda Lutfi Najib, a 13-year-old girl, was shot in the West Bank village of Baga al Sharqiya. A military official said an Israeli civilian had been detained for questioning.

The deaths brought the total in 10 weeks of disturbances to at least 65.

Israel's handling of the protests has brought unusually strong criticism from the International Committee of the Red Cross. In a letter to Israel's representative to the committee in Geneva, the organization's vice president, Maurice Aubert, said that "thousands of people have been the victims of brutality and grave ill treatment at the hands of Israeli soldiers.'

The letter said the Red Cross had irrefutable proof that at least three Palestinians had died as a result of beatings by Israeli soldiers and that "unacceptable" measures had been employed against "innocent victims such as young children, pregnant women and the elderly.'

Charges in a Burial Alive

Earlier this month, Israeli soldiers were reported to have dumped dirt from a bulldozer over four Palestinians in the village of Salim. Today the army announced that Sgt. Maj. Charlie Danino, assigned to the West Bank Civil Administration, had been charged in the case, and others were being investigat-

In asserting that a similar incident had occurred in the Gaza Strip, the Gaza Attorneys' Association said today that Adel Ali Massoud, 18 years old, was taken by the army from his home in Khan Yunis on Feb. 14 and brought, with another young Palestinian, to a beach outside the town.

There they tied me to a jeep and dragged me while driving fast. Afterward they beat me again, and buried me in the sand, filling my mouth with the sand also," Mr. Massoud, who is in a hospital, said in a sworn affadavit given to the lawyers' association.

The army said today that its education office was preparing a letter to be distributed through the ranks, explaining the regulations governing the use of

force.

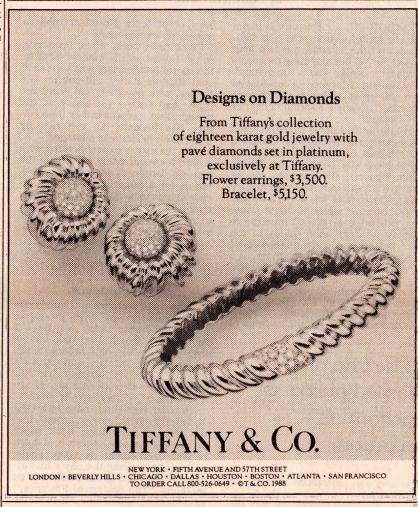
Defense Minister Yitzhak Rabin, defending his policies before Parliament today, said that the country was engaged in a "civil war."

"There is no calming down in the territories," Mr. Rabin said. "The riots there come in waves. We are in a stage of things growing more serious."

'This is a political confrontation

liament elected President Chaim Her-partner in the coalition Government.

said. "The soldiers are just defending zog to a second five-year term in the themselves. What do you expect if largely ceremonial post. He was unopthey're throwing stones and Molotov posed, having the sponsorship of the Labor Party and wide backing from As the unrest continued today, Par- the right-wing Likud bloc, Labor's





West Coast report

9-18-65

The great West

By Harlan Trott

San Francisco

Across the rolling wheat fields, midway between Lodge Grass and Hardin, windshields flash in the hot hazy distance. And down in the green Montana bottom land, the fields along the river are fragrant with fresh mown alfalfa.

Except where U.S. 212 branches south from Interstate 90, the tawny hills rolling up toward the Big Horn Mountains must look about as they did to Custer's scouts in the pale morning twilight of June 25, 1876.

By sunup, the long, clanking column—five dusty companies of Col. George Custer's 7th United States Cavalry—was moving east. This was part of Gen. Alfred Terry's planned three-pronged campaign to subdue an allied force of Sioux and Cheyenne Indians led by Sitting Bull and Chief Gall, and return them to their treaty grounds. Custer was to close in from the south. Terry and Col. John Gibbons would fan out as they marched down from the Yellowstone. Terry's aim was to draw a ring around the Indians and force them to make a stand before they could get away and dissolve into the mountains. The general attack was set for the 26th.

From high up on the divide between the Rosebud and the Little Big Horn valleys, Custer's Crow scouts sighted a yellow cloud hanging on the horizon to the northeast.

Early on the 25th, the scouts kept probing. It was a huge Indian camp, they told Custer. The dust hung several miles along the valley. There were 15,000 people down there along the river, tepees everywhere, a regular city. And ponies, thousands of them.

Custer was skeptical. The scouts were being fooled by all that dust. Their eyes were bigger than that yellow cloud! Before long there was stray firing out ahead. Before noon, the hills and coulees were aswarm with Indians and fusillades of lobbing arrows. The farther Custer's trail goes along the southern ridge, the deeper the Custer legend recedes into misty speculation. Ranger guides at the Custer Battlefield National Monument make a persuasive showing in filling the historical gaps.

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In August, this year, 50,006 visitors stood on the brown grass knoll above the iron fence that rings the site of "Custer's Last Stand." So far this year, 158,307 tourists have flocked through the visitors' center. Last year the count hit 188,753, a record. This year's attendance will top it, says Superintendent Thomas K. Garry. This is 50,000 more than the sight-seer tide of 10 years ago.

The public count expands at about 5 percent a year, according to this veteran parkman whose service span includes a term as Right now the National Park Service is spending half a million dollars to improve the display center and the dioramas that depict in dusty realism that shock and clamor, the valor and the aching impact of that final last stillness. None too soon, the park people are enlarging the parking areas around this historic monument, too, remembering no doubt the unexpected 20 percent attendance jump the year of the Seattle World's Fair.

Manifellioni

Transcr

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Farther out along the high plains, on our vacation sweep through what we sometimes think of as Owen Wister's West, we found a contrasting postscript to the problem conservationists are apt to define simply as "too many people."

This was at Shelby where our two young card-carrying members in the Walnut Creek Model Railroad Club forsook the highway for the journey up to Glacier Park's imposing east portal aboard the Great Northern's crack Empire Builder.

The Arena Motel's sign on the outskirts held out its neon latchstring to westbound tourists, inviting them to sleep on the Dempsey-Gibbons heavyweight battle site. The hustling editor where we bought a copy of the weekly Shelby Promoter seemed a little too young perhaps to recall that Fourth of July encounter that marked promoter Tex Rickard's last venture very far out beyond the roar of Madison Square or Yankee Stadium.

But in the attractive new public library, our eye caught something that a few Shelby ranchers and businessmen of 42 years ago must regard as an unpleasant reminder. Hanging on the wall above the glass cases filled with fine Indian relics, and the tables were rapt towheads were poring through the newest children's books, was a panoramic photograph of the temporary pine saucer where Shelby pitched its square ring.

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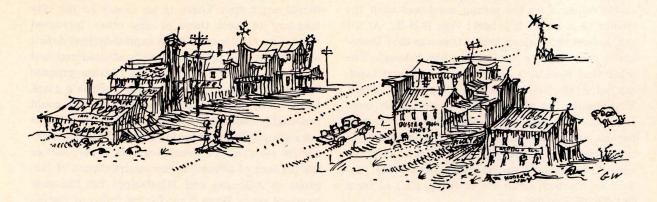
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Legend has it that Rickard ran out of cowboys, Indians, ranchers and other paying customers, before half the tickets were sold. "The real story of the Dempsey-Gibbons match is this," said my neighbor at the hotel lunch counter. "The oil fields were beginning to open up around here, and a few wellheeled ranchers and businessmen figured this was the way to put Shelby on the map so as to attract workers and spark a land boom. I guess some lost their shirts."

One of the nice things about Shelby 42 years later, as we saw it, was that the country wasn't overrun with people. You could take a deep whiff anywhere outdoors and be sure you were breathing some of the West nobody else had breathed first. Folks said it was a pretty good wheat year. The oil fields didn't seem to be crying for workers.

Down at the Great Northern depot, there was a fair-sized crowd standing around with the Walnut Creek boys waiting for No. 31. That's the afternoon train going west, the Empire Builder. Don't forget, the railroads had a lot to do with how far and how fast the West was won.



Requiem for a West Texas Town

by Larry L. King

Harpon's Jan. 66

All the stores were dark and shuttered, No scarlet ribbons in our town . . .

It was a very special place, and those of us lucky enough to live there felt somehow set apart. Many signs ratified our suspicions.

Didn't visiting politicians confess that reaching our town was the high point of their peregrinations? Of all the towns on the Texas & Pacific railroad, wasn't ours the only one through which the westbound Sunshine Special clattered at exactly 4:14 P.M.? The Stamps Quartet, Ringling Brothers Circus, Toby's Medicine Show—none dared pass us by. We had the word of our preachers that the Devil himself placed the highest premium on earthbound souls whose mail came addressed to Putnam, Texas.

Life had its absolutes: the world domino championship was settled behind Loren Everett's icehouse each Saturday afternoon. An aged citizen of ours had perfected the telegraph only twenty-four hours behind Thomas Edison. On evidence collected from all quarters of the town, no rational resident could doubt that in the tomb of the Unknown Soldier there slept in honored glory a Putnam boy.

If Notre Dame had its Four Horsemen, the Putnam Panthers had Jiggs Shackelford, Turkey Triplett, Tuffy Armstrong, and Hooter Allen. Where Bernard Baruch advised Presidents from Washington park benches, Ole Man Bob Head, perched on the ledge of sidewalk-level windows in the Farmer's State Bank, warned of hogs expiring of cholera and of our delivery to the Soviets in gunnysacks before FDR had completed the mischief of his first term. Even in our recreations we proved superior. Summer visitors were almost always treated to a "snipe hunt"; many an outlander, given the honor of holding the sack while other hunters fanned out to flush the "snipe" and drive it to him, figured out the game in strange pastures at dawn. More than one boy, taken by a carload of Putnam contemporaries to pick up his blind date-a bucolic beauty named Betsy, whose loose charms had been carefully advertised in advance-bolted for the woods in panic when Betsy's angry "father" fired a stream of oaths and a double-barreled shotgun into the night air.

Putnam was on Highway 80. Cisco was a dozen miles to the east, Dallas 159 miles in the same direction; New York was rumored just a little beyond that. To the west, Highway 80 curved around Utility Hill before winding eleven miles through wooded rangeland offering protection from our natural enemies in Baird, running thence to a mysterious land called California

Beame comes out of one of those solidly Democratic neighborhoods in Brooklyn where little children distinguish the Republican and Democratic columns on the voting machines with the chant: "A is awful, B is best! Vote B-B-B." At the end, he had two forlorn hopes. One was that Democratic party loyalty would carry him through. The other that Buckley's candidacy would hurt Lindsay more than himself. Neither hope was fulfilled. Even among the ethnic groups traditionally most loyal to the Democrats-the Negroes, Puerto Ricans, and Jews-Lindsay made sharp gains. At the same time, Buckley's appeal drew as many votes from socially conservative Democrats (policemen, firemen, small homeowners, etc.) as from Old Guard Republicans.

An Odd Bonus for New York

Lindsay's election was a severe defeat for Kennedy. Although Kennedy professes privately to believe that the Democratic loss did not damage him personally and many observers see him in a position to "pick up the pieces," the fact remains that when Wagner's retirement made the young Senator the dominant figure in the party, the first fruits of his leadership was the hapless Beame candidacy. It only served to remind liberal Democrats of Kennedy's ties to Charley Buckley and the other old-line bosses, exactly the memory he had spent a year trying to erase.

Despite all the easy talk about City Hall being a graveyard for those with higher political ambitions, the office of Mayor of New York is still a command post of enormous power and influence. For the Democrats to lose this command post during the first year that Kennedy became active as one of the party's movers and shakers does not speak well for his political acumen. Because he governs the city that is the nation's communications headquarters, any Mayor of New York has opportunities for publicity and for shaping public opinion surpassed only by those of the President. Lindsay is exactly the kind of alert, imaginative, telegenic politician who can be expected to exploit these opportunities to the limit. He is a competing attraction to Kennedy in a way that Rockefeller, battered by fate, and Javits, who will be sixty-four in 1968, are not.

As Mayor of a huge, trouble-prone city, however, Lindsay has formidable problems to solve and his rather free-and-easy campaign promises will not make his task any easier. He has pledged himself among other things to maintain the uneconomic fifteen-cent subway fare, undertake an

ambitious program to reform narcotics addicts, spend two billion dollars on housing, and modernize and computerize the police force as well as increase its size. There is no money in the city treasury to meet these or any other increased costs. The city is running a capital-budget deficit on public-works projects already started and had to borrow money to balance its routine expense budget in the past year. The only hope is a giant infusion of federal funds-which the city could reasonably request, since New York, after all, was not responsible for annexing Puerto Rico and making its residents citizens. Nor was it responsible for the lack of education and mistreatment of Negroes in Alabama and Mississippi for the past hundred years. Were it not for the influx of Puerto Ricans and Southern Negroes and the cost of trying to meet their needs, the Wagner Administration in recent years would have had budget surpluses pleasing to the most orthodox conservative.

But standing at the gateway to federal funds is New York's Junior Senator, Robert Kennedy. Even under a Democratic Mayor he was already assuming a kind of viceroy role as the federal government's Mr. Big in New York City. Thus, in one week last June-the week when Wagner decided to retire-Kennedy made the front pages three times by his actions involving city problems. On Monday, June 7, he participated in a tour of the city's parks and recreation areas, bringing Secretary of Interior Stewart Udall in from Washington. On Wednesday, he and Javits introduced with considerable fanfare a bill providing a new approach to the treatment of narcotics addicts. The next day, he opened the antipoverty office in Harlem. If Kennedy was as active as this in the Wagner period, he is not likely to slack off during Lindsay's tenure. He chafes at the passivity of the legislator's role and simply has to have an outlet for his executive energies and talents. He is also drawn to the city and its agonizing problems because of his genuine sympathy and desire to help the really unfortunate: the slum family, the retarded child, the lost young Negro, and the defeated old people. When political self-interest reinforces instinct and concern, Kennedy cannot stay still in the sanctum of the Senate.

Kennedy's intervention, coupled with the still heavy Democratic majority in the City Council, may make life hard for Mayor Lindsay. But the City of New York, which has been becalmed for so long by the consensus of Wagnerism and ignored for so long by the benumbed native Republicans, can only benefit from the lively competition of these two ambitious, fiercely determined, and socially responsible young politicians.

where Tom Mix, Tarzan, and my Aunt Dewey lived. Nothing much was to the immediate south or north of Putnam, though Mississippi presumably occupied acreage somewhere over Harper's Hill, and if you struck out toward the water tower you'd eventually stumble onto the North Pole.

It was here I had discovered the magic little Ulysses Macauley knew in Saroyan's *The Human Comedy*, when upon finding a hen egg he presented it to his mother, "by which he meant what no man can guess and no child can remember to tell." Here I had known the pains and pamperings attendant to that universal distemper, whooping cough; shivered at my first funeral; and roamed rocky foothills in search of Indian arrowheads and in honest fear of God.

I was born in Putnam on New Year's Day, 1929. The oil boom had peaked out a few months earlier, yet the familiar sound of hammer-on-anvil could still be heard in my father's blacksmith shop. Roadwise drummers in straw boaters and polkadot bow ties still brought their sample cases into our two hotels to stay the night. The cotton gin ran in season a dozen hours a day, during which a good gin hand could make three dollars. On Saturday nights, when the feedstore turned into a magic palace by the mere hanging of a bed sheet, addicts of the silent flicks came with their dimes. Though Ole Doc Britton had owned the town's only automobile in 1910, dozens of Tin Lizzies were backfiring in the streets by the time of my bones. For some five thousand salts-of-the-earth Putnam would still be standing when Rome had only a general store and an old stadium.

II

That was almost forty years ago as the life flies. Now the faded sign pointing vaguely north of Interstate Twenty proclaims: Putnam. Pop. 203. But even this is a gentle fiction. "You might dredge up that many," old-timer Ellison Pruett says, "by countin' chickens, dawgs, and Republicans." Probably no more than a hundred survivors could be mustered for all-day singing with free dinner on the grounds.

The new slab that is Interstate Twenty, down which traffic thunders at terrible speeds, rises thirty feet above what once was the familiar town square with its pick-up baseball games, mineral-water wells, and ancient hitching posts. I had always assumed a stone monument would one day be raised there to commemorate my triumph as All-Pro Quarterback, America's Most Decorated Marine, Famous Arthur, and Richest Man in the World. But the square is gone, along with those

dreams, and so for that matter is most of Putnam. The skeleton that is the business district—a dozen sad, sagging buildings, half of them wearing padlocks—faces bare dirt walls serving to underpin the overpass forty yards away.

Putnam had been sick for more than twenty years, but it took Congress to kill it. The Federal Highway Act did it in. Supposedly the Interstate System prevents congestion in our towns and cities, speeds commerce, and strengthens national defense. Perhaps more money will be made faster, and bigger bombs hauled over better roads, with Putnam out of the way. But I have wind of darker plots involving jealousy in high places, and possibly Castro's land reforms.

Whatever the motive, some invisible bureaucrat with an operable slide rule (but with no operable heart) decided an imposing overpass, or viaduct, would look good at a given point on proposed Interstate Twenty. He laughed madly, no doubt, as he made his fatal mark on the map. Four-fifths of my birthplace rested on the mark he made.

One day two years ago the growling machines came. An iron ball swung its fist, and bulldozers with metal jaws took bites from the earth. The barbershop, that exciting Istanbul of spicy tonics, racy stories, and old shaving mugs-where my Uncle Claude cheerfully and for two bits skinned young heads before drenching them in Red Rose Hair Oil-fell under the assault. So did the offices of the weekly Putnam News, where my first literary work appeared-a bit of doggerel called "The Indian Squaw," sufficient to crown me undisputed poet laureate of the third grade and to inspire several fistfights seeking to prove the scientific fact that all poets are born sissies. The wonder that had been, in turn, the Hotel Carter-Holland, the Mission Hotel, and finally the Hotel Guyton was reduced to rubble along with its splendid sunken rose garden. DeShazo's Variety Store, famed for its square deals on pocket knives, Halloween masks, and sacks of shiny marbles, came down. Pierce Shackelford's Farm Implements, the corner "filling station" where you could pump up your bicycle tires with free air or flag the Greyhound, my father's blacksmith shop, the telephone exchange where my Aunt Flora was the friendly Central who answered when you cranked out one long ring-all are no more. When the bulldozers were gone so was the town square,

Larry L. King, now free-lancing in Washington, has appeared three times in "Harper's" in the past year, and in other national magazines. His first novel, "The One-eyed Man," will be published soon by New American Library.

and everything to the east, west, and south of it. All for an overpass.

Alton White, suspecting his hometown held little future for grocers, moved twenty-two miles down the highway to Eastland. When progress wiped out Charlie Davis' service station, he moved to Cross Plains. Mrs. Bess Herring went 225 miles west to live with her widowed sister. The Sandlin Brothers sold their farm and used the money to buy another two counties away. You can't boss a ranch or tend cattle by long distance, so it became R. D. Williams' lot to suffer the greatest indignity. He moved to Baird.

The government man sent to pacify the survivors told them the town was lucky to have held losses to a minimum. This is roughly comparable to congratulating Whitey Ford should he lose only three fingers on his pitching hand. Local citizens were gratified when they learned the government man wasn't one of our leading diplomats, Averell Harriman, perhaps, or Henry Cabot Lodge, but a representative from the Bureau of Public Roads.

III

I. G. Mobley thinks Putnam is coming back. Richard Nixon may come back, Khrushchev conceivably could, and some say Jesus Christ surely will. But Judge Crater is not coming back, nor Benito Mussolini, and neither is Putnam.

Sitting in I. G. Mobley's air-conditioned living room on a modern farm near Putnam a few months ago, I could not tell him that. His roots go deep in home. He pays his debts, lives by his labor, and keeps his barn painted. He has served his neighbors as county commissioner and member of the school board.

Mobley sat on the edge of a rocking chair, tensely unfolding his slender hands and long legs. "I tell 'em," he said, "that it's up to the people of Putnam whether we have a town here or not. We're the only town on Interstate Twenty from Fort Worth to Cahoma and—why, that must be over three hundred miles! Other little towns are off the highway by a right smart. Folks are gonna need gasoline, food, rest rooms. Maybe they'll want to mail a letter." I thought of how, earlier in the day, I had clocked traffic speeding along Interstate Twenty at an average of 72 miles per hour, and of the small sign warning of Putnam's decaying carcass down there beneath the slab.

I. G. Mobley took no note of these facts. Miracles were like buses: if you missed one, you simply caught the next. "The gloom merchants have prayed over Putnam's remains before," he

said. "When I was a small kid things were slow as winter molasses. Then the mineral-water boom hit."

That was in 1908. People swarmed in to bathe their tortures-lumbago, gout, arthritis, rheumatism. The Carter-Holland Hotel was built: a mission-style palace of forty-six rooms, and a polished ballroom for dancing if you weren't bedeviled by lumbago or Fundamentalist parsons. For three dollars a day you could bathe in Putnam's miracle waters, have meals in your room, and take treatment from the well-known "rubbing doctor," Doc Milling. By 1912 completion of three red-brick buildings of two stories each-a bank, Yancy Orr's drugstore, the new school with its imposing bell tower-gave the town a slight case of skyline fever. An Opera House was opened over the protests of the preachers, and traveling shows took away dollars Heaven had earlier designated for the collection plates. When, almost without warning and for no obvious reason, the mineral-water craze ended in 1916, nobody had to ask why. The preachers told them.

For the next few years Putnam was in the doldrums, though crops were generally fair. Then came the drought of 1917-18. Creeks, tanks, and cisterns dried up. Water was hauled twelve miles from Cisco by wagons and teams. But May of 1919 brought a new miracle. "It rained frogs and fishes," I. G. Mobley recalls. Wheat made fifty bushels to the acre that year and each bushel sold for \$2.75. The following season Putnam's two gins handled 5,000 bales of cotton. On top of the agricultural prosperity came the oil boom of 1922. Wildcatters fogged in to drill shallow wells, and the rocky foothills around Putnam seemed loaded. Once again the hotels were filled. Tom Davis operated a flourishing wagon yard; in my father's blacksmith shop fires were seldom banked. Yancy Orr got competition from the new Black's Drugs, and the Putnam Supply Company was founded.

I. G. Mobley had put himself through Draughton's Business College in Abilene through clerking part-time in one of the hotels, before a few producing wells blessed his acres. "Everybody was drilling for oil and swinging big deals," he recalls. "We had more paper millionaires than Carter had little liver pills."

The boom had almost everything associated with booms—inflated prices, muddy streets, the tents and shacks of nomadic "boom hands." Everything, in fact, but open saloons. Saloons weren't really needed; drugstore counters did a booming business in a patent medicine of high alcoholic content said to cure nagging coughs, chest colds, and other convenient ailments. Old heads recall



that one of the parsons who fought so fiercely against the Opera House developed the most persistent cough in town.

In 1928, with no more warning than might be given by the rattlesnakes on Harper's Hill, the boom went bust, and the Depression followed. Oil dropped to thirty cents a barrel, a lease pumper was grateful to keep his job at \$30 per month, and fly-by-night oil operators left town by the dozens even if their unpaid bills didn't. My father could only sigh and write off the \$10,000 due him for services rendered. Putnam Supply Company and Black's Drugs folded, and the movie house cut its schedule to Saturday Nights Only. Men who had swarmed to town for good-salaried jobs, or to wheel-and-deal in oil speculation, went back to farms long lying fallow where they could at least grow food for their families. Some left for good, riding the rails in search of jobs or dreams, or joining the westward migration of jitneys laden with household goods in the manner of Steinbeck's Joad family.

Putnam had one more opportunity to snap back. About 1932, as New Deal pump-priming measures brought faint signs but great hopes of relieving the misery, a stranger came to town from "across the waters"-though no one seems to have pinpointed his sources better than that. The foreigner charmed Putnam's ladies with deep bows, pretty speeches, and hand-kisses. Somehow he also charmed the town's businessmen. Within a few months he promoted money from hard-pressed Main Street merchants to finance what he envisioned as "the largest automobile dealership in Texas." The daughter of a prominent citizen consented to be the go-getter's wife. She sold her diamond rings and persuaded her father to add \$5,000 to her fiancé's venture. After hot excitement and speeches at the depot, the promoter left by train to arrange for the first shipment of cars. He was slightly delayed to the extent that he has not been heard from again. Even I. G. Mobley gave up hopes of his coming back about three years ago.

Not all Putnam natives share I. G. Mobley's optimism for the future. "She's about dried up and blowed away," grocer Charley Odom says of the town. Some worry about losing their churches. On a typical Sunday there had been eight, nine, and eleven worshipers at the Campbellite, Methodist, and Baptist Churches, respectively. One

recent collection plate at the Methodist Church brought in \$3.48. You can't keep a preacher on that.

Miss LaVerne Rutherford has worked in the post office almost since graduating from high school in 1943. She was appointed Postmaster by John F. Kennedy, and she now worries over the possibility of the office being closed. She would be transferred to a larger office, reduced to clerk, forced to live away from Putnam for the first time. Hopefully she says, "These people have to get their mail somewhere!"

The title of chief optimist of Putnam, and maybe of the world, must go to Jim Meador, a newcomer. He opened J. E.'s Steak House, at a reported \$5,000 investment, after the bulldozers had done Putnam dirt. The J. E. Steak House sign is new, orange and green, made of a glittering substance which dazzles the eyeballs in the sun. It cannot, however, be seen from Interstate Twenty.

IV

Putnam cannot fairly lay all its troubles at the feet of Washington. Its alternating cycles of boom and bust are common to many of the nation's small towns. Census figures show the startling migration from rural to metropolitan areas. In 1940, some 43.5 per cent of Americans lived on farms or in rural hamlets. By 1960, only 30.1 per cent did.

Rural America is full of towns dead or dying. In Texas alone there are examples without end. Take Thurber, for instance. In 1887, after the discovery of a rich bituminous coal vein, it grew into a city of 10,000. For several years it supplied all the coal or building bricks used in the state. Thurber grew its own Nob Hill of haughty homes, a spacious Opera House, a man-made lake stocked with fish or suitable for boating. The local Poohbah of commerce and industry tooled about in his own plush railway car and handpicked his mayor. When the coal supply and brick orders ran out, so did Colonel Pooh-bah and everyone else.

The death blow fell in 1933. General offices of the Texas & Pacific Coal and Oil Company were ordered to Fort Worth. Stocks were sold from store shelves; buildings were wrecked and moved away; wires and poles came down; water and gas mains were removed. Where in 1930 Thurber had almost 6,000 people, it was virtually gone by 1935. The population in 1960 was eighty. Today it is exactly zero. All that is left is the remnant of an old smokestack bearing a bronze marker saying in twenty-five words or less that Thurber once knew glory.

Shafter and Terlingua, in the Big Bend Country, were booming mining towns as recently as the mid-1940s. Now they are ghost towns, too. Wink, in the western sands of what has been called "the Texas Sahara," was born with the oil strike of 1926. Little more than two years later it was a shack-and-tent Baghdad of 7,000 people, mud-bog streets, and open saloons serving up red-eye whiskey and sudden death. It knew a decade of stability, during which its Wink Wildcat football teams earned the reputation of being meaner than your ex-wife. But oil production petered out. By 1960 the federal government decided to restore Wink as a model city in the new urban-renewal program. At a cost of only two million of your tax dollars, planning geniuses replaced rusty tin pool halls and dilapidated sandwich shops with modern, sanitized miracles of glass, brick, and fluorescent lights. The scheme didn't work. Too many of Wink's 1,863 remaining citizens used profits from condemnation proceedings to hightail it to where the action is.

Ranger, in Eastland County, reached 16,205 in 1920. Old-timers swear its oil boom of that era pushed it 5,000 higher than that. Drinking water fetched ten cents a glass in restaurants, and special policemen who dealt in mayhem were hired to handle street rowdies. Long on the wane, Ranger today claims only 3,113 residents.

Even home bogs of Great Men and their ladies have declined. Only one member of Lyndon Johnson's 1926 high-school graduating class chose to build a future in Johnson City. The President has said, "I go back to my hometown and I find difficulty locating anyone under twenty-one years of age that has finished high school. They have moved on."

Jefferson, a bustling seaport of 38,000, was Texas' second-largest city from 1867 to 1873. Then Jay Gould, the genius of the T & P, incensed when he had trouble getting right-of-way through the town, ran his railroad tracks around it. Jefferson started to wither. Soon the natural dam that backed the water up and made Big Cypress Bayou and the lakes navigable was removed. Jefferson is now a sedentary village of 3,000. The biggest attraction is the birthplace of a local girl everyone remembers as Claudia Taylor, now Ladybird Johnson.

Putnam, too, knows the loss of its young. In the

words of one old nester, "Every kid with good sense and the price of a bus ticket leaves." Figures back him up. Where Putnam High School graduated twenty-six seniors in 1941, it conferred degrees on only eleven a decade later, and the Class of '64 consisted of Doris Lee Donaway, Charlie Ivie, and Farrell Thorp.

The bottom dropped out of Putnam for good about 1942. The peak population of 5,000-reached during the oil boom of the 1920s-shrank to less than half that figure by 1936. In 1940, the census counted only 1,403 people. When World War II came, Putnam had no munitions factory to brighten the times and nobody looked after it when military bases were passed around in Washington. Following Pearl Harbor Putnam boys answered the call to arms; fat paychecks lured their elders to shipyards and factories. Seventy-five houses moved away in the single year 1942, and a dozen more were shuttered. A dozen cousins of mine joined the military that year, Uncle George Gaskins sold his grocery store and moved to California, and my father took a job with a New Mexico oil company. The exodus was on.

V

It was a broiling-hot day when I went home again last summer. My head was full of memories and my car full of kinfolk. The air conditioner was on full volume, while on the car radio T. Texas Tyler sang "When I Look Up My God Looks Down on Me."

We flashed by Baird (Pop. 1633) at a high speed, and it seemed but a couple of minutes before my father said dourly, "You better slow this thing down to about a thousand. It's right down yonder."

But we had gone past the sign pointing north to *Putnam. Pop. 203*. Seeking a spot on Interstate Twenty to turn around, I noted Harper's Hill with shock. In my youth it had towered over the countryside, and probably no man had scaled it, even if Lem Harper did grow peaches and apples up there. I recalled when a committee of jelly-smeared faces had solemnly judged it three million feet high. But now....

"Look at Harper's Hill," I said. "Somebody's sawed the top off."

My father chuckled. "Naw, it never was anything but a little ole mound of dirt."

Where the depot had been was only the wooden platform on which it had rested. The platform seemed no bigger than a life raft. I complained that not only was the depot gone, but part of the platform as well. My father enjoyed another laugh. No, the depot had been that exact size. I didn't

dispute him, though I clearly recalled when dozens of us—Benny Ross Everett, Bobby Gene Maynard, Kenneth Gaskins, Humph Weeks, Buck Yarborough, a barefoot army—had stood on that platform with acres of wooden boards running in all directions, and the yellow depot looming grandly behind us like Convention Hall in Atlantic City.

As I U-turned on Interstate Twenty, my mother fretted how this was the exact spot where so-and-so got killed turning his car around in March of 1926. There was little point in reminding her this particular highway had not existed then, for my mother is blessed with an infallible memory for tragedy. Nobody got killed this time, much to her surprise and, perhaps, slight disappointment. I followed the highway signs as we tooled under the viaduct and drove by sixteen strange white pillars supporting it like sentinels of an enemy army.

That couldn't be Putnam there! Not that collection of frayed little buildings, bare and huddled against the sun, where once had been a proud line of stores grandly sending forth all the world's good smells. There were skips between buildings: vacant lots overgrown with weeds and Johnson grass. Grass poked up through the sidewalks, cracking and crumbling them. A patch had burst through almost at the exact spot Ole Man Bob Head had angrily scuffled his feet while warning that grass would grow in the streets should FDR be much longer tolerated. In the silence my father said, "It was a purty good town, once."

On this hot Saturday afternoon only two cars, one ancient pickup truck, and absolutely no human beings were visible on the single, one-block business street. In Putnam's salad days the sidewalks would have been crowded with round-eyed urchins, women sampling cloth bolts in Norred's Dry Goods, farmers hustling to sell their butter and eggs in time to sweat the domino matches. While my father conducted a door-to-door search for friendly natives, I explored the short stretch of sidewalks in pursuit of memories.

Orr's Drugs was padlocked. Peering through the glass I could see, under layers of dust, the marble soda fountain with its brass-headed spigots, three marble-topped tables with wire wicker chairs, the cumbersome upright scales that for a penny had given your weight and the bonus of a small trinket. Long, narrow shelves held ancient concoctions Putnam mothers had sworn by: Dr. Caldwell's Syrup-of-Pepsin, a bitter brew called Al-Da-Eureka (once assumed more vital to health than sunshine or surgery), and I wondered if in the clutter there remained that miracle cure for coughs, Jamaica Ginger.

I walked over to the lonely site of Uncle George's

grocery store, where the Candy Bandits of 1936 did their work. Cousin Kenneth would enter a rear storeroom, banging among crates and boxes, whooping like an Apache until his father rushed back to deal with the menace. With the candy case unguarded, I would scoop up jawbreakers, peanut brittle, chocolate bars, and peppermint sticks in quantities that would have foundered all the inhabitants of Boy's Town. We divvied up in a jungle of back-alley weeds after each successful foray. But the community's leading busybody entered the store one day to buy some baking powder and caught the bag man of the duo. The flogging administered by the village blacksmith to his youngest son was painful, though less so than Cousin Kenneth's bawled denials that the conspiracy involved him. The final indignity came when my blood cousin publicly forgave me for swiping from his daddy's store, then led the First Baptist Church Sunbeams in loud, pious prayer for my long-range rehabilitation. This act of charity was enough to win for Kenneth the Jesus' Little Helper Award. I was delighted when his prize proved to be nothing more interesting than a New Testament.

VI

My father's return interrupted this reverie. He complained over having recognized three people who had not recognized him. Nor had he found any of his old cronies. Morosely we ambled toward Tood Cunningham's service station. As a battered pickup truck rattled down the street my father bellowed in a bass key that was stunning for lungs pushing eighty years' service: "Ellison!" The truck faltered, zigzagged, and stopped. The driver gazed out suspiciously.

"Don't set there with egg on your face," Dad called. "Get down outta there."

The old man didn't budge from the truck. "Says who?" he demanded.

"By durn, says I."

That seemed to settle something. Ellison Pruett climbed stiffly down, a large, raw-boned, red-faced man who probably tended his own fractures with cow-chip poultice. He wore a Western-cut shirt, khaki pants, scuffed boots, and the cattleman's coiled hat.

"You know me?" my father demanded.

Ellison Pruett studied my father's face. He probably recognized that it had known hard work and the outdoors, but that was all. "Naw." Then his shotgun-eyes moved over and got the drop on me. He jerked a thumb like Randolph Scott uses in warning bad-hat gunslingers to hit the road.

"Don't know the feller with hair on his face, neither."

"That's my son." The beard needed some justification. "He's a writer."

"Hell he is." Ellison Pruett examined me down to the skin pores. He nodded, slowly and with stern sympathy. He watered the dusty earth with a golden stream of tobacco juice. "He uses a name when he writes?"

"Yeah," said my old man. "Same one I do. Leastwise, the *last* name." He chortled in delight, slapping his knee. Ellison Pruett grinned, shoving his hat to the back of his head. Knowing when he'd met his match he said, "Thunder, I give up. I couldn't name you if I was a-gonna be hung."

"Well, I worked for you once upon a time."

Light dawned in Ellison Pruett's old eyes. "You ain't Clyde King?"

"I reckon I am. What's left of me."

"Naw. You ain't Clyde King!" This time it wasn't open to question. "Why, Clyde King weighed over two hundred pounds and was stout as a mule. He wasn't no little ole dried up nobody like you!"

They gurgled in delight, embracing in the street. "Clyde King!" Ellison Pruett repeated. "By damn!" He slapped his old comrade on the back, then whirled on me. "Boy, I seen this man lift a whole barrel fulla water from the ground and set it flat-dab in the bed of a wagon without straining hisself."

My father grinned. "Can't do much anymore. I'm kinda like Putnam. Too old and wore out."

"Why," Ellison Pruett said, "this burg never amounted to much, anyways." Then his eyes walked slowly along the solitary main street, as if he'd noted its diminution for the first time. "Things change," he said. "I don't care for some the changes, neither. Do you, Clyde?"

"No," my father said. "I'll betcha there's one thing hasn't changed, though."

"What's that?"

"I'll bet you still can't play dominoes!"

"Why, I'm teachin' dominoes. Got a beginner's class you might be able to get in." They whooped and hoo-hawed, and when the mirth died down Pruett said, "We been playin' all afternoon up in the old Odd Fellows hall."

My father was chagrined. "Why, durn it! Who all played?"

"Same ole bunch. Me and Lee White. Elmer Mc-Intosh, Walter Caldwell. Feller named Truman Blaylock, from over at Scranton."

"I sure wish I'd knew it," Dad said. "It wouldn't of taken much to clean *that* bunch's plow."

They talked then. Of crops and the Bible and

men a long time dead. When Ellison Pruett took his leave my father watched the dust of his pickup as far as the eye could see.

VII

Though the school house was locked for the summer, an official yielded to my attack of nostalgia and provided a key. "Look around," he said. "Likely there's not much in there you'd have."

Yet the place held many treasures. In a glass display case was the silver-plated trophy won by the Bi-District football champions of 1937. Misshapen and deflated but awesomely majestic was the historic football Oliver Davis had romped with for the 65-yard touchdown that had brought Putnam its championship—and, far more important, a 13 to 6 victory over the loathsome Baird Bears. Had I not feared the grip of Superintendent R. F. Webb reaching from out of the past, I might have copped it like Murph-the-Surf.

The grandfather's clock in the principal's office had ticked off doom while I once awaited judgment for having talked in assembly. President Johnson's portrait was next to the one of Franklin D. Roosevelt, hung when Federal Emergency Administration of Public Works Project No. 1295, more commonly known as Putnam High School, had been dedicated. We had been proud when we moved into the shining new palace of cream-colored bricks in 1937. It was a showplace. Even ill-atease farmers had shuffled in to view the Central Sound System (i.e., a public-address hookup to every room) dedicated at a cost of \$200 by the Class of '37 to give "our Beloved School access to the diffusion of knowledge that will aid pupil advancement." Some of the charm wore off when school authorities failed to pipe Jack Armstrong or Amos 'n' Andy into the classrooms.

It wasn't a showplace anymore. Cracks ran through its bricks in several places, the summer grounds were a jumble of grass and weeds, a disreputable car with three flat tires sat near the flagpole. The auditorium, where I had played Grumpy in a very swinging one-night production of "Snow White" to the applause of several thousand people, now seats only a couple of hundred and doesn't need half that. They have lowered the drinking fountains three feet each. The walls of my old classroom have been moved in by several feet, and the wall lockers are scaled for midgets.

Nor were outside objects in their rightful places. The pine-board lunch stand, where I had violated home training by first buying on credit, is no longer there as a temptation to hungry schoolboys. The football field—where I played two

heart-bursting minutes in my first "real" game as the Putnam Grammar School Pussycats routed Scranton, 28 to nothing—is grown over with alfalfa. Missing, too, was the clump of trees where ranch boys had tied their horses and fed them bundled roughage during the noon hour. My father counted the absence of nineteen houses he recalled near the school. In a growth of mesquite bushes stood the concrete steps which once led to the house where I was born.

VIII

Was Putnam just another of man's experiments gone bad, no better than those tens of thousands of isolated villages where people had dandruff and gas pains and warts on the nose?

What we had produced in the way of native sons and daughters would not cause the earth to move. Statesmen? Billie Mack Jobe had served two terms in the Texas legislature and called the Governor by his first name, but his name appears in no histories I have read. Athletes? Stanley Williams played pro football with Dallas and Baltimore, but his name became a household word only in Putnam. The arts? Lewis Nordyke published a couple of books and several articles in Saturday Evening Post, not quite enough to rank with Sartre or Faulkner. Most ex-Putnamites were safe in the anonymity of our society, working for a weekly wage in undistinguished jobs, watching "Bonanza" on television, and fretting over income-tax forms. This knowledge was painful for me, and altogether new.

Our town had not been a complete one—not even an "average" one by national standards. No Negroes lived in Putnam within the range of my memory, nor Jews, and the only Catholics had been Mexicans who lived in converted railroad boxcars for a few weeks each year when their work as itinerant section-gang hands brought them briefly our way. We were, I could now acknowledge, a bigoted town. I remembered the despair of local people when Joe Louis knocked out Jimmy Braddock to win the world heavyweight championship in 1937. I had learned of this the morning following the fight, when a gentle Putnam lady remarked to a companion in the post office, "Well,

the ole nigger is champion." And the other woman answered, "I guess they'll be pushing white folks off the streets and into the gutters now." In November of 1937, when the Japanese seized an American vessel, tore down our flag, and tossed it in the Hwang Pu River, many of our natives said the U.S. could "whip those little brown monkeys in ninety days"; Japan wasn't even as big as Texas. We were narrow in politics: you were a Democrat because Daddy was, and his father had been before him. Our theology fell just short of teaching a flat earth, and in some cases it did teach that eternal damnation followed infant baptism. Sin had meant the strict idea of the word: drinking spirits, dancing to music, or wearing lip rouge. The more destructive sins-gossip, bigotry, indifference to injustice, oppression of free thought-were cheered in the streets.

Man being the weak creature he is, no doubt Putnam had known its share of commerce in Prohibition dew, its backstair romances, small larcenies or other transgressions that I had always assumed to be the property of New York, Washington City, or Baird. We were not rampant with wrongdoing, but for the first time I questioned whether we had been creatures of Utopia.

We left in the late afternoon. I stopped by the only business house open, J. E.'s Steak House, for cigarettes. Four men in work clothes sipped coffee while on the jukebox a cowboy singer urged us to "Cross the Brazos at Waco." I wondered how long it might take Jim Meador to get his \$5,000 investment back at ten cents a cup.

As I drove away into the sun, the loss of the town saddened me beyond the telling of it; it may not have been anything unusual, but it had been home. Suddenly I was angry—at Congress, the Bureau of Public Roads, the Depression-makers on Wall Street, the greedy oil speculators, the foreigner who had failed to open the biggest automobile dealership in Texas. How could a place be allowed to die?

But the anger passed, for I knew I would not find the answer—not this side of whatever Heaven there is that has rewarded all Putnamites who lived by the code. And even then the answer would probably lie on the farther slope of the last holy hill, guarded by a mean old dog.



Portrait of Gabriel

A Puerto Rican Family in San Juan and New York



Concluding a Series by Oscar Lewis

Introduction: This tape-recorded excerpt from my forthcoming book In the Life, to be published by Random House later this year, presents the observations of a seven-year-old boy who lived in a San Juan slum and then moved to New York City. Gabi is the eldest son of Felicita Ríos,* whose story appeared in Harper's last month. Gabi and his twin brother Angelito were born when Felicita was fifteen. By the time she was twenty-two, Felicita had three more children by two other husbands.

Gabi is an attractive, bright child with a ready smile. His experiences are typical of children who grow up in the culture of poverty. They really have no childhood as we know it. Prematurely burdened by heavy responsibilities, exposed to violence,

*The names of all persons have been changed to protect the subjects of this study.

promiscuity, drunkenness, and vice at a tender age, and subject to unstable and immature adults, these children develop an incredible precocity and a superficial maturity which is damaging to their personality. Psychological tests suggest that Gabi is a lonely, confused, and frightened child who depends upon cunning, denial, fantasy, and escape to survive in his hostile and overwhelming world.

The most remarkable thing about Gabi is how well he manages to cope with a difficult and pathological environment. Those who define mental health as the ability to adapt would have to conclude that Gabi has excellent mental health. However, his adjustment is achieved at a high price. His own dream, in which he sees himself at age twenty, may foretell his sad destiny. Gabi's story illustrates the terrible abuse and waste of talent and human resources which are the real tragedy of the culture of poverty. —Oscar Lewis

Electric Rail Line Is Gone

Milwaukee Replaces Last Segment With Diesels

HARLOWTON, Mont. - spread fame as the apparunusual railroad operations in the world quietly passed into history when diesel locomotives replaced aging electric engines on 440 miles of track between Avery, Idaho, and Harlowton.

The Milwaukee Road's electrified system, a model of efficiency during the era when steam locomotives hauled most of the nation's freight, came to an end June 16.

Company officials said problems of maintaining the obsolete electric engines and the use of more efficient and versatile diesel engines caused the de-

For more than 50 years, the powerful electric engines, smokeless and five mountain ranges over five mountain ranges from Harlowton to Seattle-Taco-

The 216 miles of track between Othello, Wash., and Seattle-Tacoma were converted entirely to diesel use in 1971.

A major obstacle to keeping the electrified system was "the gap," a 212-mile segment of main line between Avery and Othello that never was electrified.

This severely limited the versatility and efficiency of the over-all electrified system, the company said.

"Initially an unmatched technical marvel, the electrification gained wide-

(AP) - One of the most ent prototype for a new electric era in railroading. That era never arrived, the company said in 1973 when it announced plans to phase out the system.

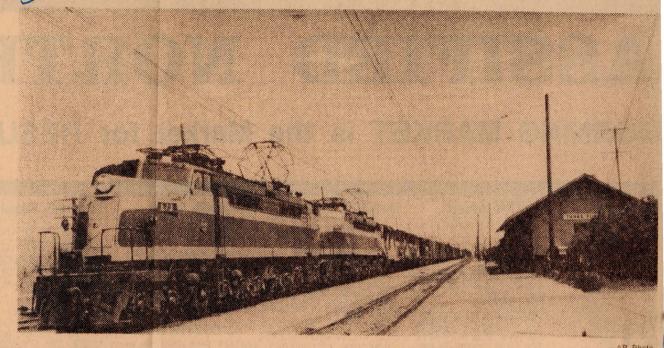
The Chicago, Milwaukee, St. Paul and Pacific Railroad Co. electrified the Harlowton-Avery section in 1917 and three years later went electrical on the Othello-Seattle stretch. They represented the first longdistance rail electrification in North America and the longest electrified lines in the world.

The system was pow-ered almost exclusively by energy from hydroelectric dams. It involved more than 3,000 miles of transmission, feeder and trolley wire and a string of electrical substations.

When the firm electri-fied, it abandoned steam entirely on the electrified sections with the intention of saving money and improving service. Other railroads electrified on a limited basis to eliminate smoke in tunnels and terminals and to help conventional trains over difficult grades. But in these cases, electrification was merely an adjunct to the prevailing steam power.

In its time, the system was a resounding success. The company said fuel and maintenance costs were cut sharply and the higher speeds and hauling capacity increased productivity.

deattle P. J. July 8 - 1974



TWO "LITTLE JOE" UNITS TEAMED UP WITH TWO DIESEL ENGINES TO HAUL HEAVY TONNAGE For more than 50 years, the electric engines, smokeless and quiet, pulled trains over five mountain ranges

Festival Rodeo

Blitzes and **Holding Actions**

Edward Hoagland

Every October the cowboys d to come to town, appearing the rodeo at Madison Square den, and if you frequented tain obscure hotels (the tain obscure hotels (the t Street was one), you could them kill time in the lobby, r spurs tinkling softly as they ved to the soft drink machine

Rev. Paul Broffman
The Esoteric & Spiritual
Relationship of Libra to
the hidden mysteries
Fri. Eve. Oct. 17th 7:30 P.M.
33 W. 72nd St. NYC Room 503 5th fl.
Donation \$2.00

The Cathedral
ST. JOHN THE DIVINE
112th 51. A Amsterdum Ave.
Sunday: Holy Communion 8, 9, 10
Morn. Prayer, Holy Comm., Sermon:
e Most Rev. Lakdasa de Mel, D.D.
Metropolitan of India
3:30, Organ Recital: Alec Wyton
4 p.m. ANNUAL SERVICE of
THE ORDER OF ST. JOHN
Veekdays: 7:15 & 4. Tours: 11, 12, 2

INIVERSALIST CHURCH of N.Y.C.

Central Park West at 76th Street The Rev. RICHARD A. KELLAWAY, Minister

SUNDAY, Oct. 19th

I a.m. "America's Forgotten People"
Followed by City Election Forum
nurch School & Nursery Care 11 a.m.
A Uniterian Universalist Church

Mary the Virgin 127 Weet 44 Street — Times Square the Rev. Denald L. Garffeld, Rector

SUNDAY, Oct. 19th
Mass 7:30, 9 (Sung), 10
tigh Mass; Sermon: FR. GARFIELD
ssa Salisburiensis, Geoffrey Busch
rst performance in United States
Organ. 6 Evensong & Benediction
on: FR. MARK GIBBARD, SSJE
WHY PRAY TOGETHER?"
Mass daily 7:30, 12:10, 6:15

and the magazine stand. Both cowboy and Indian getups have come into fashion lately, as part of the substitution of shadow for substance which has grown general in the U. S. (though at least the hippies and homosexuals who dress Western do frankly find the shadow more intriguing than they do the facts—shadow piled upon shadow as a sort of art form). But all one's enthusiasms of years have had fads catch up with them—soul music, which used to ring out from nether ends of the radio dial, and jogging and mountain climbing and football. The speed at which new diversions must be discovered brings us the freedom or hubris of today, which is to range back and forth across the centuries and wear Roman togas, if we like. or play ruffled fop of the Restoration, jog like a hunting bushman, practise ancient love-making arts with tongue and dildo, riot for bread and peace in the streets, play eunuchs-and-Amazons, send out space men, develop robots, and train our shock troops in the crafts of

All this made it seem quite salubrious that a Festival Rodeo was booked for the Garden last week. Cowboys aren't figures as fundamental to the American past as lumberjacks are (now there's an enthusiasm that hasn't gone hasn't gone public!), but like the lumberjacks, they preceded the farmers and traveling salesmen across the continent wherever the terrain permitted, by a matter of decades sometimes, and the farmer, dodging his bull bestoring his

chick

Whenever a rodeo arrives in town I look forward to going, but then after I get there I am somewhat repelled by the superfluous brutality involved—superfluous to livestock management anyway, if not to the requirements of a slam-bang sport purporting to represent the frontier. It's as if, say, one of the teams in a football game were not a highly paid group of glamour-guys but were slave gladiators whose job was to put up a stubborn resistance while being beaten limp. As a boy I sneaked through the stage entrance of the Boston Garden several times to look at the animals after the show, and looked at them in Colorado, and they did indeed resemble a "team" of a kind, bushed and cowed and wrung dry, standing Continued on page 28

DAHSPE

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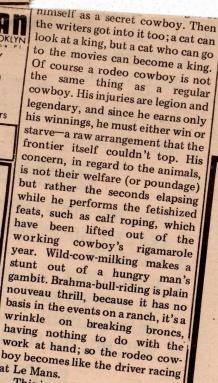
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This is not to belittle the sport, only to mention that it is a sport, technicalized and professionalized with an eye to the box office; it's a living and a career. It is also a penultimate bauble of Americana with an heroic history yet a busy present, and I've often thought about investigating it in detail.

uced by Marry Mather

NOVEMBER 25TH GEORGE OPPI

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gave him a camera to use as a teaching aid. Quite consciously, he chose to document the social ills saw around him. The living conditions of the immigrants, the black slums of Washington, served as preludes to what became his major theme: the horror of child labor. He photographed children working at all sorts of jobs—in factories, in the fields, in the coal mines, on the streets with such fierce passion, with such a sense of outrage and paternal moral protectiveness combined, that much of the credit for the anti-child labor laws belongs to protectiveness him and him alone. Hine's pictures reproduced everywhere (indeed, they still are, though they are rarely credited to him), and made him famous for several decades. Though he was later to photograph numerous subjects—the first world other factory workers, even small-town life-there intensity was an peculiar to his images of children being brutalized, a burning and highly personal anger, which is not to be found in his later work.

Hine published only one book in his lifetime—"Men At Work," which appeared in a limited edition in 1932 (and when is someone going to reprint that one?), which included his pictures of the construction of the Empire State Building. By the time appeared he had already slipped into obscurity, and he was poor and forgotten when he died in 1940.

Museum The Riverside is currently presenting the first Hine show to hit New York in 30 years. "Lewis W. Hine: A Concerned Photographer" was assembled at Eastman House and, after this howing, will be traveling abroad with the Riverside Museum's "The oncerned Photographer"—a st fitting companion exhibit. Hine show contains 75 ts-contact prints made from which cover Hine's work

are faithful to Hine's vision, and the pictures are classic and vital. I prefer not to discuss individual images in Hine's case; Hine has to be seen in toto to be understood, and singling out specific prints would not be an especially relevant process. Instead, I relevant process. Instead, I recommend exploring the show from the perspective of Hine's view of the world and his use of the camera to record that view; for Hine's way of seeing has had an incalculable effect upon the vision of all subsequent documentarians, and thus has in a certain way dictated our own view of the world.

This exhibit is part of a very welcome Hine revival. Credit for renewed interest in his work must also go to Judith Mara Gutman's critical biography, excellent "Lewis W. Hine and the American Social Conscience" (Walker and Company, 1967; \$12.50), a Company, 1967; \$12.50), a thorough and detailed study of Hine's life and work. The book is lavishly illustrated, with more than 100 Hine pictures reproduced, and the printing is good. Since very few of the pictures in the exhibit are duplicated in the book, the two combined provide a broad look at the scope of Hine's art. Now, if



YOUNG CHILD wo by Lev

only someone would reissue "M at Work"

Riverside Museum located at 310 Riverside Drive 103rd Street). The Hine show v remain on view through Novem

CERTAIN invasion is inherent privacy in photographic act, but only rar is the invaded privacy photographer's own. In his h is photographer's own. In his shat the Underground Gallery, Jo

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ontinued from page 26

nirstily by the water trough in a unch, making no distinctions as which was which—the broncs, ne bulls, and the calves, the steers naking their aching necks, all icing me, jumbled together like nimals after a forest fire. They inged in panicky reflex when the aretaker cowboys approached nd their panic operating with the owboys' own tiredness and kasperation, complicated the rocess of bedding them down;

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hats, whips, and fists were thrown until it was painful to watch. Then they stood again in their pens, panting and stupefied, as if a forest fire had passed and left them alive. Once one of the cowboys stopped afterwards in a moment sympathy and said with a smile to a horse, "No speak English?"

Mixed feelings about rodeos keep me eagerly coming and then backing up. The cowboys, too, back up. The falls they absorb, the cracked clavicles, the pounding 500-mile overnight drives between shows—all part of the Geist-turn them to thinking about the little cottonwood ranch somewhere that they want to buy when their winnings rise, where they need only yell Yowee from the door of the barn once or twice to bring the cattle on the run to be

I notice the midnight cowboys don't go to the rodeo much; it's mostly the boots and the hats that they're interested in. Nor do my several writer friends who write shoot-em-ups-the gunfire West appeals to them. I'm a merry-go-round fan, however. I watch for at least a few minutes whenever I pass a merry-go-ground. If you enter its world it reaches for an authentic entelechy. There is a milling surge, a herd seethe—the machinery whirs like horses' hooves and the windy calliope beats as bravely as the horses' lungs. How high you go, and how low; an inch seems a foot. You look back and see the lunging jam of horses behind, with their jaws turned up, their snaking necks, and the force of a tide lifting them on. From the side rail, the thrash and the bite and the blurring surge get to me even better-I can watch headily for two hours, as if some epochal life-drive were being re-enacted—geese going north or a salmon run-the bell dinging for intermission. The motion has a round-and-round structure that makes for perfection, nothing on earth being so close to perfect as a circle. And of course the real triumphs of a carousel are, first, that it doesn't seem constructed, it seems like small pinto horses catapulting, and, second, that it's the only place in the city where, day in and day out, every face aboard is young and alight.

So I come to the rodeo eager for the round-and-round monotony of the arena, which concentrates us on the exploits of the cowboys better than any straightaway could ("rodeo" means to go around, in fact). Since they can't go anywhere, they only ride; nothing steals the scene. And they do really ride, because they are graded on the horse's performance as well as their own. If he, or the bull or whatever, doesn't perform, they lose the event. They must maximize the spunk left in him, make him make it a close contest, as in a bullfight. They blitz the bronc and hold the steer.

Sadly enough, the National Mexican Festival and Rodeo, which is what the management of the new Garden has begun signing up each October by way of a rodeo, is not a rodeo. It's a little, tidy, package production which presents Antonio Aguilar, a Mexican recording star and feature of 103 movies, and his wife and eight-year-old son, singing a great many protracted songs and prancing on Portuguese high school horses. He is a likable man,

a topnotch horseman, and his voice is better than Roy Rogers' was; he too sings "Oh give me a home;" and his show rather suits the wheel of tiered spotlights and the sanitized atmosphere of new Madison Square Garden-in the Spanish tradition, he kneels to the applause. He has a tense, springy mare, a leggy comic gelding, and there is some fine Roman riding, some fire-jumping, and an all-girl close-order drill. Four or five broncos are busted briefly as an exhibition in the intervals; also three or four big, scared bulls. The Mexican lariat wizards make butterflies, flowers, and ocean waves with their reatas. But mainly it's fancy dressage in lavender lighting. Arthur Godfrey, who sat in front of me, was pleased, being something of an expert on dressage. "Beautiful, beautiful," he kept saying. And the kids behind shouted to Antonio Aguilar, "Screw the ***

horses, man. Just keep the grass coming through!" I wasn't opposed to it all. I just wished that since, apparently, for whatever reasons, cowboys continue to mean a good deal to Americans, we could have a real rodeo in New



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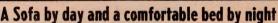
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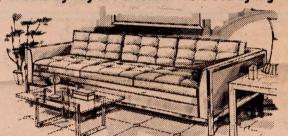
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Continued from page 25

neither precious nor obscure; his pictures are somehow both objective and subjective, involved and yet calmly detached. Yang's humor is subtle and slightly surreal, and there are some weird images in the show: a child carrying a cryptic signboard, an old man saluting in his doorway, not to mention Yang's schizoid

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self-portrait.

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SHOWS IN TOWN:

Frederick Evans, at the Witkin Gallery, 237 East 60th Street, through October 30. Bill Brandt, at the Museum of Modern Art, through November 18. Susan Smith, at the Panoras Gallery, 62 West 56th Street through October 18. "Israel: The Reality," at the Jewish Museum, 1109 Fifth Avenue (at 92nd Street), through November 10. Roy DeCarava, "Thru Black Eyes," at the Studio Museum in Harlem, 2033 Fifth Avenue (at 125th Street), through October 26. Cecil Beaton, "600 Faces by Beaton, 1928-1969," at the Museum of the City of New York, Fifth Avenue between 104th and 105th Streets, through October 26. Janice Van Raay—David Curtis, at the Jefferson Market Courthouse branch of the New York Public Library, Sixth Avenue at 10th Street, through October 25. David Batchelder, at Exposure, 214 East 10th Street, through November 2. Bill Rubens, "Flower Power," at the Muhlenberg Library, 23rd Street and Seventh Avenue, through October 31. David Marvel, at the Camera Club of New York, 37 East 60th Street, through November 7. Fran Coleman, "At Lincoln Center," at the Lincoln Square Branch of the First National City Bank, 162 Amsterdam Avenue (at 67th Street), through October 34 67th Street), through October 24. Charles Pratt, Ann Treer, Lilo Raymond, David Vestal, at the Pratt Institute Gallery (main building, first floor), through November 15. Jack Harris—Bob Fletcher, "Love and Other Survivors—Uptown and Down South:
A Photodocumentage," at the Paul
Klapper Library, Queens College,
through November 15. Garry
Winogrand, at the School of Visual
Arts, 214 East 21st Street, through October 27.

Bio-Energic Talks

The Institute for Bio-Energetic Analysis will present its 1969 lecture series, "Aggression and Violence in the Individual," on Thursdays, October 16, 23, and 30, at 8.30 p. m., at Community Church, 40 East 35th Street. The lectures include films and demonstrations on the dynamics of aggression and violence, and aggressive functions of the upper half of the body, and the lower half. Single admission is \$3.

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Cowboy State is facing shortage of — guess what?

by Michael Zielenziger Knight-Ridder Newspapers

DOUGLAS, Wyo. - Wyoming, the Cowboy State,

is facing a shortage of cowboys.

As a result, Georgie LeBarr is among the first U.S. ranchers to legally import Mexican cowboys to work on her 400,000-acre ranch properties straddling two states. She can do that because the federal government has for the first time certified that no qualified American citizens are interested in the work.

On every Wyoming license plate, cowboys ride broncos. The university football team is the Cowboys. Likenesses of cowboys gallop through restaurants and saunter across billboards throughout the state.

But to ranch owners like LeBarr, those symbols represent the romance of the old West, not the reality of the new. Truth is, no one wants the job these days.

"Nobody wants to work that hard," said LeBarr, who grew up on a ranch and never intends to leave

her rolling spread.

"Nobody wants to be a cowboy," said Oralia Mercado, executive director of the Mountain Plains Agricultural Service, which helps ranchers find suitable workers. "It's hard work, it's dirty work, it's round-the-clock work. It's not something a U.S. worker wants to do."

This month, for the first time, Mercado's organization imported Mexican *vaqueros*, or cowboys, to work with cattle on the open range of Wyoming and the Dakotas. It is a formal acknowledgment that efforts to hire qualified cowboys have failed — even in Wyoming, where unemployment exceeds 7 percent.

It also is a reminder to the families still working the range in this, America's least populous state, that

their way of life is quickly disappearing.

"We advertised in the newspapers and on radio, but we got zero results," Mercado said, displaying a classified ad from a Denver newspaper. "I can't see that there's anyone in the U.S. that wants this job. The status of being a cowboy just doesn't exist any more."

This year Mercado has imported only six workers – four from Mexico and two from Peru – for U.S. anchers. But she and other experts believe a larger

influx of foreign workers will inevitably result from changes in immigration law. New penalties against employers who hire undocumented foreign workers has effectively dried up the flow of Mexicans who traditionally worked illegally on farms and ranches across the West.

"The traditional cowboy is dead," said Greg Baker, the foreman of the LeBarr ranch. "We're a dying

breed."

The Western Range Association, based in Fair Oaks, Calif., has imported 1,300 sheepherders from nations as diverse as Chile, France, Mongolia and Australia, according to director Larry Garro.

With the dearth of ranch labor, Baker worries not only about the passing of an era but also about the inevitable disappearance of special skills once needed

to run ranches in the open West.

But the labor shortage has been a blessing for Jose Mendoza, a ranch hand from Bachiniva, in the

Mexican state of Chihuahua.

Mendoza, who once worked in the United States as an undocumented immigrant, said he's much more relaxed now that his presence has been formally blessed by the Immigration and Naturalization Service.

Mendoza, 37, said the jobs he performs on LeBarr's ranch are similar to those required on a Mexican ranch, when work is available. The difference: "I make four times as much money here."

Mendoza and the other imported ranch hands are paid \$800 per month, in addition to room and board. They are expected to help during calving, branding and castrating of livestock; to feed and water cattle, fix fences, repair water lines and troughs and clean barns. When warm weather comes, they will ride horseback and take the cattle into open grazing land.

LeBarr said that Americans are just too lazy to take the work she has to offer and that she can't

afford to raise the pay scale.

"They all want to work banker's hours," she said. "Everybody wants to be a boss. These Mexican workers, they don't quit on you when you hand them a shovel and tell them to clean a corral."

Besides, the vaquero originated in Mexico long

before the West was won.



Randy Jones / INX

ing up the Initiadomestic partner-

from a different not comprehend encourage and sexual relation-Irs. Fogassy for urture a family of thom are eligible idents of a city of his discourse them as parasites

society recognizes and affirm the underlying social make clear choices nancial resources, can grasp somel culturally neutral main tenet holds as Mr. Neff's body Initiative 35 heads for the fall ballot. Meanwhile, Police Lt. Fogassy, his family (and also my family) are entitled to city employee benefits. Mr. Neff, on the other hand, is entitled to his opinion.

- Martin Kral, Seattle

CAPRICIOUS LEGISLATION

Saving 'ancient woodlands' of Indiana a juvenile plan

Shame on Alaska's congressman Don Young for wasting his colleagues' time in the U.S. House of Representatives with suggestions for capricious legislation (Times article, April 10, "New 'bill' would save ancient woodlands of Indiana")!

Young's proposal to have the U.S. Forest Service acquire a new congressional district-sized national forest in Indiana is a juvenile response to what he perceives of as "meddling" by Indiana Rep. Jim Jontz in the forest affairs of Western states.

In case Rep. Young forgot, Jontz introduced legislation covering the status of old-growth timber in our national forests. All Americans, not just the residents of Washington and Oregon, are entitled to the benefits, and have a say in the stewardship, of our national forests. It should be the job of our elected federal officials to care for all national resources, not just the ones contained within the boundaries of one jurisdiction.

Did Washington's legislators behave more responsibly than Rep. Young? I'm afraid not: Sen. Slade Gorton weighed in with an "amendment" that, "maybe we should take all the warehouses in Muncie (Ind.) and declare them to be ancient historic treasures."

In a tit-for-tat response, Rep. Al Swift said he "... was not terribly sympathetic" to Jontz's requests for concessions on a completely unrelated clean-air bill.

Is it any wonder that our legislators in the "other" Washington are often unable

of Eastern Europe. If the issue of women in leadership is not built into the new system, we know it is not democracy.

Why are the media skimming this issue? Why are states "men" and diplomats not writing into the negotiations for U.S. support a requirement for full democracy? Could it be because we can't point to our own legislature and model democracy in our country?

Sara Stone-Alston, Seattle

DIVERSIFICATION BILL

State has little say in how Boeing, feds divide the pie

In a gush of propaganda that would make the Pentagon blush, Times writer Carlton Smith sings the praises of the "breakthrough" passage and signing of the so-called Defense Diversification Act (article, April 10). After having suggested that formerly "young, earnest" SANE-FREEZE canvassers have grown up by shifting their focus from "picket signs" to "dollar signs," Smith goes on to express amazement that Republican legislators are "fly(ing) with the doves," as the article's headline proclaims.

Smith recounts dire warnings of the potential "radical" cut of defense spending by 10 percent — which would reduce the bloated Pentagon trough to around Reagan's 1987 budget, still double the peacetime war spending of the despised Carter years. The "loss of jobs" from such an act, he reports, would be detrimental to this state, hence the need for state planning to avoid this outcome.

First, jobs are never "lost" by changes in government spending. The money is out there, and will be spent, to someone's benefit; that much is guaranteed. Give the huge profits for Boeing and oth military contractors, any shift is likely result in more jobs for real peoply fewer windfalls for the wealthy. "Why corporations fear the cuts."

POP VIEW/Ion Pareles

Even the Music Was Recycled

MID THE EARTH DAY festivities in New York's Central Park, some of the most ingenious recycling took place in the music on stage. Many of the performers made the effort to do something more than flog their latest hits; they gave at least a passing thought to the cause.

Daryl Hall and John Oates had the panache to resurrect Marvin Gaye's "Mercy, Mercy Me (The Ecology), recorded in 1971 and not outdated in its despair over "radiation underground," while Edie Brickell realized that Bob Dylan's "Hard Rain's A-Gonna Fall" (not coincidentally her most recent recording, for the soundtrack of the film "Born on the Fourth of July") was as appropriate to environmental apocalypse as it was to the fears of nuclear war that inspired it in the early 60's. And the rally could almost have commissioned the B-52's, whose latest songs - especially "Roam," about enjoying the wilderness - gamely, campily grin through environmental worries.

Whatever cleverness the performers showed was amplified by the sheer sense of event. Like the sun's gravity bending a light beam, the rally's size and fervor bent other songs to fit its theme.

With a million-strong audience attuned to messages about the state of the environment, songs whose meanings had long seemed settled were transformed. Love songs no longer seemed like private affairs; Ben E. King's "Stand by Me" became an anthem of concern and solidarity, while Hall and Oates's "I Can't Go for That" became a protest instead of a romantic gripe. Even the Bee Gees' morosely self-involved "I Started a Joke," sung by the Roches, could be taken as a parable about unthinking consumption and disposal.

Rallies and benefits are good places to hear songs getting reinterpreted. At the series of Farm Aid concerts over the last several years, songs about home and work and land have all seemed pointed and topical; at Amnesty International shows, Sting's "Set Them Free" - a song that urges lovers not to be possessive - became anthemic. "That's What Friends Are For," a hunk of sappy sentimentality, gained some gravity when Dionne Warwick turned it into a fund-raiser for AIDS. No harm done; context isn't everything, but it accounts for more of a song's impact than most songwrit-

Such flexibility is one of pop's deep-



Edie Brickell sang Bob Dylan's "Hard Rain's A-Gonna Fall" as an anthem about environmental apocalypse rather than nuclear war.

est pleasures and easiest corruptions. As gospel and soul singers know, the same song can sound devotional or lusty, give or take a few pronouns and a change of venue from church to club; thus the continuing pilferage through the centuries, as pop steals from religious music and religious music steals pop tricks in return. In the vast majority of pop songs, the flexibility of interpretation makes each lover or dancer an intimate of the singer, who seems, like a fortuneteller or con artist, to know the whole story

But the same thing that makes pop songs democratic - anybody can have their interpretive fling with a song - makes them promiscuous; they lend themselves to commercials as well as benefits, demagoguery as well as education. Movie and television soundtrack producers can make

love songs ominous or political songs complacent. The meanings of songs can be grabbed just as easily by the highest bidder as well as by the most well-meaning (or farfetched) cause.

Heartwarming as the performers' show of concern was at Earth Day, the recording business has its own imperatives that could hardly be called ecological. The large companies are nettled by an organization called Ban the Box. The advocacy group, started by the independent Rykodisc label and directed against the 6-by-12-inch disposable packages called longboxes that are used for CD's in the United States, has been busily publicizing the price (do consumers really want to pay an extra dollar for it?) and wastefulness of the longbox. It would prefer no longboxes On Earth Day, songs whose meanings had long seemed settled were transformed.

or, in a pinch, reusable display boxes designed to prevent shoplifting.

Ban the Box must be having some effect, since the American record business has launched a countercampaign. They want to keep the longbox, because the bigger package has more visual impact on a record-store shelf. As the LP disappears, the record companies want to hang on to some form of packaging that will advertise the product.

Just in time for Earth Day, a group of major and independent labels responded with their own initiative. They noted that many longboxes are now made from recycled paper, which sidesteps the fact that they still cost money to make and are still thrown away by the vast majority of CD buyers.

Even better, the record companies came up with a project that's nothing less than breathtaking in its transparent hypocrisy. To prove their green consciousness, record companies are planning to print ecological suggestions on the longboxes - presumably to be read and taken to heart in the few moments before the package hits the trash. (One prospective hint urges readers to keep car tires properly inflated, which would promote fuel economy while music fans are cruising for burgers. Pretty radi-

This is exactly the kind of gambit that could catch on in a big way. No doubt we can look forward to ecological messages on polystyrene foam containers and aerosol cans and disposable cameras, all in the name of heightened environmental consciousness. Think of it: towering landfills could be devoted exclusively to throwaways that claim good intentions.

As messages go, the ecological su gestions are nothing if notlike songs, they're suppo terpreted in just one so me the volatile, ind to able messages of the solution able messages of the solution and the solution anation and the solution and the solution and the solution and the

When Three Beats to a Bar Bo

By BARRYMORE L. SCHERER

Strauss' waltzes so irresistible? Melody? Offenbach and Emil Waldteufel composed melodies that are often as memorable as Strauss'. Harmony? Strauss' vocabulary is notably rich, sometimes implied in the melodies themselves, sometimes exhibited for its own sake in piquant, Schubertian key progressions within and between the sections of a waltz set. Yet Franz Léhar's harmony is even more sophisticated, though fewer of his waltzes are as endearing. Rhythm? They all played with those three beats to a bar.

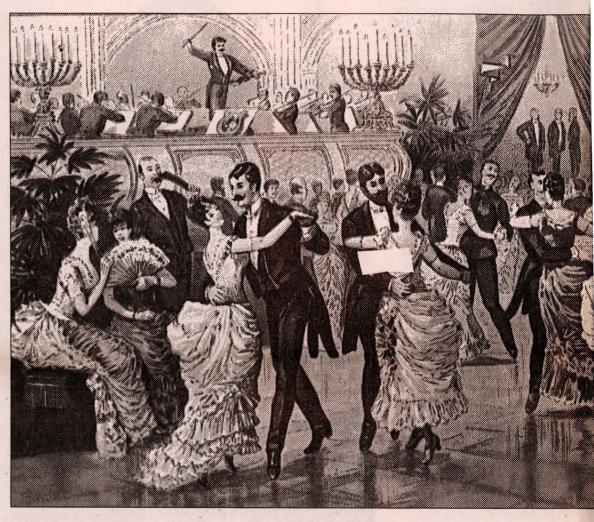
The quality that sets Strauss apart from his colleagues is rooted in his ambition to ennoble dance music, which led him to treat it with the seriousness of a symphonic poet. In the unforgettable introduction to "The Blue Danube," a masterpiece of romantic tone painting, Strauss, with high tremolando strings, solo horn and divided cellos, gradually presents the primary theme, builds to a climax and descends from it while maintaining a sufficient atmosphere of expectancy to go on to the waltz proper. The evocation is comparable with the opening of Bruckner's Fourth ("Romantic") Symphony. With such introductions and extended codas Strauss bridged the gap between the ballroom and the concert hall.

As the first releases in a new series of disks devoted to his work make clear, beneath the freshness and verve of Strauss' greatest compositions runs an affecting undercurrent of sorrow, of regret: The plaintive opening measures of "Artist's Life" and the zither melody of "Tales of the Vienna Woods" betray the heavy cost to their creator, for the Waltz King's crown was never an easy fit. Strauss was the equivalent of a modern pop star in a heartlessly competitive business. To fulfill contracts signed months in advance, he often composed at the last minute, rehearsing at all hours and conducting nightly in ballrooms and casinos that, however richly appointed, were usually overheated by gaslight, poor ventilation and crowds.

Morbidly neurotic, Strauss came close to suffering breakdowns several times, and only in middle age was he finally able to release some of the pressure by entrusting the direction of the family orchestra to his youngest brother, Eduard (an inferior composer but a superior organizer). Moreover, at the height of his fame as the leading composer of Viennese operetta, Strauss suffered more failures than triumphs. Functionally illiterate, loath to read even newspapers and tacking all feeling for written words, he compared to the sufferior of the suf

operettas to some terrible librettos.

rt from "Die Fledermaus," "The
and possibly "A Night in
rettas are usually re-



A 19th-century illustration of a Vienna dance hall—New recordings make it clear that in Strauss' greatest compositions there is an affecting undercurrent of sorrow.

Johann Strauss
ennobled the waltz as
a dance form, and a
new series will offer
all his work in that
genre.

ments, respectively, of themes from the failed operettas "The Queen's Lace Handker-chief" and "Prince Methusalem."

While there has never been a dearth of recordings of Strauss, the repertory has usually been limited to a relatively small sampling of his complete oeuvre, which runs to over 470 works with opus numbers, and many without them. "The Emperor," "Voices of Spring" and "Wine, Women and Song" are, of course, widely known and loved, and the same can be said of such polkas as "Tritsch-Tratsch" "Pizzicato" "Thunder and Light-

the first six volumes of a projected 45-volume Johann Strauss Edition played by the Czechoslovak State Philharmonic Orchestra based in Kosice, Czechoslovakia, under a number of conductors on Marco Polo compact disks (8.223201 through 8.223206; CD only). Produced with the assistance of a Strauss scholar, Franz Mailer of the Vienna Johann Strauss Society, and with the support of the Johann Strauss Societies of Britain and Sweden, as well as the cooperation of Strauss' publishing firm, Doblinger, this series promises to make available all of Strauss' music for orchestra and military band, including the operetta overtures and dances arranged from music by other composers. Marco Polo (distributed in this country by Harmonia Mundi) is releasing three disks at a time at intervals.

Overall, the performances, under the batons of Alfred Walter
Erdlinger (Vol. 4) an
(Vols. 5 and 6), are fluer
if the orchestra's home