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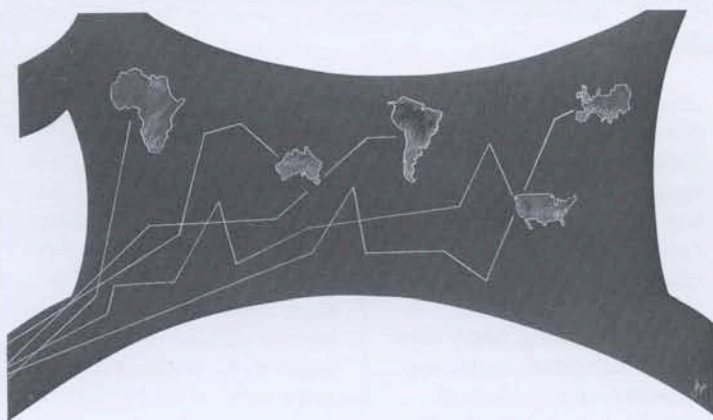
The photographs of Stonehenge, the most famous of prehistoric monuments, documents one of the sites visited on the Art History Study Tour (AR314) which traveled in England, the Netherlands, and France in the summer of 1984. I was pleased to assist in this program which was initiated and primarily organized by Professor Joan Hausrath. —Roger Dunn

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ARE WE STILL #1?

by Michael J. Kryzanek



Julie Polvinen

The United States leads the world in college graduates, car owners, Nobel Prize-winners, and nuclear warheads. Americans buy more televisions, produce more corn, and publish more books than any other people. In category after category, from agriculture to industry to consumer consumption, the United States is at the top of the list; the premier developed country, or as Americans are quick to point out — #1.

The pride with which many Americans list their accomplishments, however, has been tempered somewhat by a number of disturbing new rankings. For example, the United States is 13th in infant mortality, 52nd in home ownership, and 19th in male life expectancy (9th for American women). Unfortunately, in terms of negative rankings the United States does lead the world in the importation and use of opiates and is #4 in reported rapes (only Lesotho, Botswana and the Bahamas lead the United States in this crime category).

The penchant for journalists, government officials and academicians to create lists and rank nations has now become something of a national pastime. As Americans we seem to demand a regular accounting of, to use a modern phrase, "who's hot and whose not." But where this accounting procedure has generally reinforced our perception that America is #1, the broad range of negative rankings that have appeared recently are beginning to call into question our claim to be the most developed nation on earth.

If posed today, the question of whether the United States was the most developed country would most likely meet

with an answer of "it depends," and in some instances a few brave critics would suggest that America is in a period of decline with little prospect of ever regaining its position as #1. There are a few (primarily in politics) who still hold fast to the view that this country retains its power, prosperity and popularity as it did in the post-World War II era, but even they are forced to admit that the world is changing and the United States is no longer the only nation to be reckoned with.

The appearance of negative rankings for the United States and the charge by some that, like Greece and Rome, this is a period of decline, can be viewed as a positive turn of events in that it has forced

both our leaders and the general public to examine more carefully what we value and what we consider to be the essential elements of a developed nation. There is no doubt that this country has provided its people with a strong defense against the dangers that lurk in the world and a prosperity unmatched in the history of mankind. Americans not only live well, but they feel secure and maintain that sense of optimism that is the trademark of our way of life.

But the negative rankings on health care, education, crime, and drugs, combined with the growth, inventiveness and prosperity of countries such as Japan, West Germany, and Taiwan has forced Americans to question

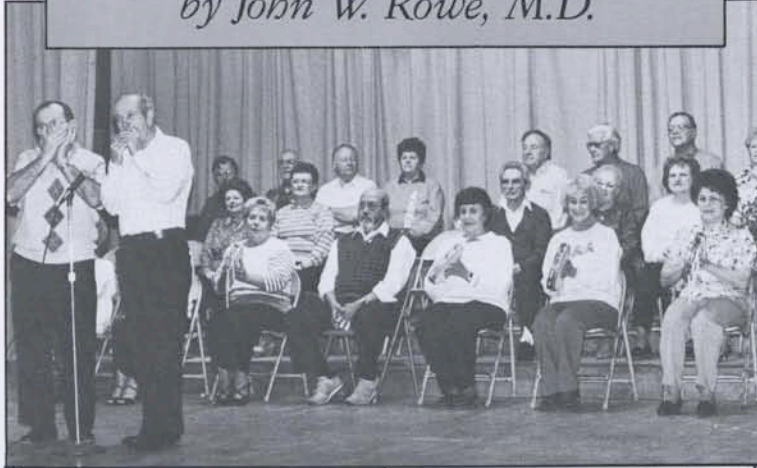
exactly what "developed" means and how they see the United States developing in the future. Americans are beginning to understand that the reason European children live longer at birth and read better is because their societies place more resources in these areas. Americans also now recognize that by spending only 2% of their GNP on defense the Japanese can allocate more resources toward research and development and modernize their industrial base. (The United States spends nearly 7% of its GNP on defense). And Americans are grudgingly coming to the realization that the social stability found both in Europe and the Far East is a factor not only of family ties and tradition, but of public policy decisions that strive to support those in need and create a climate of more equitable distribution of the nation's wealth.

Whether we like it or not, the United States is moving through a transition period in terms of its standing in the world community of nations. Despite the doomsayers, this country is not heading the way of Greece or Rome, but rather is in the process of adjusting to the realities of a world in which there are new #1's. The critical test for this country is not whether our ego can deal with being #2 or #3, but whether we can recognize that development means more than millionaires and nuclear warheads. A developed country is one that builds on its economic and military power and addresses a wide range of human problems. Without the foresight to recognize the importance of caring for the basic needs of its people, this nation may do more than slip in the rankings; it may forfeit its claim as developed. ■

HUMAN AGING

There's Less To It Than We Thought

by John W. Rowe, M.D.



Gina Guasconi

Hearing and memory losses, cognitive decline, easily fractured bones, crankiness and depression are often considered to be inevitable accompaniments of the aging process. How often do we hear such comments as, "I can't remember where I put my glasses; I guess that means I'm getting old." Yet many losses which have traditionally been thought of as age-determined are, on more careful examination, turning out to be merely age-associated. In other words, many of the declines we associate with being elderly can be explained in terms of lifestyle, habits, diet and other psychosocial factors which are not a necessary part of the aging process.

Common stereotypes about skin changes provide an excellent example. When I teach medical students, I often ask them to examine the skin of elderly patients. Usually, observing an array of wrinkles, blotches, freckles on an 80 year old patient's arm, the students report what seems obvious: "That's caused by aging." But then I ask them to look at the underside of the patient's arm, which has been protected from the sun. Here, the skin is soft and unblemished. "But isn't this also the skin of an elderly person?" I ask. "Why hasn't this skin aged?" The point is, of course, that wrinkling of the skin is age-associated but not age-determined. Skin which has been protected from the sun and other environmental damage appears less "old" than exposed skin. In addition, heavily pigmented skin appears to age less than lighter skin; thus elderly black men and women often appear younger than elderly whites.

Much recent research, including my own, is focussed on distinguishing changes that are age-determined (intrinsic) from those that are merely age-associated (extrinsic). Some illnesses result from a combination of intrinsic and extrinsic factors. For example,

osteoporosis, the decline in bone density which causes bones to fracture easily, is to some extent an intrinsic process — both men and women experience a decline in bone mass with advancing age. But extrinsic factors such as cigarette smoking, heavy alcohol consumption, inadequate calcium intake and lack of exercise cause a remarkable variance in bone density among the elderly. As people become aware of these extrinsic factors, they can obviously modify their life-styles accordingly: reduce cigarette smoking, increase exercise, etc. Thus a common, crippling and expensive disorder like osteoporosis, once thought to represent the "normal" aging process, is now recognized as being influenced by both aging and nonaging factors.

Emotional and psychological changes once thought intrinsic to the aging process have also come under scrutiny. In recent years a number of studies have shown the importance of control or autonomy — that is, the extent to which people are able to make decisions. Older people often find that their autonomy is reduced for a va-

riety of reasons: physical impairments, reduced income as wages are replaced by pensions, residential moves from their own homes to combined or institutional living arrangements. The research results show that lack of control has adverse effects — on emotional states, performance, and a sense of well-being.

In one set of experiments, nursing home patients were gradually allowed increased control over their own daily lives. Residents on one floor of a nursing home heard a lecture from the nursing home administrator about decisions that they could and should make for themselves, including such matters as planning menus, organizing exercise programs, and redecorating common areas. A comparison group, on another floor, heard a lecture explaining how the staff would take care of such matters. During the first three weeks after these lectures, the people in the experimental group were happier and more active, according to a self report, and spent more time in social activities as reported by the nurses, who also judged them to be generally more

improved than those in the control group. These changes persisted and the differences between the groups increased over an 18-month period.

Such experiments as this one have important implications for social policy, influencing our thinking about such subjects as retirement. Mandatory retirement has become a controversial issue lately, with some gerontologists arguing that people should not be forced to retire, but should be encouraged to remain active and working. The autonomy studies, however, suggest that the crucial factor in terms of personal happiness may be whether or not the individual involved feels that she has made the decision to retire herself. A great many workers look forward to retirement, while others prefer to continue working. Recognizing this heterogeneity, we should begin to question policies which are age-determined, with their implicit assumption that the elderly are all alike in their interests and needs.

An important distinction should be drawn between *usual* and *successful* aging. In the past, gerontology research has generally focussed on average or "usual" age-linked tendencies. But averages don't tell the whole story, and I believe that this approach exaggerates the effects of the aging process. By shifting the focus to what I have called "successful" aging, we can concentrate on those extrinsic factors (including diet, exercise, and autonomy) which are associated with health and happiness in old age. Once we have identified the extrinsic factors which contribute to successful aging, we will have a better idea of which approaches and policies are likely to be in the best interests of the elderly. ■

JOHN W. ROWE
Director of the Division
on Aging at Harvard Medical
School

ARE RATS RELEVANT?

by Edward J. Calabrese

Over the past several years there has emerged a widespread recognition that numerous environmental pollutants, consumer products, and certain medications may be carcinogenic. Many people refer to this continuing recognition of carcinogenic agents as the carcinogen of the week club. One day we are told that peanut butter contains a carcinogen, that saccharin causes cancer, that ham and bacon contain nitrite which may form the carcinogen nitrosamine in your stomach, that diesel exhaust is very mutagenic, and that the American Petroleum Institute recommends that self-service gasoline stations put up a warning similar to the one that is on saccharin-sweetened diet soft drinks. While this list could go on and on through hundreds of chemical agents, it is important to realize that much of our information indicating that these compounds are harmful to people comes not from studies with humans, but from experiments with mice and rats. The critical question then is how relevant are rodents in predicting how you and I may respond to such agents? Is a rat just a miniature version of a human or is a human just a big rat? Let's take a look at this issue.

The vast majority of cancer studies are in fact carried out on mice and rats. This is the standard procedure used by our National Toxicology Program. Scientists typically figure out the largest

amount of a chemical that mice or rats can consume without getting noticeably ill, and then feed it to them for most of their adult lives, about two years. This high dose is called the maximum tolerable dose or MTD. The scientists also use a second dose which is usually one-half the MTD. 50 male and 50 female animals are tested for each dose of the chemical, as well as a group given no chemical at all, called the control or comparison group. At a predetermined time, near the normal end of their lives, all of the animals still alive are sacrificed and examined by pathologists for various diseases, including cancer. All of the animals that have died before this predetermined time are also examined in the identical manner.

In order to ensure that no bias influences the outcome of the analysis of the study, the pathologists are given coded specimens so that they don't know which treatment group the specific specimen comes from. Consequently, the study is designed to give as fair an assessment of the study as possible.

This describes in general terms how cancer studies are carried out. The issue still remains — are these studies helpful in predicting how humans respond to the chemicals given to the mice and rats?

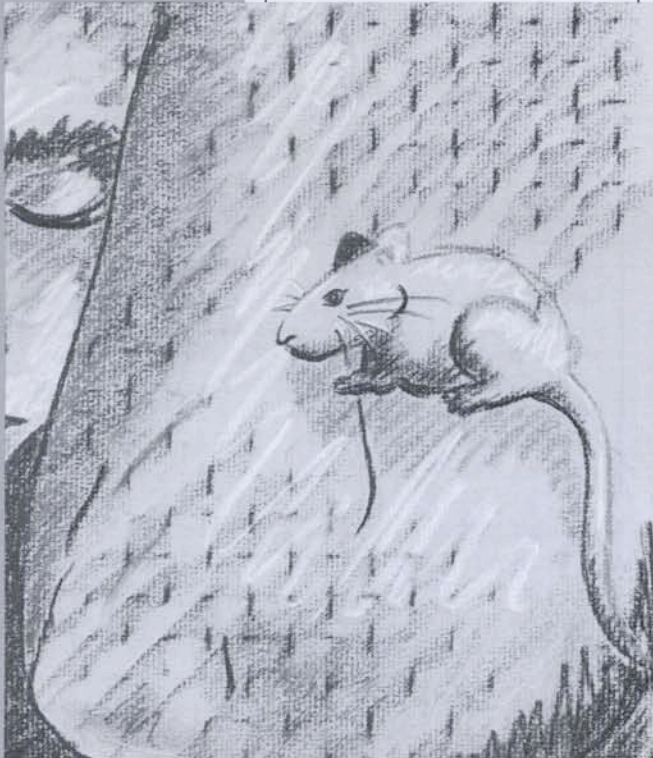
Does it make sense to give the rodents extremely high doses of a suspected carcinogen especially when humans may be exposed to only a tiny fraction of what the animals received? This is a critical issue today. Recall all the commotion over the question of saccharin's potential carcinogenicity. The controversy seemed to stem from the fact that the investigators gave the rat the saccharin equivalent of 800-1000 cans of diet soda each day of their lives. Many in the general public believed that giving such unrealistic exposures to the animal could not be of any relevance to the human condition in which people may drink only a can or two each day. It is interesting to note that the saccharin study was actually one of the most "relevant" studies conducted since many agents are tested at levels which exceed normal human exposure by not just a factor of 1000 times but literally by greater than a million times more!! If the public felt that the saccharin studies did not make any sense in terms of predicting human cancer risk, what must they think about these other studies? Of course, the general public isn't terribly aware of these other studies. Yet it is on the basis of these reports that drinking water standards and concern about hazardous waste areas are evaluated. Why does the

National Toxicology Program use such large doses when cancer studies are conducted and why do many toxicologists both in and out of government believe that using the MTD is the right way to go?

The answer which these people give is based both on science and economics. First the scientific answer. It is assumed that the magnitude of the effect of the carcinogen is directly in proportion to the dose. Using this assumption, no matter how low an exposure may be, some percentage of the population will still be adversely affected. There is therefore no threshold or safe level of exposure. Based on the assumption of directly proportional relationship between dose and effect, it has been argued that every exposure to a carcinogenic agent, no matter how small, will offer some degree of cancer risk. It is further assumed that one can predict what will happen at low doses based on what happens at grossly higher doses such as at the MTD. That, in brief, is the argument that scientists use when they say it is legitimate to extrapolate from high to low doses of carcinogens.

It has been argued that if we use a much larger number of animals, for example 1000 instead of 50 per treatment group, we could use more realistic (as in lower) doses, since the larger number of animals would permit us to detect a lower risk - thus the lower dose. However, since

studies with 50 animals per group already cost over one million dollars and since we never know the actual risk we are dealing with, it just doesn't make any sense to change the current scheme. So, in effect, what the researchers do is to use a small number of rats or mice, give them the highest dose they can handle over a lifetime, and then somehow extrapolate down to a lower, more realistic dose. Does this make sense? If not, are there ways it could be improved?



Julie Polvinen

At the present time, the best argument supporting the current testing system is financial and not scientific. The assumption that one can predict cancer risk from the consumption of one soda per day based upon responses observed at grossly higher levels (for example, 1000 cans per day) is just that, an assumption. It is quite possible that nothing bad may happen at low levels of exposure. While the body may not be able to deal effectively with a massive chemical challenge, it may work just fine if the carcinogen is given in minute

amounts. If this is true, then the whole premise of the current cancer program is undermined. This, in fact, is true for a whole new class of carcinogens which apparently act on the body without attacking its DNA. However, untenable as some of the assumptions used by toxicologists doing animal cancer studies may seem, finding acceptable alternatives to the current problems which are scientifically defensible while not breaking the bank are few and far between.

Given that scientific approaches seem to be at a standstill with regard to improving the current situation, the major driving force for change is, as stated before, financial. Why? We have literally tens of thousands of chemicals which we desperately need to evaluate for their potential carcinogenicity. If each one were to cost over a million dollars, the total cost just for cancer evaluation, not even considering all of the other possible health concerns, would be astronomical. Consequently, there are strong efforts being made to try to shorten or even circumvent the lifetime cancer studies with shorter, less expensive studies which can reliably predict whether an agent may be carcinogenic. However, all known short-term predictive tests for carcinogenicity are inherently limited in their ability to predict the actual risk of cancer. Often just knowing that an agent may cause cancer is not enough information. Our society needs to know what the risk or chance of developing cancer is for each dose level of a chemical. Thus, we should try to find a way to incorporate the enormous benefits of our technological achievements while at the same time not falling victim to them.

Now let's investigate how well rats and mice simulate the human organism and why they are presently used in cancer studies.

Have you taken a walk through a pet store recently and stopped to look at the mice? Do these little furry creatures, with pointed noses, whiskers and four legs remind you of yourself? Believe it or not, your health and life and that of your family depends on the ability of mice and rats to predict how humans respond to toxic and carcinogenic agents. Thousands of substances are allowed to be used in foods and other consumer products on the basis of how they affect mice and rats. If these animals don't develop cancer or any other horrible diseases, the government will usually give its O.K. and before you know it we are eating the foods or wearing the products. What confidence should you have that your health and life are being adequately protected by our current testing scheme?

Let's take a look at why the government uses rodents to predict how we may respond. The rodents are used not because they are excellent models to predict human responses or even because they are the best models. They are used because of practical reasons which include their cost, resistance to infectious diseases, relatively short life span, and ability to develop pollutant-induced diseases. While many scientists feel that monkeys may be better models for humans, they are not used in alternative studies because of their poor availability, high cost, and longer life-span. You need an animal model that can tell you relatively quickly if an agent causes cancer; waiting 10-20 years for the answer is just too long for society to remain in suspense, even if the study has a significantly better chance of being correct. Even the 2-3 years of a rodent's life seems too long given the need to know whether a substance is a carcinogen. These practical considerations are powerful arguments in deciding which animal should be used.

Given the practical reasons for why we should use rodents, what about the biological reasons? That is, can these animals predict how you and I will respond?

This is a most difficult question to resolve. The answer, as I see it, is that the rat can give a fairly decent indication of how an agent may affect people. In other words, like an archer, often times we will hit the target but don't expect us to hit the bull's-eye. Take, for example, the cases of asbestos, vinyl chloride and cigarette smoke. All three are human carcinogens and all three cause cancer in rodents. In contrast, arsenic is also a known human carcinogen. However, arsenic has been tested over a dozen times in mice and rats and has never been found to cause cancer. Getting 3 out of every 4 right on tests in school means you pass the test. However, when we are dealing with potential cancer causing agents, even one wrong out of 1000 is unacceptable given the untold misery the mistake is likely to cause.

That studies using the rat should miss one every now and then is not unexpected. Despite some striking similarities between humans and rodents, there are many differences which can easily spell the difference between developing cancer or not. For example, rodents have different numbers and types of bacteria living in their digestive tracts than people; they tend to excrete a higher proportion of heavier compounds through the bile; they synthesize ascorbic acid in their livers; they don't have gall bladders; they concentrate their urine much more; and they always breathe through their noses, among many other differences. Given so many differences, it is often surprising that they do as decent a job as they do!

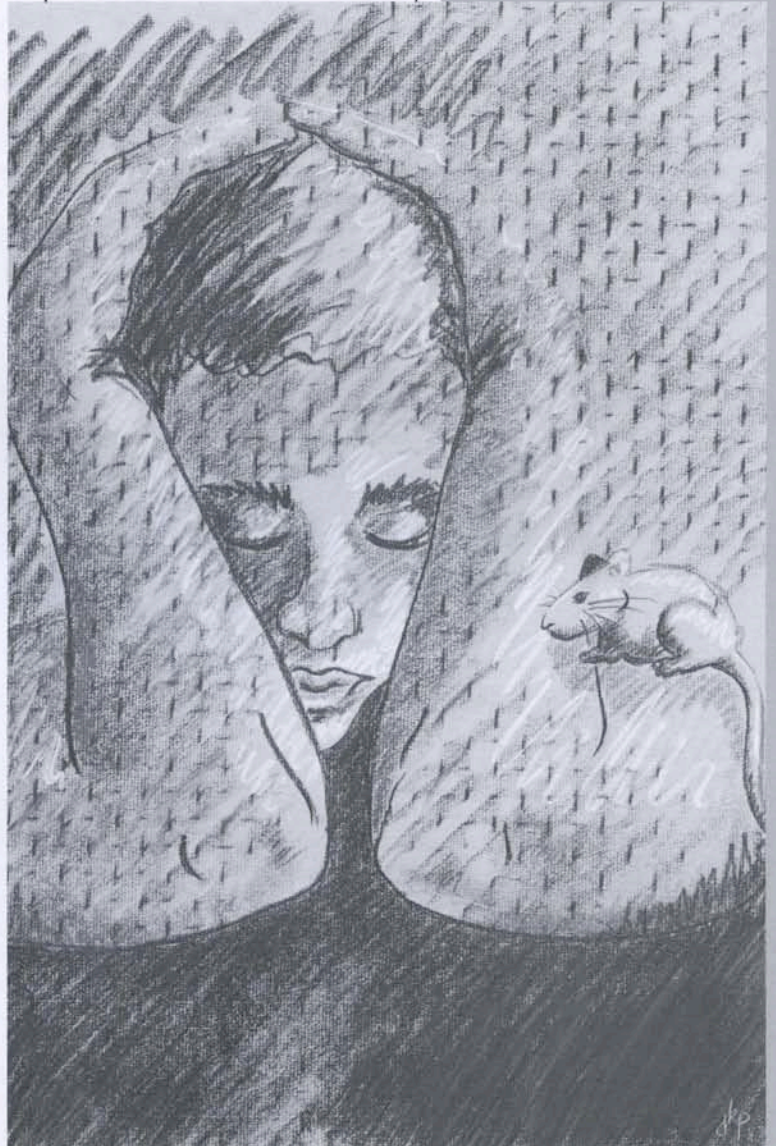
It is because of the inherent limitations of any one species

to predict accurately how humans may respond that the National Toxicology Program uses not one but two species - mice and rats - in their testing scheme. Presumably, they figure that if one species doesn't pick out the adverse health effect, then maybe a second one would. Using two species, in fact, played an important role in the study sponsored by the American Petroleum Institute on the carcinogenicity of unburned gasoline. In that case, only the male rat was sensitive. If only the mouse had been used, then the cancer effect would have been missed. This type of redundancy in the testing system is thought to help ensure that a carcinogen will not slip through.

The interesting thing about the current testing programs is that we really don't know how successful they are. It is very hard to later prove that "compound X" which caused cancer in the rats was, or wasn't carcinogenic in humans. Human population studies are generally somewhat insensitive unless we are dealing with a very rare type of cancer (as in the case of vinyl chloride-induced angiosarcoma) or a very potent carcinogen (as in the case of cigarette-smoking asbestos workers). The current situation reminds one a little of a comment that Senator Howard Baker made about Reaganomics in the early 1980's. He said that the economic course Reagan was charting for the country was a "river boat gamble." At least in the case of President Reagan's program, one can tell after a certain number of years if it was the right way to go. However, in the case of cancer testing programs one may never know.

Finally, it has become

fashionable in scientific circles to discuss the cancer risks of various activities. For example, drinking a quart of water each day with a chloroform level of 100 parts per billion, the level allowed by the EPA, is thought to have a risk of causing four cancers per 10,000 persons over a lifetime. One flight from Boston



to L.A. and back will increase one's risk of cancer by one in a million because of the extra amount of cosmic rays you receive at that high altitude. Eating 20 peanut butter sandwiches will also increase your cancer risk by one in a million because of the carcinogenic contaminant called aflatoxin found in most commercially available brands.

Now we read that as little as a trillionth of a gram of dioxin in a cubic meter of air is predicted to produce about 100 additional cases of cancer for every million people. Just what are these numbers or risks based on?

These numbers are really predictions of what experts think will happen based on previous studies, usually with mice or rats. Only in very limited situations are these predictions based on human studies. As previously discussed, the typical situation involves scientists conducting a study in which the animal receives a very high dose of a chemical over its entire lifetime. If the substance causes cancer in the animal, then predictions like the ones we are talking about are made. The key element here is that we are trying to predict what will happen at very low levels of exposure based on studies in which grossly higher levels were used. If the findings of a study are positive, mathematicians apply certain formulas to the cancer data. These mathematical manipulations allow us to calculate a risk at any level of exposure one desires to know. This process of predicting what will happen at doses beyond those used in a study is called extrapolation. The further the doses are from those used in the study the more risky the endeavor.

But, now for a simple question. How can one tell if a prediction is correct or even close to being correct? The sad fact of the matter is that these cancer risk predictions can never really be proven or disproven. Why? Consider the question: How would you even prove that a risk exists for one cancer in a million people over a 70 year lifetime? To do this you would need over 70 years to conduct the study, the size of a budget that only Fort Knox could hold, and the luck of a dozen Irish sweepstakes winners. The simple fact is that the

risks are calculated without the intention to try the impossible - that is, to validate them!

Another important point to consider in this whole process is that when these risks for humans are calculated based on animal studies, it is assumed that the human and rat (or mouse) respond in an *identical* way to a carcinogen. Of course, this could not be true. Nevertheless, this is an assumption that is always made. Nobody knows whether the rat may be more or less sensitive, nor how much more or less. All in all,

cancer risks is a new discipline in the field of public health. Although we as a society may need and, in fact, demand accurate answers, we should fully understand the limitations of current approaches. Consequently, in my opinion, the value of current risk predictions is not the calculated risk we are told, because this could be way off the mark. The real value at present lies in the ranking of chemical agents and activities so that regulatory agencies may identify the most important areas where action is needed.

What then is the bottom

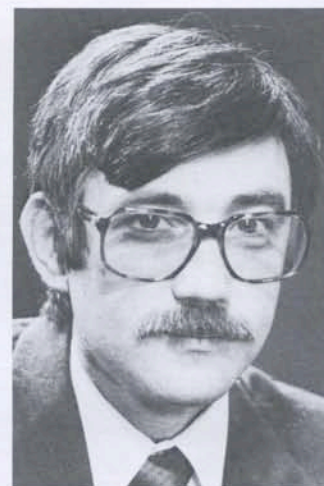
Much more, however, is needed and it can proceed with the continued support of the American public to demand that quality of our scientific database and judgments in this field of toxicological risk assessment be maintained and expanded — because without such improvements the enormous uncertainties we face can undercut the basic right to a safe and healthy environment. ■

... the value of current risk predictions is not the calculated risk we are told, because this could be way off the mark. The real value at present lies in the ranking of chemical agents and activities so that regulatory agencies may identify the most important areas where action is needed.

the process whereby toxicologists go about predicting cancer risks is heaped with uncertainties.

Since the process used to predict cancer risk is based on several questionable assumptions and cannot be empirically verified, predicting cancer risk is problematic. However, society needs to begin to get answers to these questions. To be able to differentiate between activities and products on the basis of cancer risk is important in establishing government policy, developing drinking water and air quality standards, and affecting the public's choice of activities. However, the scientific community and the general public must realize that the process of predicting

line here? It is that the toxicological community faces a series of extraordinary challenges as it tries to accurately predict whether a future drug, food additive, or pesticide is not only able to do its intended job but to do it in a manner that does not adversely influence the public's health. Current procedures have many limitations and yet decisions have to be made. We truly hope that our testing procedures are up to the task of protecting the public. But enough exceptions or failures exist to preclude overconfidence. We must recognize that the demands on the toxicologist often exceed the capacity of this science to deliver the answers we need. Yet, progress has been made.



Dr. Edward Calabrese is a board certified toxicologist who is Professor of Toxicology at the University of Massachusetts School of Health Sciences, Amherst. He holds a B.A. and M.A. in Biology from Bridgewater State College, and a Ph.D. in Zoology from the University of Massachusetts, Amherst.

Dr. Calabrese has researched extensively in the area of host factors affecting susceptibility to pollutants. He is the author of more than 200 papers in refereed journals and ten books and writes reviews for 10 journals.

Professor Calabrese was instrumental in the conceptualization and development of the Northeast Regional Environmental Public Health Center and was elected its first director.

Studying Historical Family Change In Nineteenth-Century New Bedford

by *Walter F. Carroll*



New Bedford Harbor - circa 1900

Courtesy of Sue Poyant

The past ten to fifteen years have seen a revolution in our understanding of the nature of family life in the past. The recent tenth anniversary of the *Journal of Family History* marked one signpost of this revolution. Research in historical family change has compelled historians, sociologists, and other scholars to re-examine their notions of family life in the past, and their understanding of the relationships between large-scale social change and family life. In this article, I will explain a little about how scholars carry out such research. I use New Bedford as a case study of research in historical family change.

In spite of the importance of family change, until recently we have known remarkably little about the topic. Sociologists studying family change had tended to focus on the relationship between large-scale processes such as industrialization, urbanization, or modernization, on the one hand, and family life, on the other hand. We had relatively little real evidence about historical family change. However, despite the paucity of evidence, scholars invented fairly elaborate descriptions of family life in the past and explanations of the relationships between social change and family change. Many of these descriptions and explanations turned out to be myths.

Perhaps the best known set of myths had to do with changes in household structure, which includes household size and household composition. In pre-industrial societies, the story went, relatively large extended families predominated, typically with three generations living in the same household. With industrialization, smaller, two-generation nuclear families increasingly prevailed. Kinship ties outside the immediate family declined in importance as relationships within the nuclear family

became more intense. Industrialization also meant a shift from production in the home, either agricultural or handicrafts, to factory work. The family became a center for consumption, but lost its role in production. People had to leave the home to go to work. The family increasingly specialized in emotional support, personality stabilization, and socialization.

Although not completely wrong, these views are oversimplifications, and in some cases pretty far off the mark. Nonetheless, these myths apparently made sense so few noticed the lack of evidence for them. The developing study of family history changed that. In studying family history, sociologists, anthropologists, and some economists work alongside historians. Their research has produced some startling findings, especially from the point of view of the old myths.

Research now indicates that small, nuclear households predominated in pre-industrial western Europe,

Japan, the United States, and parts of eastern Europe, for at least the last several hundred years. The widespread extended family now seems mythical. Research by the British sociologist Michael Anderson suggests that kinship ties did not weaken with industrialization. In fact, industrialization in Great Britain increased family members' dependence on kin outside the household and led to an increase in household size and complexity. From this research emerges a far more complex picture of historical family change.

This new picture pushes us to abandon or significantly revise long-held myths. It also suggests the need for further research. Several years ago, I decided to carry out such research. I focused on New Bedford, Massachusetts. Many know of the city's whaling history, but some forget its later pre-eminence as a cotton textile manufacturing center. In 1855, 314 whaling ships from New Bedford plied their trade. By 1885, the number had

diminished to 85. The value of the catch declined from over five million dollars in 1855 to about one and one-half million in 1885. During the last quarter of the nineteenth century, New Bedford industrialized rapidly and intensively. By 1880 industrialization in New Bedford was well under way, making it an excellent case study for examining the relationships between industrialization and family life.

In my research on New Bedford, I examined many aspects of family life and family change, but in this article I focus on issues related to household structure. I wanted to measure average household size and composition in New Bedford in 1860 and again in 1880. I wanted to know how big families were. With whom did people live? Did they live with other kin or non-relatives? Were nuclear families predominant, or did they increase during industrialization? I was especially interested in how a family's economic standing affected its size and composition. To find out these things I constructed what social historians call a "collective biography" of New Bedford's population in both 1860 and 1880.

Collective biography is a technique for reconstructing the lives of a whole population, including those who would otherwise remain unknown. Until fairly recently historians had slighted the lives of common people—those who did not often leave written records and were not involved in momentous events. However, recently social historians and historical sociologists have begun to document the lives of these anonymous Americans. This research on New Bedford illustrates the strengths and weaknesses of the approach, as well as the kinds of records and techniques on which it depends.

First, I had to choose some sub-groups in the population

for study. Using standard statistical techniques, I drew random samples of the New Bedford population for 1860 and 1880. Each sample had about 400 households. I got the names of the people in my sample from the federal census manuscripts, the most valuable records for this kind of research. In the nineteenth-century, the census enumerators went to each household, asked for information, and filled out the census forms. These forms, the census manuscripts, are now available in microfilm. The United States has conducted the census since 1790, but not all censuses are available or useful. Not until 1850 did the census collect complete information on the entire population. Fire destroyed the 1890 manuscripts. In addition, recent census manuscripts are not open to researchers, due, ostensibly, to privacy concerns. Nonetheless, the available census manuscripts constitute rich sources of data about the nineteenth-century United States, so I used the 1860 and 1880 census manuscripts.

The information on the census manuscripts includes, at least, the names and ages of household members, their place of birth, occupation, whether children were attending school, and various other information. Notice the "at least." The same information does not appear on each census. This leads to major problems for researchers, and makes using other kinds of records mandatory.

Two examples of changes in the available information will illuminate the problems with these records and ways to surmount the problems. Because I wanted information on household composition, I needed to know the relationships between people living in the sample households. These relationships are not listed in the 1860 census manuscript, but, by reading the instructions to the census

enumerators, we can develop rules for interpreting household relationships. For example, I assumed that the second person listed in a household was the spouse of the household head if the person was of the opposite sex, had the same surname, and was within 30 years of age of the household head. Naturally, using these rules will lead to errors, but the errors will probably be small. In the 1880 census such relationships were listed, thus easing this particular task. However, other problems arise.

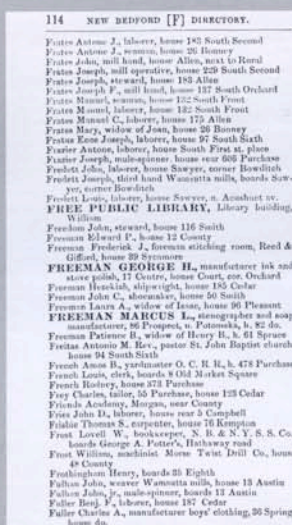
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manuscripts to the tax records, I was able to gather more complete information on families' economic status. Linking records this way helps in constructing a collective biography. Another example, related to occupation, illustrates the value of yet another source, the city directories. I have included page 114 of the 1879/80 New Bedford City Directory with this article. Take a look at the page. Notice John Fulhan, the fourth name from the bottom. The surname is actually Fulham. The census gives much

century families. By the way, this does not imply that we should ignore traditional sources, such as newspapers, diaries, letters, and local histories. Combined with these sources, they round out our picture of particular times and places.

I put the samples together using the census manuscripts for 1860 and 1880, and the city directories for 1859 and 1879/80. These records have shortcomings in addition to those already mentioned. They give us no sense of the interior life or emotional texture of family life. In addition, they are undoubtedly inaccurate to some extent. However, without them we would know nothing at all about these families. We need to use them, while remaining conscious of their weaknesses. Looking at a few specific nineteenth-century families will make the contributions of these records clearer, as well as introduce us more directly to family life in late nineteenth-century New Bedford.

Emma Carrol lived in New Bedford in 1860. This 40 year old woman lived with her 9 year old son William. Both had been born in Massachusetts and William had attended school during the year. No occupation is listed for Emma Carrol, nor did she own any real estate or personal property. She is not listed in the 1859 city directory. We don't know much about Emma Carrol, but what we do know can lead us to some important questions. Were female-headed families common in the nineteenth century? What were their economic circumstances like? Perhaps we can find out if the conditions of female-headed families in the past were similar to those today. Female-headed households and the "feminization of poverty" receive much attention today. Maybe this kind of historical research can shed light on the dynamics of the relationships



1879-1880 New Bedford Directory

I also wanted to know how a family's economic status affected its family life and household composition. Therefore, I needed measures of families' economic standing. The census manuscripts list occupations, one good clue to a household's economic standing, but I wanted additional information. In 1860, the Census Bureau had collected information on household heads' personal property and real estate holdings, so I used that. Although undoubtedly somewhat inaccurate, this information is valuable, if used cautiously. However, in 1880 the Census Bureau did not collect that information on wealth. I got around this by using the New Bedford tax records for 1880. By linking families chosen from the cen-

more complete information, but the city directory provides more detail in one area. The census manuscripts listed occupations, but often in a fairly general way. For example according to the census, John Fulhan "works in a cotton mill." However, the directory tells us that John Fulham was a weaver at the Wamsutta Mills. Both sources refer to the same John Fulham, even though the spellings of the last names differ, because of the addresses. In case you are wondering, the 1880 tax records tell us that Fulham owned no real estate or personal property, and confirm his last name and address. You can see that drawing on several sources enables us to construct a fairly detailed portrait of these nineteenth-

between female-headed households and poverty in contemporary America.

We have much more complete information on the Dammon family. Silas Dammon, 39, a shipwright, or ship carpenter, lived in New Bedford in 1860. Born in Maine, he had married Hannah, 37, a woman born in Rhode Island. Their eight children ranged from Thomas, a seaman aged 18, to five month old Arthur. Silas Dammon owned real estate valued at \$1000 and lived at 83 Smith St. Although the Dammon family was large, it was a nuclear family and thus fairly simple in structure. By the way, both the Carrol and Fulham families were also nuclear. The Dammon family can lead us to further questions. Were many families this large? Did the average size of families decline from 1860 to 1880, and if so, by how much? Can we isolate specific factors that accounted for changes in household size?

William O. Russell's large family had a more complex family structure. The household had ten members. In addition to Russell, 49, his wife Catherine, 40, and their seven children, Catherine Mooney, a 25 year old domestic servant born in Ireland also lived with the family. Russell's children were William T. (24), Frederick (21), James (18), Henry (16), George (14), Adelaide (9), and Edward (5). William T. was a seaman, Frederick was a clerk, and the three youngest children attended school.

I was able to link the Russell family to the city directory. In fact, William O., William T. and Frederick are all listed. The directory listing for William O. raises a problem. In the census, William O. was listed as a Custom House Inspector, and Frederick listed as a clerk, with no indication of where he worked. However, according to the city directory William O. was proprietor of William O.

Russell Clothing Store, and Frederick was a clerk in that store. Both listings of William O.'s occupation are probably correct. He may have been appointed a custom house inspector after the directory was published, and continued to own the store. Frederick may have run it for him. Despite the Russells' evident prosperity, the tax records indicate that they owned no real estate or personal property.

Although no family members beyond the nuclear family lived with the Russell family, Catherine Mooney's presence does make this a somewhat complex family. When non-relatives live with a family, we call this an *augmented* family, a fairly common type in the nineteenth century.

John Cranston headed a more complex, extended family. John and his wife Sarah were both 38. Their seven children ranged from Henry, only six months old, to 14 year old John. In addition to these members of the immediate, nuclear family, William Cranston, John's 78 year old father lived with the family. Two non-relatives completed this household. We may wonder if this was a common type of family. How likely were people to live in extended households in 1860? Did the percentage of extended families decline over the next twenty years, as some perspectives would suggest? You can see that each family we look at raises further questions. Before considering the answers to these questions we should consider a few cautions.

Remember that, strictly speaking, we are guessing about the family relationships in these 1860 families. Catherine Russell was listed immediately after William O. Russell. She shared his last name, and she was within 30 years of his age. Therefore, following our rules we infer that she was his wife. The inference seems pretty safe,

but it is an inference and could be wrong. Let's consider the Hunt family, from the 1880 sample.

John Hunt, 25, lived with Nancy Hunt, also 25. Also living with them were Samuel Hunt, 21, and Ruth Hunt, 15. How are these people related to each other? We would infer that Nancy was John's spouse, and perhaps the others were his siblings, or cousins. However, because this family is from the 1880 sample their family relationships are listed so we need not make inferences. In fact, John and Nancy were siblings, evidently twins. Samuel and Ruth were also their siblings. Had this family been in the 1860 sample, we would have erred in inferring their relationships. The Hunts remind us of the need for caution in this type of research.

Finally, we can consider Joseph Hocklaw's household, also from the 1880 sample. Hocklaw headed an extended family with two separate and complete nuclear families within it. Joseph Hocklaw was 63, three years older than his wife Amelia. Their son Thomas lived with them, as did their daughter Amelia Snyder and her husband Arthur Snyder. Joseph Hocklaw had no occupation listed; perhaps he was retired. Amelia Hocklaw was keeping house, and the other three worked in a cotton mill. Unfortunately, I could not locate this family in the 1879/80 city directory and therefore do not know what cotton mills they worked in or what specific jobs they held. All had been born in Prussia. This reminds us of the importance of immigration in late-nineteenth-century New Bedford. Many of the immigrants worked in the cotton textile factories.

We have looked at several families. All lived in late nineteenth-century New Bedford, but their circumstances differed and we have different amounts of information about

each. Thinking about such nineteenth-century New Bedford families leads to important questions. How representative of other New Bedford families were these? Did family size decline during the period of industrialization? Did the likelihood of living in simple, nuclear families increase? Were immigrants more likely to live in certain types of households? To answer these questions we need to look at a different kind of evidence. Rather than just looking at each of these families we need to aggregate the evidence derived from them to see what we can learn from it.

Putting the evidence about these families together into a collective biography gives us a broader sense of social life in the past. We gain access to social patterns and structures that have now disappeared. For example, we can find out the distribution of occupations, ethnicity, and fertility, and we can begin to understand the relationships between these various areas of nineteenth-century New Bedford social life. In addition, understanding social life in the past often helps us understand contemporary social patterns.

Traditional perspectives on family change would lead us to expect a reduction in average family size. This seems to have occurred. In 1860, mean household size in New Bedford, according to the sample, was 4.9. By 1880, that had dropped to 4.3. Thus, we are less likely to find large households like the Cranstons and Russells in 1880. This leads to further questions. How did the composition of households change? Did the numbers of certain categories of family members diminish from 1860 to 1880? Did the overall distribution of household types change? Did nuclear households become more predominant in 1880?

We have seen that average household size declined by

slightly over one-half person per family from 1860 to 1880. Almost all of this decline came from reductions in the average number of children under nine years old and in boarders. The first reduction fits well with an overall decline in fertility that occurred over the course of the nineteenth-century. We'll return to that. It's harder to figure out the decline in boarders, but looking at the changing distribution of household types in the accompanying table may help us.

This table reveals some surprising changes. The percentage of no family households, households consisting of one person or a number of unrelated persons, increased very little. The percentage of nuclear families increased by about 6%, and was clearly the dominant type in both 1860 and 1880. Augmented and extended family percentages changed more dramatically. Augmented households decreased by one half, and the percentage of extended households almost doubled.

Describing these changes is one thing, explaining them another. Some might suggest that perhaps the decline in boarding reflects fewer single men and women looking for somewhere to live, but this does not seem to be the case. Rather, there was apparently an increase in large boarding houses and hotels. People were more likely to board in such institutional households and the practice of individual families taking in boarders declined.

In regard to the increase in extended households, one might surmise that the influx of immigrants to New Bedford helps to explain it. Perhaps the immigrants were more likely to move in with other family members, since their housing and resources were probably limited. This view makes sense, but it's wrong.

The major increase in extended households occurs in

families with native-born household heads. Immigrants were more likely to head nuclear families. Their nuclear families tended to be larger, but they were nuclear. The reason that native-born household heads were most likely to head extended households seems related to the level of their resources. Extended households, especially those with young children and elderly non-working parents, usually place a heavy burden on the working members. Many native-born heads could afford this type of household. However, that

Americans. This assimilation process is seen as slow, evolutionary, and inevitable. Despite the wide acceptance of this explanation, I find another more compelling.

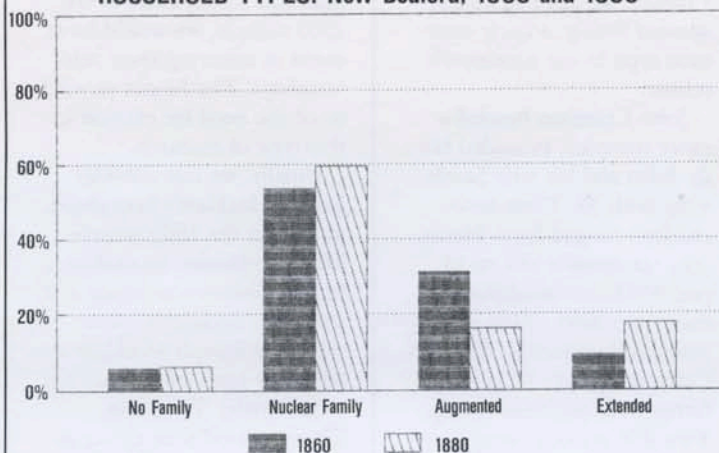
A new perspective emerging in the study of historical family change emphasizes the level of resources available to families. On this view families engage in strategic behavior that families engaged in to ensure their survival given certain levels of resources. This family strategy or family economy suggests that there is no slow, inevitable, evolutionary process leading to

second approach would emphasize making changes in people's economic circumstances first and expecting that changes in family behaviors, such as fertility, might follow that.

My research indicates that the changing distribution of household types, as well as fertility levels and family size, in New Bedford was closely tied to the level of available resources. In fact, during the period 1860 to 1880, social class seems to have become important and ethnicity less important in determining various aspects of family life in New Bedford. In other words, cultural values became less important and the economic situation more important. This surprises many who emphasize ethnic differences.

A complex picture of family emerges in late-nineteenth-century New Bedford, with some expected and some surprising developments. As I continue this research, I hope to move beyond describing historical family in New Bedford, and become able to explain it more completely. I hope this article has given you a sense of what this kind of research is about and of its importance. ■

HOUSEHOLD TYPES: New Bedford, 1860 and 1880



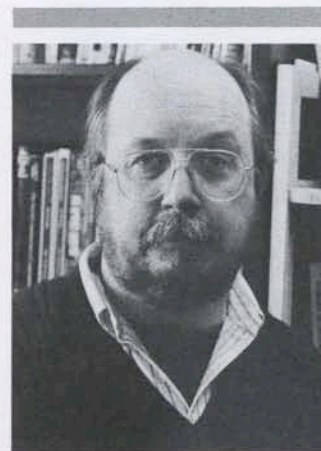
does not tell us why they increasingly preferred them.

We can examine some related changes. We have noted the decline in family size, due primarily to declining numbers of young children. A decrease in the birth, or fertility, rate caused this decline. Fertility in the United States declined over the course of the nineteenth-century, and New Bedford clearly fits this overall pattern. In particular, immigrants reduced the number of children they had. Why? Let's consider two answers to this question.

The fertility decline among immigrants has often been attributed to changing values and attitudes. As immigrants spend more time in the United States, the story goes, they accept the cultural values of the native-born, middle-class

changes in fertility. Rather, families chose various behaviors, including whether to have children, depending on their resources. With less demand for child labor, and with household heads increasingly able to support their families on their own wages, the need for large families declined. I have already mentioned the possible connection between a family's level of resources and the likelihood of its being extended.

My research, as well as that of others, lends support to the second perspective. These two approaches also have practical consequences. For example, many are concerned about overpopulation in the Third World countries. Acceptance of the first view would lead one to suggest education to change cultural values. The



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Two Poems



Elizabeth McFarland

by
Daniel
Hoffman

LAST LYNX

A census of murdered
Chickens. Entrails and bones
Swarming with green
And blue bottle-flies,
An incriminating scene

Like hound-dogs slashed,
Bellies gashed open,
The guts dragged
Howling a little ways
Towards home—

Who'd need to see half
A footprint in soft
Earth after rain,
It was the last
Lynx in Hancock County

And they all went
Out on that hunt,
For the fun, the excitement,
Some for the bounty.
With their shot-guns and deer-guns

They blazed at anything moving.
Those damned fools near killed
Their sons, their companions.
Never got near her.
She's gone,

Leaving the legends
Of her crafty will
And the longings of hunters
As keen as the hungers
She sates with her kill.

THE SACRED FOUNT

Stubborn hidalgo, rusting in his mail,
Outliving enemies, his loves, his time.
What spell, what doom lures him to hope that Time,
Whose breath seres every limb, would leave him hale?

The stagnant swamps he's swigged! How many's the time
Since being gulled by a Medicine Man's tall tale
He's almost found that fount; but weary, frail,
An old dog can but piddle away his time.

Who hasn't hacked through mangroves, tried to suck
The juvenescent dew from the earth's breast,
Gulped potions, bottles, jugs, with just his luck

While Memory's daughter still holds out her Grail—
One taste, and a body is forever blessed,
She sings, from thickets serried as chain-mail.

*Daniel Hoffman is a distinguished poet and literary critic. He is poet-in-residence and director of the creative writing program at the University of Pennsylvania. In November 1987 he gave a poetry reading at Bridgewater. These two poems appear in **Hang-Gliding from Helicon: New and Selected Poems 1947-1987** (Louisiana State University Press), (c) 1987 by Daniel Hoffman.*

Ann T. Jones



Paul and Natalie at the La

They had been sitting in an isolated corner of the browsing room for more than an hour. The library was almost empty, only a few isolated students squirreled away upstairs in the carrels, no one — hardly — in the stacks. He felt safe from detection.

She sat alone on the long, grey sofa, the grey emphasizing her pallor and the deep shadows under her eyes. He sat opposite, straight upright on a wooden chair, looking at her across a small, wooden table he'd drawn up in front of the sofa. Occasionally he ran his hands through his prematurely white hair.

The argument was going nowhere. He was insistent, contending it must be done at once — and she continued to refuse. By now her refusal consisted mainly of quiet sobbing, and she ignored his pleas to lift

up her head and look at him.

"I *want* this baby." Her words were barely audible. "It's all I have of you . . ."

"That's ridiculous. After it's over, we can be the same as before."

"No, we *can't*." This time her voice was stronger, and she lifted her head to stare defiantly. "That's why I want the baby. We're *not* going on the way we were."

"What are you talking about?"

"After the baby is born I'm leaving here. With my baby."

"That makes no sense at all. She doesn't suspect a thing. Neither does anyone else."

"I'm going home."

"To *Kansas*?" He laughed, but quickly smothered the sound with coughing.

"Have you told your shrink?"

"I'm not seeing him any more."

"When did you stop?"



Mercedes Nunez

Library

"Three weeks ago. I wasn't getting anywhere."

"You're full of little surprises today. You might have told me."

"I don't owe you a report on my emotional problems. The shrink and I discussed it and we parted amiably."

"He *agreed* you didn't need to see him again?"

". . . . Not exactly"

"What *precisely* were his feelings on the subject? His *words*, Natalie. Not what you've interpreted them to mean."

She looked away and he quickly surveyed the browsing room, satisfying himself that no one had come in while they were talking. The chairs were still empty and the sofa at the far end of the room was still buried under a welter of abandoned books and papers. The heavy, floor-

to-ceiling draperies were drawn to one side of the windows, letting in white street-light from the courtyard. Outside the sky was black, with the bare, gnarled trees just beyond the window a grotesque outline in the white glow.

"My shrink said all my discussions with him are confidential."

"That means *he* isn't going to repeat anything you say. You're at liberty to tell anyone you please."

"But I *don't* please."

". . . . Are you pulling some kind of goddamn rip-off? Because if you're trying something like that I swear I'll"

Christ, Natalie. What did the goddamned shrink say?"

". . . . He said if I decide to kill myself to call him first. That it's at least negotiable."

"What the hell? You walk in to a shrink and talk about killing yourself and he hands you garbage about suicide being 'negotiable'? I don't know who's crazier, you or him."

"I'm *not* crazy."

"What kind of person puts rat poison in her oatmeal? And then changes her mind and feeds it to her cat instead?"

"Take back what you said about 'crazy' or I'm walking out of here now."

"All right, you're not crazy. You're a little bit pregnant but you're not crazy."

Natalie began to cry again and this time she let her head drop down onto the small table. Her noisy sobbing worried him. Coming to the library was a bad mistake. His idea they could pass for just another professor and student was naive, a foolish misjudgment. He should have known there was no such thing as a simple conversation with Natalie. "What else did he say?"

"Who?" Natalie had stopped crying. She lifted her head from the table, and he was startled to realize that even sloppy and tear-stained her face was still pretty. Or could be, if only she'd get rid of the damned thing and get her healthy color back. Besides, there was something almost incestuous about screwing a pregnant woman.

"The shrink. Who else? What did he say when you told him you weren't going to see him again? Be open with me, sweetheart. I *want to know*."

"He said it wasn't a good idea."

"I see. That's a little bit different from 'we parted amiably.'"

"Not really."

"Semantics? What else did he say?"

"He asked if I was depressed about the baby. And how you felt about it. And if you were going to ask your wife for a

divorce. He asked if I felt 'used.' That was the word, 'used.' He said that married men who have affairs with their students give him heartburn."

"Heartburn? He said that?"

"Yes."

"Christ! You pay him eighty dollars an hour to tell you he has heartburn?"

"That's not the point."

"What is the point?"

"I think you're a shithead. A goddamned shithead." Natalie collapsed on the table again, crying softly this time. A more poignant cry than earlier. As if she were experiencing real physical pain. Maybe he hadn't realized how upset she was. But Christ, she was thirty-four years old and she'd been married once. She was no gullible young virgin — a teenager he'd knocked up between classes. "Why did you call me a 'shithead'?" He tried unsuccessfully to make his voice tender.

"I don't have to explain. The shrink told me to stop justifying myself to people. Especially to you."

"Maybe you shouldn't have stopped seeing him. Since he gives such clever advice."

"I hate it when you're sarcastic. The shrink said your sarcasm is a manifestation of your basic contempt for other people."

"Oho, my pet. It sounds to me like you've had *me* on the couch with your clever doctor friend."

"He's not my friend. He's my shrink."

"*Was* your shrink. Remember, you're not seeing him any more."

"You *are* a shithead. If it weren't that I wanted something of my own so badly I'd rip this baby out of my belly."

"I thought you were having it because it was all you had of me? Make up your mind."

"Sometimes I could kill you."

"My, my, we're violent today. What you really need is some screwing. How about it? You're always hostile when you're horny."

"The shrink said I should give serious thought to whether or not you love me, or if you're simply using my body."

"He *is* clever, isn't he?"

"Do you?"

"Do I what?"

"Love me?"

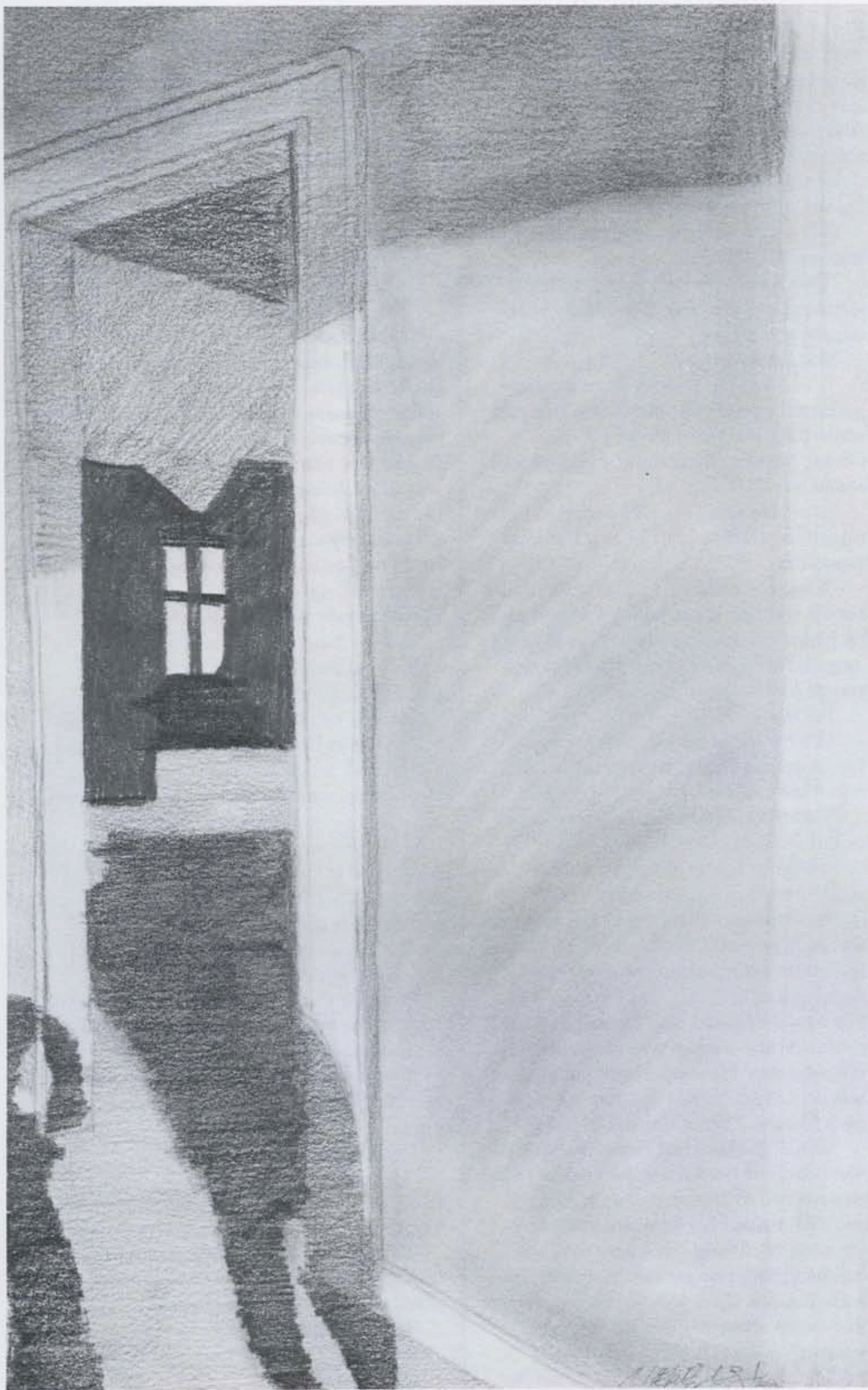
"Natalie. You *can't* have the baby."

"Why not?"

"Because it's too dangerous. I couldn't risk it."

"The baby's inside *me*. Remember? *Mothers* die in childbirth. You'll come through fine."

"Now who's being sarcastic? What I'm saying is that people around here would ask questions. You don't think they're



Mercedes Nunez

"That's sarcasm again. I don't know how I ever let you talk me into all of this in the first place."

"Aha! The pure virgin. I waylaid you in the halls and dragged you screaming into the broom closet. You ought to have me arrested for rape."

"You really get a high out of mocking me, don't you." Natalie began trembling, putting a hand to her lips as if trying to prevent a cry. "You really think this is one big joke," she said finally.

Paul stirred in his chair, wondering how she'd react if he stood up and simply announced that he was going home to dinner.

"I know you'll never believe this, but I loved you, Paul."

Here it comes. What the hell was he going to say to her now? The beautiful, crazy, sexy, pregnant doll was going to recount the depth of her feelings. And she'd mean every word of it. He'd sit here feeling like scum while she spread her heart out on the table, and he'd be looking at her, thinking what wonderful boobs she had.

"I know I get too involved, Paul. But that's the way I am. I don't go to bed just for something to do, you know. I can get along without it."

"Hah!"

"If you want to hurt me, why don't you just stick a knife in my heart?"

"I wasn't trying to hurt you."

"No? You think I'm a whore. Or something pretty close to it."

Oh, for God's sake. She was going to detour right past loving him and talk about her low self-esteem. This could take a very long time. And what the hell would he tell Adelaide? Nothing at all, probably. Besides, Adelaide wasn't stupid. Sometimes she preferred him to skip the excuses. As long as he found his way home eventually.

Suddenly Paul was aware of another presence in the room. Mary the cleaning woman swept towards them, righting chairs, emptying ashtrays. Her expressionless face zeroed in on the corner where they were sitting, nodding blankly at Natalie. She snatched up a crumpled cigarette butt from an ashtray, dumped it into a small plastic pail she carried, emptied the waste basket next to the sofa, inserting a fresh plastic liner. "Good evening, Professor Cummings." The voice out of the blank face was completely noncommittal.

"Quiet around here tonight, Mary." He kept his tone even.

"Sure is." Mary moved toward the next grouping of chairs. Her stiff back was a ramrod of condemnation.

going to watch your belly growing every month and not catch on to *something*, do you?"

"But why should anyone conclude it's yours? We're never seen together."

"We're together *now*, aren't we?"

"But you insisted. I didn't want to come here. This is my rest time. And I'm

nauseous. I won't be able to eat dinner."

"Goddammit, Natalie. They'll know you've been with *someone*. And the damned little bastard will probably look like me."

"I said I'm leaving as soon as the baby's born."

"The next day?"

She knows. The most astute old biddy they've got in the place — *she knows*. But she'll never tell a soul. She'll just convict me with her eyes every time I walk past her.

"... What would you say if I told you there *is* no baby?"

"*What do you mean, no baby?* You've already had the goddamned abortion? And you've been sitting here torturing me?"

"I didn't say that. . . . I'm only asking what *you* would say if that were the case." Natalie's pale face had grown even more pallid and her eyes appeared glassy.

She *is* crazy. She's a total screwball. How did I ever get myself into this mess?

"Assuming, for purposes of argument, — discussion — that you *have* had the abortion, why do you tell me every day that you're suffering from nausea? You continually skip my classes."

"I'm not feeling well. I feel terrible."

"Did you tell *that* to the shrink? Before you parted so amiably? He's a doctor, isn't he? He might have been able to help you."

"I told him."

"And?"

"He said I'd be dead in a few weeks if I kept it up, that I leave him no choice."

"If you kept up *what*?" A feeling of horror swept over Paul, creating a wild, ridiculous fear that his heart might stop. His hands shook. He trembled. *She was back on the rat poison again*. "If you kept up what?" he repeated, but his mouth was dry and the words stuck.

"Nothing. If I kept up nothing at all."

"Don't play games with me, Natalie. The shrink said you'd be dead. What was he referring to?"

"I don't want to talk about it any more. I'm going home. I'm tired." She picked up her notebook, tucking it under the slim volume of "Jonathan Livingston Seagull" she always carried around with her. Some of the book's pages had come loose, and she was using a rubber band to hold the seagull pictures together. She held the book in one hand so that she could smooth back her straight, soft hair with the other.

Even with dark circles under her eyes she was still far prettier than Adelaide. Adelaide's features were brittle. She was a dried clay mask ready for firing into porcelain. Natalie's features were soft, fragile. And the grey eyes were lovely, except that now they were bloodshot from crying.

Natalie half rose from her seat but seemed to change her mind, sat down again. An unusual mixture of determination and pleading played across her face. He'd seen her this way once or twice before. And when finally she spoke her voice had grown quiet, thoughtful, maybe

even wistful.

"There's still time, Paul."

"I don't know what you mean." He was ashamed of his own caginess.

"The shrink said it's never too late to find some kind of redemption, even in the worst of situations."

"I think you'd better go back to that shrink if you want redemption, as he chooses to call it. I don't think I'm into redemption just yet."

"I'm serious, Paul." She seemed about to scream but she pulled herself together, and when she resumed speaking her voice was controlled again. "I don't *really* want to die, you know. But I need something to live for."

"You knew from the first that I wasn't going to leave Adelaide. I've been totally up-front with you. You said it didn't matter. That our relationship had a 'consecration' of its own. It didn't require society's approval."

"That was before I started seeing Dr. Asbury. I've begun to view life differently."

"But is that fair? *I'm* not in therapy."

"I'm asking you to save my life"

"Don't be melodramatic."

"Is that all you have to say about it?"

"Oh, Christ. I can't sit here all night. As if I had nothing else to do There are other demands on my time."

"I know. You have a wife."

"Don't try to make me feel guilty. You had a husband once. You know the obligations marriage entails. You can't just wander around all evening and never show your face at home."

Natalie rose to her feet unsteadily. For a moment he thought she might topple over onto the table. Her face was deathly white, and she seemed to look right through him.

"I'll call you tomorrow, doll," he said airily. "A good night's sleep and everything will look better."

"Goodbye, Paul." Her voice was shakier than before.

"I *will* call you. In the morning. First thing." Paul stood up, too, stretched, cramped and stiff from sitting so long in one position. He made a quick check around the room to be sure no one had come in and froze as he recognized the young student in dirty T-shirt and jeans loping toward him.

"Excuse me, Dr. Cummings. You wouldn't have a minute, would you?" He dumped his books onto the sofa Natalie had just vacated.

"Not now, Jake. I'm sorry."

Disappointed, Jake turned, leaving his books and papers behind. Paul stared at the scuff marks on the carpet from Jake's

running shoes. He bent down to pick up a candy wrapper overlooked by the cleaning woman. When he looked up Natalie had disappeared. He was completely alone in the silent room, with only the hum of the ventilating system. The clickings. The buzzing.

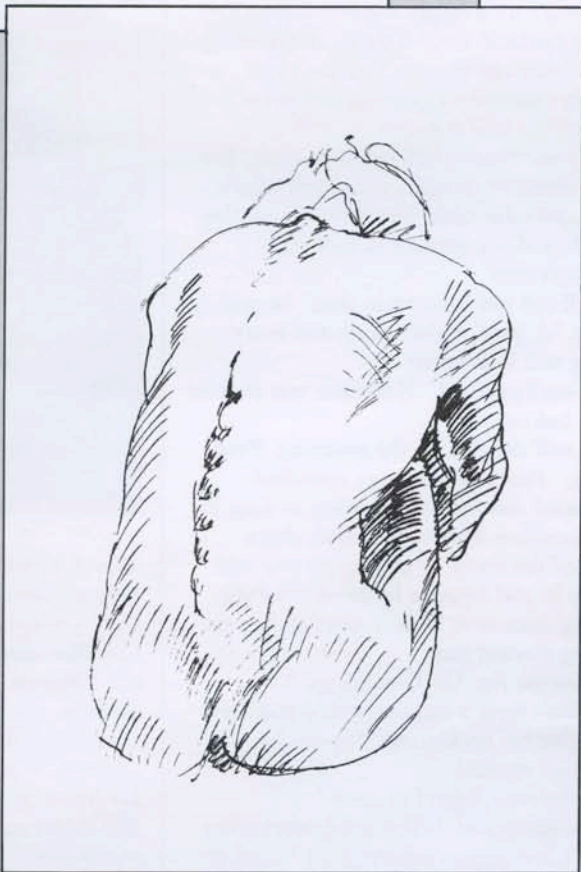
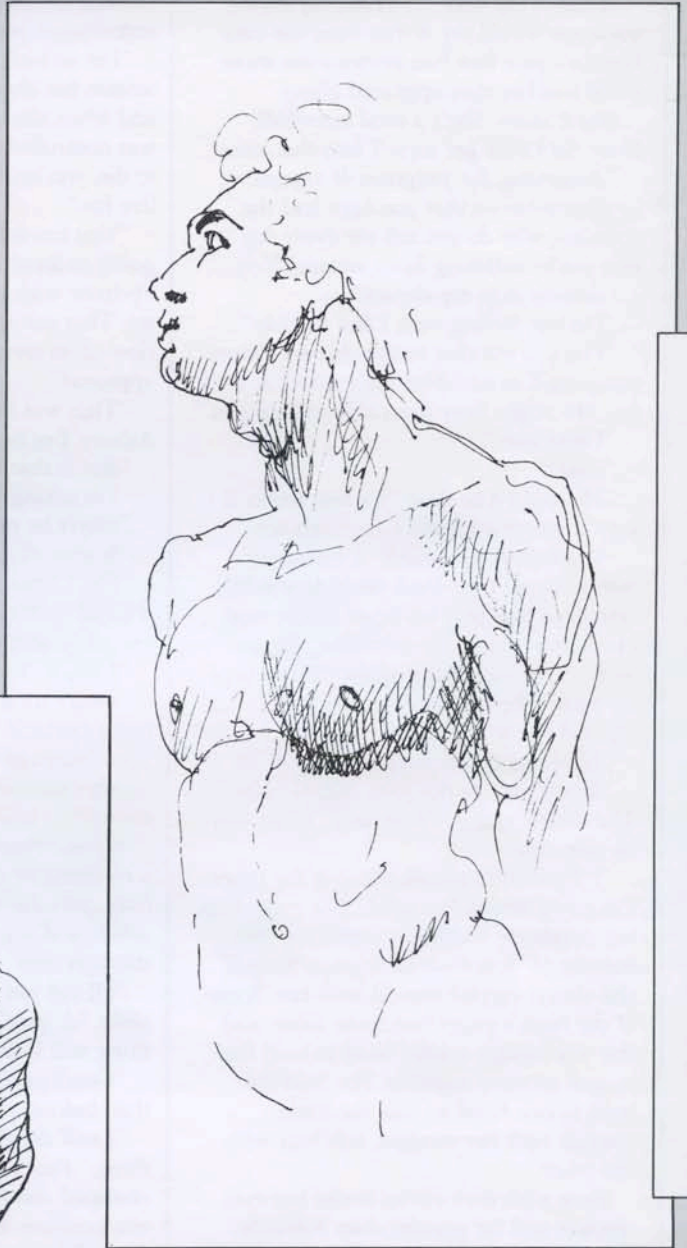
What a crazy dame she'd turned out to be. He should have known she was unstable. A *nut*.

Why kill herself now?

He dropped down onto the sofa beside Jake's books, lit up a cigarette. What a nutcake! Natalie, sweet Natalie. All fragility and deadpan honesty. But actually holier than thou, when you came right down to it. A real judge. A goddamned judge of a woman, with all her soft femininity. Blaming *him* because she'd decided to kill herself. What did she want *him* to do? Put rat poison in *his* oatmeal? Shit! He didn't even *like* oats. ■



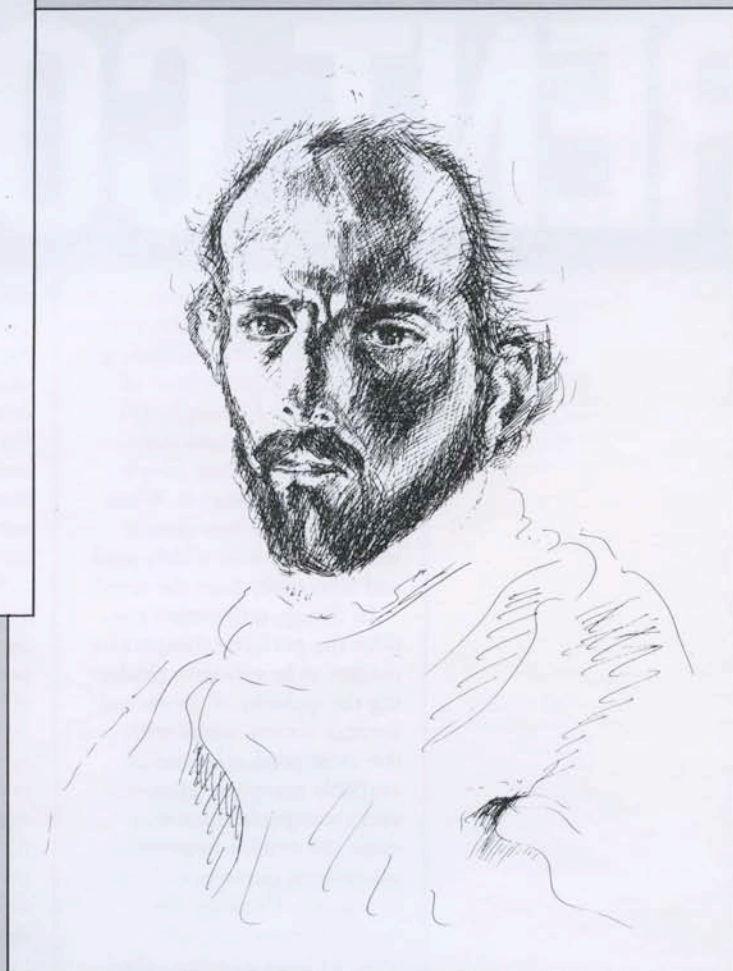
Ann T. Jones, a full-time writer, graduated Summa Cum Laude from Bridgewater State College in 1977 with a B.A. in English. Her nonfiction work has appeared in the Taunton Daily Gazette, the Easton Bulletin, the Irish Echo (both locally and nationally), and The Woman Engineer, in addition to fiction in Leatherneck and Ladycom, the military service magazines. She is currently at work on a novel about matchmaking in Ireland in the early part of the twentieth century.



From an Artist's Sketchbook



The figure drawings on these pages are by Walter Hawk, a part-time instructor in the Art Department during recent semesters. Professor Hawk received his undergraduate degree from the University of Oklahoma and his Master of Fine Arts degree from Wichita State University.





RENT CONTROL-

According to a recent government report, over 200 U.S. cities, including Boston, have some form of rent control. Although rent control is now a national phenomenon, many people are unfamiliar with it. What is rent control, how does it work, why is it so widely used and who really pays the rent?

In theory, economists consider the perfectly competitive market to be efficient, producing the quantity of goods and services society wants with the most productive use of available resources. However, various imperfections may cause the market to produce suboptimal quantities of certain goods. Housing, for example, is sometimes referred to as a "merit" good, which may be defined as a

good that is actually better for people than they realize. Because some of the benefits of improved housing - lower crime rates, a reduced risk of fire - are not received directly, many people fail to take these benefits into account. As a result, the quantity of housing consumed is less than optimum.

The supply of housing provided by the market can also be restricted. Run-down, poorly maintained buildings affect both tenants and owners of surrounding properties and can lead to a reduction in the quality and quantity of housing available. This may occur when the landlords' profit motive dictates the decision to allow property to deteriorate rather than to maintain it.

Available housing is also

restricted when a small number of landlords are able to gain control of a major portion of the supply. When market concentration occurs, as in the case of the international oil cartel, O.P.E.C., it pays for owners to restrict the supply, raise prices and thereby increase profits. Any of these market imperfections will lead to a smaller than optimal quantity of housing.

In addition, the time period required by the housing market to adjust to an increase in demand is especially long. The housing stock changes very slowly, creating hardships for many families, at least in the short run, as prices rise.

Since the market system controls the distribution of income as well as the supply

of housing, it also determines who gets what kind and quality of housing. The market's income distribution is not necessarily equitable and may leave many individuals and families unable to afford decent housing.

Inefficiencies caused by market imperfections, the long period of time necessary to adjust to changes in demand, and the inequitable distribution of housing services may create many hardships. Under these conditions, most people would agree, the government should intervene in order to reduce the hardship created.

What corrective policies should be used to mitigate these hardships? Economic theory tells us that when the supply of a particular good or service lags behind demand, prices rise in the short run, acting as a signal for entrepreneurs to produce more of

the property tax, reduces labor mobility, and leads to discrimination. Although there may be some immediate benefits to consumers, the long run consequences, though difficult to uncover, are negative.

Proponents of rent control argue that decent housing is a basic human right and should be available to all citizens at a reasonable price. They criticize the free market approach and assert that the conclusions drawn from theory are based on a perfectly competitive model which does not reflect the true market structure. Critics of the market model and its implications also contend that landlords earn excessive profits, exploit the tenants by charging rents that exceed the true value of apartments, and put profits above human needs. For these reasons, they claim that government intervention is necessary.

War I. In France, it was at first a temporary action to preserve the interests of families while their men were at the front. Yet once enacted, rent control laws proved difficult to repeal and are still in existence today in Paris, allowing artificially low rents, inhibiting the number of apartments available, and helping to create a bootleg housing market. In England, rent control began with the passage of The Increase of Rent and Mortgage Interest (War Restrictions) Act in December, 1915. Although the Act has been revised, rent control still exists in England today, creating problems for bureaucracy, especially in attempting to determine a fair price for rental properties. Rent Control was introduced in Sweden in 1942 as an emergency measure which was to be discontinued soon

have also been investigated. Although most economists agree that income is transferred from landlords to tenants, it has been impossible to show conclusively that this is a transfer from a high income group to a low income group. At least one study dealing specifically with the effects of rent control on the distribution of income concludes that there is no evidence to support the claim that rent control transfers income from a higher to a lower income group. A recent report delivered to the Rent Stabilization Association of New York City reached the following conclusions: those most in need do not benefit equally from rent control; the system is not progressive in its delivery of benefits; the system is not race or gender neutral; and, in Manhattan, rent regulation has kept down housing costs for wealthier

Who Pays the Rent?

by Anthony Cicerone

this good. Over the long run, as supply increases, the relative price or rent is reduced and the temporary flow of economic profits disappears. The hardships created during this adjustment period are the very problems temporary rent controls address. However, opponents of rent control, including most economists, feel that in the long run this policy actually exacerbates the problems and in the short run inequitably transfers income from landlords to tenants, which is not necessarily from a higher to a lower income group. In addition to reducing the future supply of housing and redistributing income in an arbitrary fashion, rent control causes a deterioration of the quality of the housing stock, shifts the incidence of

Many American families are unable to afford adequate housing, particularly in large urban areas, and rent control is one of many attempts to address this problem. It is usually proposed as a temporary solution, to be used only until the lagging supply of rental units can be sufficiently increased. However, the effects of rent control, both in the short run and over a longer period of time, may not be what policy makers intend. Certainly, the effects of rent control are not completely understood and although current theory is strongly supported, the empirical evidence is not conclusive.

How effective has rent control been in the past? It has been used by various governments as far back as World

after World War II ended. Yet it continues today, causing a deterioration in the quality and quantity of housing units available and paradoxically benefitting many rich people. Rent control started in New York City in 1943 and has existed in one form or another ever since. As in European cities, rent control in New York has exacerbated the problem of a short supply of housing, destroyed the quality of existing rental housing, and has been an arbitrary tax on landlords. One study of New York demonstrates that the costs of rent control exceed the benefits, although many of the costs are hidden and difficult to demonstrate.

The effects of rent control on the distribution of income

New Yorkers without reducing the housing costs burden among the poor.

In Boston, rent control was initiated as a temporary measure in the late sixties in response to rising rents and an increased demand for apartments. A substantial increase in the student demand for housing in various neighborhoods was increasing rents and causing economic hardship to the indigenous population. Mayor Kevin White began rent control by Mayoral Proclamation, which established the Boston Rent Board. Since the original proclamation in 1968, the temporary rent control regulatory system has evolved into a patchwork system regulating rents, evictions, and condominium con-

versions. Today approximately 18,000 units are still under rent control versus the 85,000 that were originally controlled. These are estimates only, since even the Boston Rent Review Board itself is not sure how many units are controlled. The current system of rules, procedures and regulations is confused and inefficient, a common outcome of rent control as the regulatory agency attempts to cope with many unintended results and the ingenuity of the market in avoiding the rules.

Economists are generally in agreement about both theoretical and empirical predictions concerning rent control. In fact, in a recent survey of economists, 98% agreed that rent control reduced the quality and quantity of housing.

Arguments over rent control continue. Proponents claim that it is necessary to protect the social fabric of the city, help the poor and the elderly, and keep rents within the limits which allow members of society their right to adequate housing. Opponents claim that rent control worsens the problems rather than alleviating them, and that the distribution of housing should be left to the market.

Rent control seems at first glance like a quick solution to the problem of high market prices. But are high rents the problem? No. High rents are a symptom of the real problem: insufficient income, restricted supply, and slow adjustment by the market. Increasing both the supply of and the effective demand for housing are solutions. Rent control does neither.

A comparison with agriculture is instructive. The U.S. today produces too much food, not too little - exactly what theory predicts will occur when price supports are used to maintain prices above market levels. Supplementing income with food stamps has been one method of reducing

this hardship to the poor. Rent control, on the other hand, does exactly the opposite. It holds price below market values and inevitably reduces the supply of housing. In addition, it does a very poor job of helping the truly needy. Who loses when rent control is enacted? Young families, recent movers, those who don't know anyone, and of course the homeless. These people pay the rent for those lucky enough to be in a controlled apartment.

Better options than rent control are available. Unrestricted cash grants are perhaps the best short term option. Awarding cash grants to supplement income attacks the problem on two fronts. First, the greater income allows the recipient to increase his effective demand for housing, whether it be directed towards a greater quantity of housing or better quality of housing. Secondly, the increased demand for housing gives entrepreneurs the impetus to increase the quantity of housing supplied as increased income shifts the demand curve upward, causing a higher price and, assuming some responsiveness to changes in price by the supply curve, calling forth a greater quantity. However, cash grants should be considered a temporary solution only. Programs to help individuals acquire the necessary skills needed to increase their earning potential should be considered as a permanent cure of the problem. This applies, of course, only to those members of society who are able to work. When prejudice, past and present, prevents individuals from earning decent wages, actions should be taken to eliminate these prejudices. Unavoidably some individuals, including many of the elderly, handicapped and others, are unable to sustain themselves at an acceptable level. These individuals require some type of permanent income transfer as

a long term solution. Rent control, however, is neither an efficient nor equitable method of transferring income.

A categorical cash grant in the form of a housing allowance or voucher is an alternative method of increasing the quantity of housing consumed. However, economists usually find that cash grants which restrict the expenditure to a specific good or service may be less effective than unrestricted cash grants. Requiring that the expenditure be made on housing does, however, help set in action the market forces which ultimately will solve the problem of insufficient supply and induce the individuals to consume more housing.

A direct increase in the supply of low and middle income housing is another approach. One attempt at this has been the provision of public housing. In Boston, for example, approximately 18,000 public units exist, 2,000 of which are currently unoccupied but scheduled for occupancy within the next two and one-half years. This solution has proven inefficient and past attempts at providing public or low income housing for the most part have been disastrous. Much more must be learned about the provision of public housing before it becomes a viable alternative. There are several other options available at both the local and the national level for inducing an increased supply of low and moderate income housing. At the local level the property tax can be used to provide incentives for the construction of new and the rehabilitation of old units into low and middle income level apartments. At the state or federal level, reduced interest rates for those who qualify is another method of increasing housing production. Credit rationing, where private financial institutions refuse to loan funds in certain low income areas, can be outlawed. At the national level,

income tax incentives can be made for the production of low or middle income housing.

Although cash grants may be the best method of increasing income and thereby allowing individuals and families to increase their consumption of housing, they are not feasible at the local level. Cities do not have the means to raise the funds necessary for grants, nor the public support of this policy. Property tax incentives to increase supply may be reasonable but are a long term rather than a short term solution. Options at the local level are limited. Since tenant groups may be well organized and have substantial political clout and influence, rent control becomes an expedient and politically acceptable measure. There is no need to raise extra revenue for rent control, since the costs are borne by landlords and by those residents who do not have controlled units. These costs are hidden, however, and increase slowly over time. The question for local authorities, then, may be whether or not to enact rent control as a temporary, short term solution or to have no policy at all.

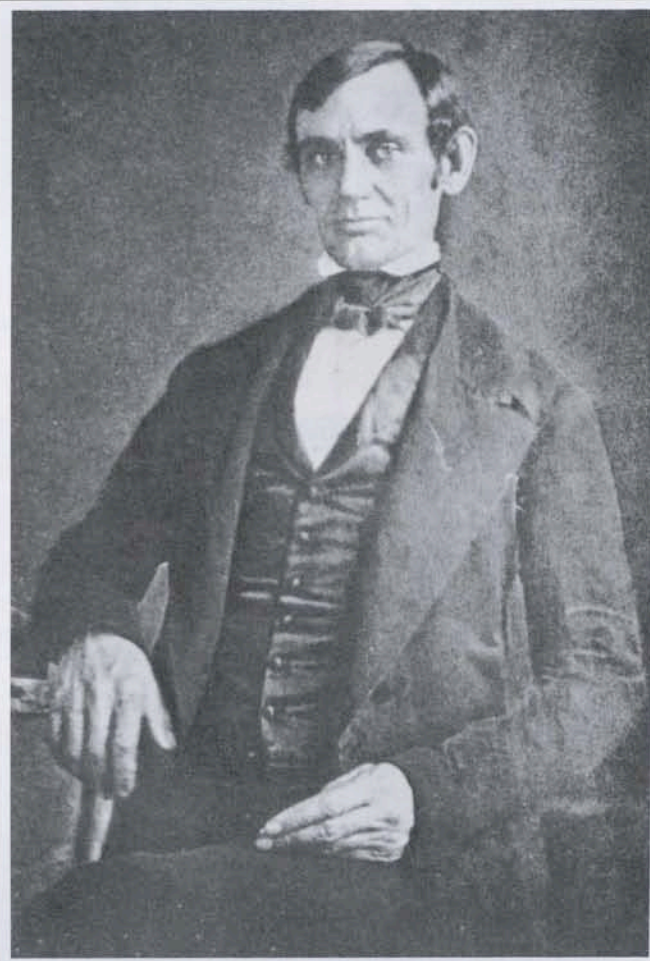
Is rent control better than no policy at all? I would argue that it is not. The long run consequences, reduced quantity and quality of available housing, have been documented. Even for the short run, a policy of no rent control is best. The inequities in the redistribution of income caused by rent control may be as bad as if not worse than those caused by the market. Worse than this is the high probability that rent control will continue, even though it is initially intended to be a temporary measure. Although it is difficult at first to see who pays for rent control, once we do, we realize just how misguided the policy is. ■

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Assistant Professor
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In the second quarter of the nineteenth century, Bridgewater was a small town slowly changing from a rural farming community to a typical New England manufacturing town. Although growing slowly, Bridgewater was not isolated. With roots reaching back in Old Colony history to a land grant that made it a plantation of the town of Duxbury, the town was firmly connected to the world around it. From the seventeenth to the nineteenth century, ships used the Taunton River to gain access to the inland port of Taunton, and from 1790 until the twentieth century, New Englanders built ships on the river in the Titicut section of Bridgewater. Bridgewater people advocated the development of a highway connecting Boston and New Bedford, and Bridgewater became a half-way stop on the highway. By 1846, the Old Colony Line and its Abington Branch connected Bridgewater to Boston, Plymouth and Fall River by rail.

By the 1840's when the state normal school (later to become Bridgewater State College) was established there and the subjects of this paper were establishing themselves as town leaders, Bridgewater's population was between two and three thousand, and it could boast of several boot and shoe factories, two air and cupola furnaces which cast over 400 tons of iron a year, two forges, two nail manufacturers, a tack factory and two companies that manufactured cotton gins.

In the same decade Abraham Lincoln was advancing in Illinois politics and the profession of the law. He was a Whig leader in the Illinois legislature and a politician whose views were listened to in the whirl of Illinois politics. By the middle of the decade, Abraham Lincoln, then in his middle 30's, was destined for service in the United States House of Representatives and



N.H. Shephard

MR. LINCOLN'S BRIDGEWATER CONNECTIONS

by Jordan Fiore and Jean Stonehouse

perhaps beyond. In 1846, he was elected to Congress and went to Washington the following year.

In the fifteen years preceding his election to the American Presidency, Lincoln's path would cross the paths of two of Bridgewater's successful businessmen several times, and the contacts affected all three men. Both of the Bridgewater men, Artemas Hale and Joshua Eddy Crane, were locally well-respected, and each treasured his rela-

tionship with Lincoln — brief as it was — as long as he lived.

—I—

Like Abraham Lincoln, Artemas Hale came from a humble background. He was born in Winchendon, a town in north central Massachusetts near the New Hampshire border, on October 20, 1783. His father was a farmer who had served as a captain in the American Revolution. Hale attended the district school in Winchendon, worked on the family farm, studied on his

own and was proficient enough to become a surveyor in the town and then a teacher at nineteen.

In 1813 he went to Hingham, where he taught school for several years. The war of 1812 had begun, and he witnessed the battle between the the *Chesapeake* and the *Shannon* in Massachusetts Bay. He also served as an officer in the local militia company organized to respond to any land attack by the British. Fortunately, the unit was never called to active duty.

His students in Hingham included many men who were destined to become important in the town and in the Commonwealth. Here, too, he met and wooed Deborah Lincoln, a descendant of Samuel Lincoln. They were married in Hingham in 1815.

Artemas Hale's talent was too great to be spent on the duties of a country schoolmaster, and at the end of the War of 1812, the Hales moved to East Bridgewater where he entered the mercantile business. A few years later, in 1819, he became a clerk for Lazell Perkins & Co., the leading iron manufacturers of the area, and then moved to the firm of Carver, Wasburn & Co., one of the country's leading manufacturers of cotton gins, where he became clerk and then agent and treasurer of the rapidly growing firm.

It was a propitious time to become involved in the manufacture and sale of cotton gins. Thanks to the large number of cotton manufacturing firms that were established in Massachusetts from Lowell south to Fall River and New Bedford in the first quarter of the nineteenth century, a steady supply of cotton was needed. The gin, which merely separated the seed from the cotton ball without damaging the cotton, allows for the use of short-fibred cotton in making cotton thread for manufacture into cloth. Cotton-growing in

the South and cotton-manufacturing in the North and in Europe flourished.

It was also a propitious time to become actively involved in local social and political affairs. In addition to his business career, Hale took part in the social and political life of the town. He joined the First Church in Bridgewater, served on several church committees and was involved in the expansion of the church and in the erection of a new church building in 1845. He was raised in the Friendship Lodge of Masons in Bridgewater, served in several posts, and finally became Worshipful Master in 1823.

Always public spirited, he was an officer and trustee of the Bridgewater Academy, which had been established in 1799, and was its treasurer for years. When the Commonwealth proposed that state normal schools should be established, he served with the Rev. Charles Brooks, former President John Quincy Adams and Senator Daniel Webster on a committee to ask that one of the schools be established in Plymouth County. He headed the committee that raised funds for the school, and he argued successfully that the school should be established in Bridgewater. He collected funds from individuals and towns and contributed a great part of his own time and pledged his own funds to insure the success of the school. He was the school's best friend for forty years.

His record in public service was outstanding. One local historian wrote that "his sterling integrity and ability attracted the attention of his townsmen, and he was called to various offices of trust and responsibility which he filled with rare acceptance."

He served as town clerk and town treasurer in 1822, 1823, 1825, 1827 and 1828, as state representative in 1826, 1827, 1828, 1829, and 1831 and as a state senator for

three years. In addition, he was a moderator for town meetings for five years. He also found time to serve in the local fire department, and when that agency was reorganized and obtained new equipment, Artemas Hale, though sixty-one years of age at the time, was chosen chief engineer.

In his early years he had been a Federalist and later a National Republican and a

cended from the same Samuel Lincoln of Hingham who was Abraham Lincoln's first American ancestor. From the study of consanguinity charts we know that Deborah Lincoln and Abraham Lincoln were fourth cousins twice removed.

Solomon Lincoln lived in Hingham, Massachusetts. A polished and urbane lawyer and civic leader, Lincoln was the author of an excellent history



ARTEMAS HALE

H.N. Robinson

supporter of John Quincy Adams. When the Whig party was organized, he joined it, and in 1844 he was supported for United States Representative by his party's caucus. In the election that followed, although he attained a plurality, he could not gain the required majority and no one was elected. The following year he was elected.

Although this estimate must be based on conjecture, it is not difficult to determine why Hale was attracted to Lincoln. His wife was a Lincoln, and Hale wondered if she and Abraham Lincoln were related. Lincoln could give him no answers, but the questions did cause a chain reaction for both of them. Deborah Lincoln was des-

of the town and a serious Lincoln genealogist. He wrote to Artemas Hale on March 2, 1948, asking Hale to ask Abraham Lincoln questions about his family background. Hale showed Lincoln the correspondence and on March 6, the Illinois Congressman wrote to Solomon Lincoln as follows:

Dear Sir: Our letter to Mr. Hale, in which you do me the honor of making some kind inquiries concerning me, has been handed me by Mr. Hale, with the request that I should give you the desired information. I was born February 12th, 1809 in Hardin County, Kentucky. My father's name is Thomas, my grandfather's was Abraham, - the same name of (sic) my own. My

grandfather went from Rockingham county in Virginia, to Kentucky, about the year 1782; and, two years afterwards, was killed by the Indians. We have a vague tradition, that my great-grandfather went from Pennsylvania to Virginia; and that he was a quaker. Further back then this, I have never heard anything. It may do no harm to say that "Abraham" and "Mordecai" are common names in our family; while the name, "Levi" so common among the Lincolns of New England, I have not known in any instance among us. Owing to my father being left an orphan at the age of six years, in poverty, and in a new country, he became a wholly uneducated man; which I suppose is the reason why I know so little of our family history. I believe I can say nothing more that would at all interest you. If you shall be able to trace any connection between yourself and me, or in fact, whether you shall or not. I should be pleased to have a line from you at any time.

*Very Respectfully,
A. Lincoln*

Abraham Lincoln's letter interested Solomon Lincoln very much, and he wrote on March 12 raising several more questions. The Congressman's letter shows that Solomon Lincoln had piqued Abraham Lincoln's genealogical curiosity. Lincoln replied again and in the next few months made a number of inquiries to people about his background. He wrote Solomon Lincoln on March 24, 1848 as follows:

*Washington,
March 24, 1848*

*Mr. Solomon Lincoln
Dear Sir:*

Yours of the 21st is received. I shall not be able to answer your interrogatories very fully; I will, however, do the best I can. I have mentioned that my grandfather's name was Abraham. He had, as I think I

heard, four brothers, Issac, Jacob, Thomas, and John. He had three sons, Mordecai, Josiah, and Thomas, the last my father. My Uncle Mordecai, had three sons, Abraham, James, and Mordecai. Uncle Josiah had several daughters, and only one son, Thomas. My father has an only child, myself, of course.

This is all I know certainly on the subject of names; it is, however, my father's understanding that, Abraham (,) Mordecai, and Thomas are old family names of ours. The reason I did not mention Thomas as a family name in my other letter was because it is so very common a name, as to prove but little, if anything, in the way of identification.

Since I wrote you, it occurred to me to enquire of Gov. McDowell, who represents the district in Virginia, including Rockingham, whether he knew persons of our name there. He informs me he does; though none very intimately except one, an old man by the Christian name of David. That he is of our family I have no doubt. I now address him a letter, making such enquiries as suggest themselves; and when I shall receive an answer, I will communicate to you, anything that may seem pertinent to your object.

Very truly yours,
A. Lincoln

Abraham Lincoln then wrote to David Lincoln and the Lincolns asking for information about his family. These inquiries are the subject of another paper.

Abraham Lincoln was in Massachusetts in September 1848, but he did not visit Bridgewater and, unless Hale attended the Whig state convention in Worcester, the chances are they did not meet. His term completed, Abraham Lincoln went home and for several years practiced law and prepared himself for later political action.

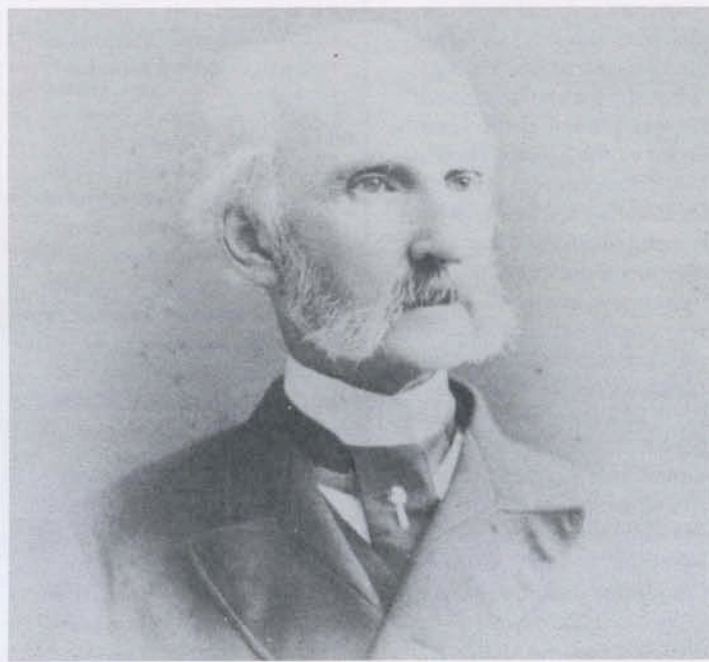
After two terms Artemas

Hale retired and returned home and established his farm. He had served well and was greatly respected. Like Lincoln he was a Clay Whig and his stands on the protective tariff and internal improvements were in the mainstream or his constituency's thinking.

Also, like Lincoln, when the Whig Party collapsed, he moved into the new Republican party which his friend Joshua Eddy Crane had helped

state, beyond dividing strength, and thereby bettering the chances of Buchanan. They know this; and I still hope the bulk of them will think better than to throw away their votes for such an object. Your obt. Servant.

In politics the town of Bridgewater had generally supported the Whig cause and later the Republican, but the Democratic party was reason-



Courtesy of "The Crane History of Bridgewater" by the Bridgewater Historical Collectors

JOSHUA EDDY CRANE

to establish. His interest in politics continued, and in the summer of 1856 he wrote to Abraham Lincoln inquiring about Fremont's chances against Buchanan in Indiana and Illinois. Lincoln advised him correctly about the situation. Pointing out that he was "a Fremont man," he asked Hale to make due allowance for his partiality. He added:

I have no doubt, then that the opposition to Buchanan, are the majority in both these states; but, that opposition being divided between Fremont and Fillmore, places both states in some danger. I think the danger is not great in Indiana; but some greater here. The Fillmore men have no power in either

ably strong. There were some Jacksonians and others who felt that the North should not have antagonized the South. In the 1840's and 1850's several Irish Catholic families moved into Bridgewater, and a Roman Catholic church was organized. Many of these Irish immigrants became American citizens, and since the general pattern among the immigrants here was to vote Democratic, they probably did so. In 1860 Hale supported Lincoln, and he carried Bridgewater handily.

In 1861 the Democratic candidate for governor carried the state, and, despite the townspeople's support of the war effort, the Democrats did well during the war years. In 1864 Artemas Hale was chosen as a presidential elec-

tor for Massachusetts,* and Lincoln won a great victory in Bridgewater and carried Governor John Andrew to victory with him. Hale's name is first on the list of electors on the Republican ballot. His friend Joshua Eddy Crane served as Republican Town Chairman in this period.

Until his death in 1882 in his ninety-ninth year, he continued his work in the town and his interest in political affairs, and at the time of his death he was honored as Bridgewater's first citizen.

—II—

Joshua Eddy Crane, Jr.'s life touched the interests of the Lincoln Group of Boston twice. First, in 1844, he decided to join his maternal uncle in business in the town of Bridgewater, home of Bridgewater State College, a regular Lincoln Group meeting place and the home of the Lincoln Collections contributed to the college library by that organization. Second, his long-term interest in American politics, anti-slavery activity and travel brought him to Springfield, Illinois in 1860 hoping to visit the next President of the United States.

Crane's Lincoln connection barely qualifies as a minor footnote in the Lincoln story. Yet in the two men, Abraham Lincoln and Joshua Crane, we can find two very different yet necessarily complementary approaches to national politics. The ambitious Illinois politician, seeking the destiny would carry him through the crucible of civil war to immortality, faced issues constrained by his realization of what was possible and what was impossible, by the necessary give and take of political life and by the awesome responsibility of high political office. The Bridgewater shopkeeper, living in a smaller world, enjoyed the luxury of building his political life without restraints. Joshua Crane had thousands of counterparts, and, with them, he helped

spur the crusade that ended slavery. Abraham Lincoln, that unique man, made their dreams bear fruit.

Family ties and business opportunity brought Joshua Crane into Bridgewater as a twenty-one year old man in 1844. He had left his native Berkley, Massachusetts to serve a five-year apprenticeship in the New York counting room of Messrs. Griffin and Eddy and was returning to New England to be associated with his maternal uncle, Morton Eddy, in Bridgewater's country general store. He became its sole proprietor in 1848. A general store would bridge the town's manufacturing and farming communities, and townspeople found Crane's store to be a pleasant oasis. A visit to the store meant an opportunity to enjoy Crane's good conversation. Townspeople appreciated his amiability, his hopeful spirit for "he always had something pleasant to say to everyone" and his unwillingness to speak against others. Some patrons had fond memories of the old dog who slept in the store and travelled about the town with Crane.

Crane's associations indicate that Bridgewater enjoyed a rich community life. As he settled into the community in which he raised a family of seven children, Crane became involved in a wide range of activities. A member of the Central Square Church, he chaired its building committee. The high point of a thirty-year association with the Plymouth County Agricultural Society, located in Bridgewater since 1819, came when he made its 50th Anniversary Address. As vice president of the Bridgewater Reading Society, whose 2,000 volume collection became the foundation of the town library, he would have attended its winter lectures, perhaps to hear Oliver Wendell Holmes or Josiah Quincy, Jr. speak. An interest in scholarship made him a

trustee of the Bridgewater Academy, and he was a good friend and supporter of the Bridgewater State Normal School. He was also a Free Mason, the chairman of the State Workhouse Board of Trustees, an honorary member and contributor to both Taunton's Old Colony Historical Society and the New England Historic Genealogical Society of Boston and an active participant in town and state politics.

Crane's political activities provided him with an opportunity to act on his "strong sympathy for the oppressed." He was present at the organization of the Liberty Party in Massachusetts, and he worked for it during the years "when it required strong moral courage" to support a party "which was in a small and very unpopular minority." He subsequently transferred his allegiance to the Free Soil Party and then to the Republican Party, which he represented in local and state office and which he served through the Republican Town Committee and the State Central Committee. In his writing and in his political life, the *Old Colony Memorial* testified that "he was liberal in all his ideas, a foe to all iniquity and shame, thoroughly loyal and patriotic, and a most earnest worker for the cause of human liberty when the foul blot of slavery cursed our land."

Abraham Lincoln probably would not have approved of Joshua Crane's political stand or of his support of the Liberty Party. The practical politician would regret that party's foolish blindness resulted in siphoning votes away from major party candidates with real opportunities to make progress in the struggle against slavery, but to measure the impact of Joshua Crane and the thousands like him in the Liberty Party and the Free Soil Party in pushing major party candidates into stronger anti-slavery positions is impossible.

By 1860, Joshua Crane and Abraham Lincoln were tied together in the Republican Party and hopeful about its prospects, and Crane travelled to Springfield to join the thousands of people who met with Lincoln in his State House office. The city and the building with its "handsome park in the centre of the city" impressed Crane favorably. Introduced to Lincoln by Mr. Baker, editor of the *Illinois State Journal*, Crane and his party stayed only a half-hour. In common with many other contemporaries, Crane reported that

The various pictures of Mr. Lincoln which we have seen all fail to give a fair representation of his features. He is very tall and muscular, but not ill-proportioned. His appearance and manner bespeak him a man of great energy of character, cheerful, hopeful, and easy of access to all who approach him.

Something in the "over-shadowing mass of hair" on Lincoln's brow and his "quick penetrating eye" reminded Crane of Rufus Choate, the famous Massachusetts lawyer. "Having no political mission," he explained, "we did not press these subjects, but shook hands with great cordiality, and parted with the next President of the United States."

— III —

So you have the story of Lincoln's Bridgewater connections. We admit the story is not earth shattering or unique and you are probably at best quite underwhelmed by this account.

One man knew Lincoln when he was a fledgling congressman, and his part in Lincoln's life, though minor, is important. On their searches through the Lincoln correspondence to 1848, the writers are impressed by the fact that Lincoln, like many Westerners of his generation, knew little about his American ancestors and seemingly

cared less about the matter.

Solomon Lincoln forced him to think about his ancestry, and Abraham Lincoln's newly developed concern for his background began and is worth further study. Lincoln opened correspondence with several distant relatives and inspired Solomon Lincoln to continue his research into a possible relationship with the Congressman and President.

Indeed, in the winter of 1865, less than one year after Abraham Lincoln's death, Solomon Lincoln first published his findings that Abraham Lincoln, like Solomon Lincoln and Deborah Lincoln Hale, was a descendant of Samuel Lincoln of Hingham, and his research has directed and influenced every genealogical study of Abraham Lincoln since 1865.

We know that Abraham Lincoln was visited by many Americans during the summer of 1860, after his nomination for president and in the late fall and winter after his election. One of these visitors was Joshua Eddy Crane, who left us a pleasant note on the impressions of a New England storekeeper, a typical middle-class Yankee of 1860, who touched greatness and knew it at once.

Most of all we see in both men, their reflections and their personal lives, the fact that they recognized the genius that was Abraham Lincoln. That they have shared their experience with posterity places us heavily in their debt. ■

**A ballot is included in the Howard and Carolyn Odell Collection of the Clement C. Maxwell Library, Bridgewater State College.*

This article is from a paper read before the meeting of the Lincoln Group of Boston, Boston University, April 12, 1987

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The summer of 1986 saw a marked change in the ecosystem of Stellwagen Bank off the coast of Massachusetts. The most noticeable effect of this was the disappearance from the Bank of the Humpback whale, *Megaptera novaeangliae*. From a biological research viewpoint the events of the past two summers were very dramatic and valuable since they verified some parts and clarified others of a model of the Stellwagen Bank ecosystem that we have been working on for several years. These events also provided a clearer understanding of the development and dynamics of the Stellwagen Bank ecosystem from the early 1970's until the present. It is an understanding of this dynamic that is one of our major research interests.

Figure 1 shows the Stellwagen Bank ecosystem as it existed during the peak period for whale watching from 1977-1986. Figure 2 shows the ecosystem after the humpbacks left in 1986. The major difference in these models is the change in the role of the sand lance population. (The sand lance is a small, elongated sea fish). Figure 3 shows the internal dynamics of the humpback whale population.

Routine surveys of fish stocks by National Marine Fisheries Service personnel confirmed that the sand lance population on Stellwagen Bank had experienced a gradual decline. Michael Payne of the Manomet Bird Observatory has data that suggests the decrease started about 4 years ago. The data from the spring of 1986 indicated that the population had crashed, and data gathered since that time has shown little significant recovery in sand lance stocks. The reasons for the crash have been a subject of speculation; minute changes in water temperature, inter-specific competition, and ocean dump sites have been suggested as possible causes.



C. Carlson

THE SUMMERS OF 1986 AND 1987

(or "What happened to the Whales?")

by John C. Jahoda and Michael C. Ryer

Analysis of dogfish stomachs by the National Marine Fisheries Service indicates that up until 1985 the dogfish were feeding almost exclusively on sand lance. In 1986 there were no sand lance in dogfish stomachs. Research also shows an increase in the mackerel population which feeds on immature stages of sand lance. This may be one of the factors causing the decline in the sand lance population. In December of 1986 I observed humpback whales feeding heavily on mackerel

off Provincetown. Observations from the summer of 1987 suggest that the few humpbacks found on the bank during 1987 were also feeding on mackerel. Most marine biologists believe that the decline in the sand lance is cyclic and a completely natural event.

It is a truism in ecology that vertebrate predators can never extinguish their prey. The reasons for this are complex, but simply stated are related to the low reproductive rate of most vertebrate predators, which means that

under normal circumstances the prey can simply outbreed them. However, vertebrate predators tend also to be large and long-lived. This means that should a decline in the prey population be initiated by other factors, the predators do not decline immediately with the prey, as is the case for short-lived predators, such as insects. Instead they stay around, and although they may ultimately starve or move elsewhere, they can become a very significant factor pushing a declining prey population to virtual extinction. Perhaps the classic example of this is the snowshoe hare and Canada lynx of the arctic. When the hare population is doing well, the lynx population is slowly building. Once the decline in the hare population begins, the lynx then becomes a major factor causing a near extinction of the hare.

Similar events seem to occur in marine ecosystems. NMFS data suggest that the reason herring populations on Georges Bank almost disappeared and failed to recover from the effects of overfishing may be the continued presence of large, long-lived vertebrate predators, specifically the finback whales. Overfishing caused the initial decline, and once on the decline the whales then exerted an increasing predator pressure on a continually declining resource. As the prey continues to decline the predator pressure continues to build, at least until the predator pressure is finally released due to either starvation or elimination of the predator.

Whales differ in a significant way from most terrestrial predators such as the lynx in that they are able to move over considerable distances. In this they are more similar to avian predators. This ability to move over long distances relatively fast allows whales to move in and decimate a building population and then move off to more favorable hunting waters, to return again if the

population begins to make a comeback. This behavior will tend to keep the prey population depressed until the whales stop returning to the area. Thus, the declining sand lance population was being subjected to increasing predator pressure by the humpback whale.

This pressure was intense during the summer of 1985. Some of our most extended and interesting records of humpback feeding behavior occurred during 1985, including large groups of humpbacks feeding in close proximity. 1985 was an excellent year for research on humpback whale feeding behavior and observations made during that summer formed the basis for our ethogram on the humpback whale. The humpbacks arrived as usual in the early spring of 1986, and by the Friday before Labor day they had taken what few sand lance remained on the bank and left. By May 15 sightings of humpbacks on Stellwagen fell off dramatically and reports began to filter in of a large group of humpbacks feeding in the great south channel some 60 miles east of Chatham. This new location was simply too far for most whale-watching boats, with only a few trips being made from Provincetown. Several research cruises were made to the area by researchers from the Provincetown Center for Coastal Studies.

The humpback whale was the species the general public most wanted to view. This species is the one which most commonly approaches boats and puts on a display of flipper flapping, lob-tailing, breaching and other interesting behaviors. Because the humpback tended to put on a good show, it was the species the commercial whale-watching boats sought out. Since most of our research effort depends on the commercial boats as observation platforms, we were often compelled to focus our

research efforts on the humpback whale.

From the mid 1970's until the summer of 1986, 300 to 350 humpback whales summered on Stellwagen. During late summer of 1986 a lone humpback would from time to time show up on the bank, perhaps searching for sand lance, and would shortly be seen heading straight back toward the great south channel, as no sand lance were to be found. The summer of 1987 found a few humpbacks scattered thinly over the bank, perhaps feeding on alternate prey which could not support a heavy density of whales.

great south channel was less than ideal.

The events on Stellwagen were also of great interest, and from a biological standpoint the summer of 1986 was extremely exciting. As Aaron Avellar of the Dolphin fleet of Provincetown noted, "the public's perception is that there are no whales, but this is not true." Avellar was right because the changes that caused the humpback to leave also caused the arrival of other species of whales (specifically plankton eaters) to Stellwagen, some of which were more exciting to biologists than the humpback.

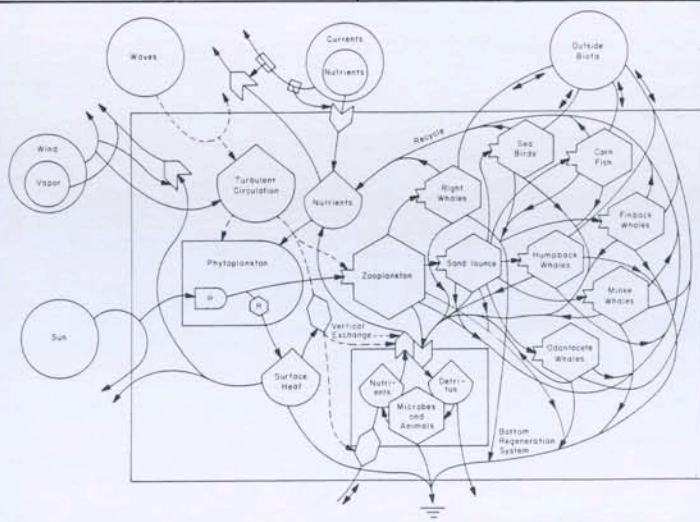


FIGURE 1
Model of Stellwagen Bank Ecosystem

These occasional visits and scattered residents suggest something about the situation at the great south channel. This suggestion is confirmed by observations on the behavior of the whales on the great south channel feeding grounds. The humpbacks observed at great south channel were feeding intensely. The large amount of feeding activity observed suggests that the forage conditions were not ideal and the whales had to spend a large portion of the day feeding in order to meet their energy demands. That whales left every so often to scout for better forage conditions on Stellwagen confirms the supposition that the feeding situation in the

However, the circus atmosphere of humpbacks performing tricks for boatloads of people was gone.

To biologists what happened next was both enlightening and exciting. After the humpbacks left, whale-watching hit its lowest point. A good trip reported 2-3 fin whale sightings; many trips saw no whales at all. An industry that had prided itself on a high success rate (90 percent or better) and in some cases even guaranteed sightings, came abruptly upon hard times. However, by late June and early July of 1986 things began to change. We do not know the mechanism that attracts planktonivorous animals, but they were show-

ing up on Stellwagen by mid-summer of 1986 in large numbers. By late June right whale, *Eubalaena glacialis*, sightings became common and continued throughout the season. A small resident population became established with at least one cow nurturing her calf all season in the area. In July, South Shore beaches were closed due to sightings of planktonivorous Basking sharks. These are totally harmless sharks, but the public reaction to a shark in any form was predictable. Higher than usual numbers were sighted within Cape Cod Bay and on Stellwagen Bank. Blue fin tuna were especially abundant and 1986 was a record year for blue fin fishermen. The abundance of tuna perhaps explains the brief appearance of a pod of killer whales, *Orcinus orca*, during the third week of July. Sei whales, *Balaenoptera borealis*, were sighted on eight trips during the second and third weeks of August, feeding on the surface on zooplankton. Fin whales, *Balaenoptera physalus*, unlike the humpbacks, did not leave the bank but shifted from feeding on sand lance to feeding on zooplankton. Finally on October 10th the event of the season occurred. A lone 60' blue whale, *Balaenoptera musculus*, was positively identified by biologists aboard the Captain John II out of Plymouth. This was the first blue whale seen on Stellwagen in more than 50 years. Observations on this whale's behavior suggested it was feeding on zooplankton below the surface.

The summer of 1987 started out similarly to 1986, with the humpbacks arriving early and then departing. However, the rest of the summer showed a different pattern. A few humpbacks returned to the bank and remained as scattered residents throughout the summer. These scattered humpbacks and the resident finbacks

served to support whale watching activities on the bank in 1987. These few individuals were probably feeding on alternate prey, perhaps mackerel. Phil Clapham (1987) reported that after a few days of intense feeding activity the humpbacks had thinned out along the southern edge of the bank by mid-May. The few humpbacks that remained in the area during late May and June showed no definitive distribution pattern and were often a long way off shore. In July a small number of sei and right whales joined the remaining humpbacks, but they did not stay long, with most individuals remaining on the bank for only a few days. Two blue whales also briefly visited the bank on August 11 and August 30, but also left the area quickly. The summer residency of sei and right whales that occurred in 1986 did not reoccur in 1987. Prey abundance was reported as low with few sand lance reported. Those whales that did occur appeared to be feeding on euphausiids, large shrimp-like zooplankton which seem on the increase on Stellwagen. Clapham also reports that large concentrations of humpbacks were seen feeding on sand lance and euphausiids in the great south channel during spring and early summer. By July the numbers of whales had declined and little feeding was observed. By mid-August very few whales had remained.

1987 was also a poor year on the northern section of Stellwagen and Jeffreys ledge. The pattern was similar to that in the lower section with a few humpbacks spread out and a modest number of finbacks sighted.

These are the events of the summers of 1986 and 1987 on Stellwagen. From an analysis of these events we can now reconstruct the dynamics of Stellwagen during the 1970's and the first half of the 1980's, and answer some important questions about the

nature of such marine ecosystems. The central principle to be learned is that Stellwagen is, like most ecosystems, dynamic. Change is inevitable and there is probably no such thing as a norm. In recent years in ecology we have come to recognize that ecosystems are in constant flux, and that stability is often only an illusion. Even the tropical rainforest, long the classic example of a stable diversified ecosystem, is now thought to be diversified because it is in constant flux and anything but stable. The history of events on Stellwagen Bank from the 1970's when we

were sighted they were usually feeding and showed little interest in boats, but as the 70's progressed we began to see more and more "friendly whale" behavior. Whales would approach boats, spy hop, swim under the boat, flipper slap, and breach near boats. Biologists speculated endlessly about the meaning of such behavior. As the 1980's began, we saw the peak of this behavior with many active whales on the bank, many of which had been returning for several years, and were well known as individuals to researchers, boat captains, and the public.

observed increase in humpbacks was real. As the sand lance continued to build, or experienced only a slow decline, the humpbacks found feeding easy, and were able to spend less time feeding and more time in other activities and still achieve maximum energy assimilation. Display behaviors like flipper slapping and breaching became more common and logging, the whale equivalent of sleep, was more frequently observed. Close approaches increased and feeding activity became less commonly observed. These were fat, well-fed whales. Life was easy on Stellwagen. These were exciting times for whale researchers. From an interesting and unique novelty whale watching had become almost commonplace. However the support for this exuberance was changing.

As mentioned earlier, NMFS data indicated that from 1972 to 1985 the sand lance population had actually been slowly declining. The slow increase in the numbers of humpback whales during the early portion of this period was due to the very slow reproductive rate of humpbacks, again typical for a large vertebrate predator. By 1984 the humpback population on the bank had reached a number sufficient to begin to maximally exploit the slowly diminishing population of sand lance. This was reflected in the increased feeding activity observed during the later part of the summers of 1984 and 1985. These events set the stage for the crash in late 1985 or early 1986. When the humpbacks arrived in 1986 the sand lance population had already crashed and the ecosystem had changed dramatically.

Sand lance had served as the major secondary consumer on the bank. The primary consumers, the zooplankton, were heavily harvested by these fishes. A few competing secondary consumers such as

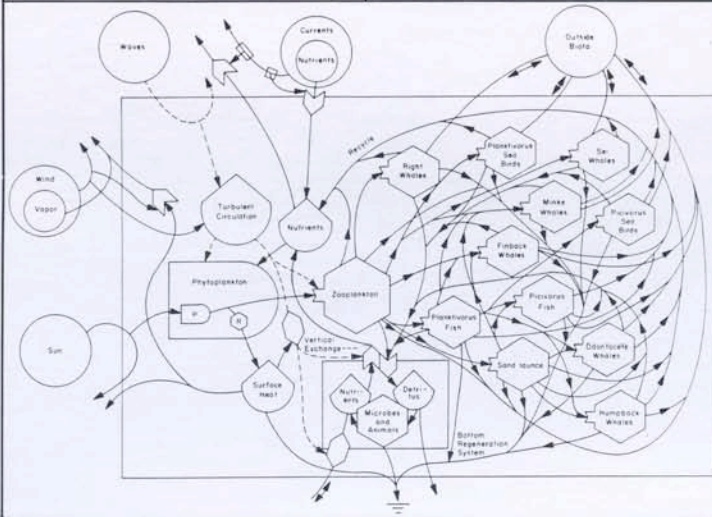


FIGURE 2
Model of Stellwagen Bank Ecosystem after the 1986 sand lance crash

began our involvement with the whales of the area until the present reveals this dynamic and can now be interpreted in light of the past two summers.

On our first trips out of Provincetown in the mid 1970's we saw many finback whales. A humpback whale was seldom seen, and when they were spotted they tended to avoid boats. As the 1970's progressed the humpback whales became more frequent and the whale watching industry began to seek them out, presenting the illusion that they were more common than they really were. The behavior of the humpbacks began to change during the early years; when humpbacks

This was the peak of whale-watching activity. However, in 1984 and 1985 a change occurred in the behavior of the humpbacks. Toward the end of the summer, in late July and August, the whales were observed feeding a great deal of the time. Spectacular displays of feeding activity occurred with interesting and varied strategies applied, including bubble clouding and bubble netting and the highly individualistic style of a whale called catspaw. Then came the events of 1986 and 1987.

What we now believe happened was that with the abundance of sand lance in the mid 1970's the humpback whale population on the bank was building. Thus, the

right whales were seen on Stellwagen during the early months of these years, but zooplankton resources were soon co-opted by the sand lance and the right whales, and other competing plankton feeders either left for better feeding conditions further north or remained in very small numbers. During this period the great numbers of sand lance tended to keep the zooplankton population in check. A fragile equilibrium existed during this period, as represented by figure 1, consisting of producers (primarily phytoplankton), zooplankton (primary consumers), sand lance (secondary consumers) and humpback and finback whales (tertiary consumers). There were several alternate energy flows such as additional tertiary consumers, including minke, *Balaenoptera acutorostrata*, whales, dolphins and piscivorous fishes (i.e. tuna and blue fish) but the major energy flow was through sand lance, humpback whales and finback whales. When the sand lance population crashed (and the humpback left), the zooplankton feeding the niche opened dramatically. Sand lance were replaced by a variety of planktonivorous animals including the right whales, sei whales, mackerel and other planktonivorous fishes, and the blue whale. The finbacks switched their diet. Thus, the bank's ecosystem came to resemble the system diagrammed in figure 2. Late December 1986 cruises on the R.V. Halos found humpbacks on the bank feeding primarily on mackerel.

One thing which seems clear is that the commercial whale-watching boats did not drive the whales away, as had been suggested by some amateur conservationists. When

the sand lance were abundant and feeding was easy, the whales could probably achieve maximum energy assimilation levels, feeding only a few hours a day and giving them the free time to approach the boats and act in all those ways which made them so popular with the tourists. When the food supply began to decline, the whales returned to the important business of maximizing their energy intake. When they could no longer support their monstrous appetites on the bank (a ton of sand lance a day for each whale) they left. In all of this man appears to have been

more productive feeding grounds elsewhere. Perhaps the pattern shown this past summer will be retained for several years. Many species which have depended upon the sand lance population, such as terns and carnivorous fish, may find feeding difficult. Other species which feed on plankton, like menhaden, storm petrels and herring, may increase. Eventually the humpbacks may stop returning to Stellwagen, having found better forage elsewhere. Perhaps then the sand lance population will begin to build again, leading to another cycle of sand lance abundance with

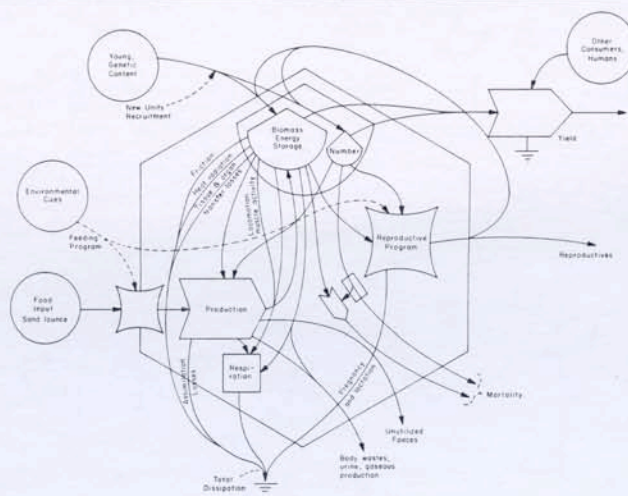


FIGURE 3
Energy diagram of the main sources and outflows of the Humpback whale population

only an observer and did not influence the outcome.

What will the future of the bank be like? We, of course, cannot be sure, and ecological projection is inexact at best. However, it is not unreasonable to believe that the humpbacks will return again next spring and crop the surviving sand lance, thus keeping the sand lance population depressed. This pattern may be repeated for several years, with the early-arriving humpbacks keeping the sand lance down before departing for

eventual rediscovery and exploitation by humpback whales. Perhaps sand lance will not support the next cycle of humpback abundance, perhaps another planktonivorous fish like herring or caplin will build on the bank instead. It is these unknowns that make ecology an exciting and challenging science. We have had the opportunity of witnessing the dynamic flux of nature these past few summers on Stellwagen Bank, and the future cannot be predicted with any certainty. ■

ACKNOWLEDGMENTS

Thanks is due a number of people with whom we have shared thoughts about cetaceans and the ecosystem of Stellwagen Bank. Mr. Gordon Waring (B.S.C., M.A. 1980) of the National Marine Fisheries Service provided valuable data, background information and discussion on modeling and ecosystem energetics. Dr. Stormy Mayo, Carol Carlson (B.S.C., M.A. 1982), Sharon Pittman, Phil Clapman, Dave Mattila and the rest of the staff of the Provincetown Center for Coastal Studies, Cetacean Research Program and Dave Wiley, Fred Wenzel, Nattilie Ward and Sharon Young of the Web of Life Cetacean Analysis Team provided access to research data, stimulating discussion, insightful comments and good company afloat observing the bank in its many moods. Thanks is also given to the owners and crews of the Dolphin Fleet of Provincetown, Massachusetts and the Capt. John boats of Plymouth, Massachusetts, upon whose boats we spent many hours observing the whales in Cape Cod Bay and on Stellwagen Bank.

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THE HANDMAID'S TALE

by Margaret Atwood

Fawcett Crest
1986

"We are two-legged wombs, that's all; sacred vessels, ambulatory chalices." Nuclear waste, toxic chemicals have devastated the reproductive capacity of the population. Babies are the most desired commodity. A fertile woman is rare; a fertile woman is cared for the way men care for their new cars. Such a woman is allowed to become a Handmaid. She will be assigned to an up-right Family, solid senior citizens. Once a month she will feel the weight of The Commander's body on hers as she lies in the lap of The Wife; she will feel his "regular two-four marching stroke, on and on like a tap dripping." Once a month The Ceremony is performed. Like Rachel and Jacob and Bilhah. Like surrogate mothers.

Atwood's text is a tale of the future, to be sure, but it is a familiar future. A women's culture, controlled by men; a women's culture structured according to those traditional values so revered in our public discourse. What if? What if a certain Christian vision became The American Way; if there were no pornography, no prostitution; if the Family were the cornerstone of society, protected, inviolable? What if everyone did their duty according to God's will, and Wife and Mother were again roles of honor, praise and glory?

The Tale is told by a woman whose blood-red gown and white winged headdress signal her role as a Handmaid in the Republic of Gilead. Gilead is a land within a land, the Boston area in fact. It gained dominance over the splintering factions of American society. It gained this power quietly, cleanly, through financial consolidation, religious zeal, and the complicity and indifference of its women. "We were the people who were not in the papers. We lived in the blank white spaces at the edges of print. It

gave us more freedom."

The power of this novel is in the crystalline economy of its style and the shocking recognizability of its characters and their culture. The narrator is a woman we know, a woman, perhaps, that we are. In the 'old' days she went to college, fell in love, married, had a child, and worked. She also resisted her mother, a 'left-over' from the sixties who was trying to live a different way, build a different reality. The daughter disappeared. "Part of my disapproval was . . . perfunctory, routine. But also I wanted from her a life more ceremonious, less subject to makeshift and decampment." The ceremonious life was not to be what she imagined. She lives now in perfect law and order, unalterable routine. She knew something was happening, something was changing, the day they fired all the women. All the women of a 'certain' class, a 'certain' color, that is. They were sent home to their families. Their bank accounts, credit cards, all property was placed in the hands of the husbands. Soon even the husbands who resisted were sent away or salvaged, the way persons were salvaged in the days of the Inquisition, their bodies killed to save their souls.

Now in Gilead nothing is unexpected, everything is regular, regulated. All relations are enforced by the Guardians, young men serving their country, working hard, living right so that some day they too will have a home, a Wife, a Handmaid and children. All infractions of the law and order are detected by and dealt with by the ever present secret service, The Eyes of God. All media is centralized in the hands of the High Commanders, and only men are allowed to read. The written word is power; the written word is possibility. Neither of these is to be available to women. Women might conceive something other than a child; they might conceive of alternative. And what can be conceived might be possible.

So the narrator passes her days, waiting. For The Ceremony, for Conception. She is clean, she is safe; well fed, regular check-ups by the doctor. She has a room of her own in a proper house. She is part of the Household, ruled by the Commander. "The house is what he holds. To have and to hold, till death do us part. The hold of a ship. Hollow."

Till death. Death permeates Gilead, in spite of,

perhaps, its cleanliness, its order, its pro-life politics. There is the death of the flesh, its sensuality, its spontaneity. All sexuality is controlled, channelled toward officially sanctioned procreation. But the life of desire dies hard and the narrator feels its insistent throbbing at dangling moments of ordinariness, "I would help Rita make bread, sinking my hands into that soft resistant warmth which is so much like flesh. I hunger to touch something other than cloth or wood. I hunger to commit the act of touch." And there is the death of the women in the Colonies, the toxic wastelands surrounding Gilead. Old women, dissident women, Handmaids who do not conceive in time, the narrator's mother - deviants. These women constitute the clean-up detail, slowly and painfully dying as they do their cleaning. And there is the death, the salvaging, of all 'irregulars'. Those who subvert the Gileadean Way of Life by saying something different, or by being something different; a Jew, a homosexual, a person with a sense of humor. All these deaths keep Gilead alive.

What happens to the narrator, what happens to the Land of Gilead, is ambiguous. This novel doesn't end, really. It simply goes on reconstructing, as the narrator reconstructed her tale; as the scholars in the last few pages reconstruct the history of Gilead. But the act of reconstruction, as Atwood reminds us, is always going on in the *now*, if not by us, then by someone else. "As all historians know, the past is a great darkness and filled with echoes." So is the present. Read the newspapers, read Atwood's text and listen for the echoes. ■

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THE CLOSING OF THE AMERICAN MIND

by Allan Bloom

Simon and Schuster

1987

Allan Bloom's book is a sustained attack on the way we live now. Its cumbersome subtitle—*How Education Has Failed Democracy and Impoverished the Souls of Today's Students*—seems more like a publisher's afterthought, a misguided attempt to narrow the scope of the book and thereby focus on the topical "crisis in education." While Bloom begins with a profile of contemporary students "who populate the twenty or thirty best universities," it is clear from the outset that he is attempting nothing less than a full-scale attack on liberal democracy, which, to revise his subtitle, has failed education and impoverished practically everyone—or at least everyone who counts, since, for Bloom, education exists primarily for the small number of students who are capable of "autonomous thought." But even that minority, in Bloom's account, is hopelessly maimed by modern democratic culture before it enters the university classroom. The plebs have infected the whole system, as demonstrated by his students preferring rock music to Mozart. The young don't read any more, and "without the book even the idea of the order of the whole is lost." Things fall apart.

All of this sounds very familiar. Variations on the theme can be heard in the hallways and offices of academe or whenever and wherever teachers meet to complain about what their students don't know and don't seem to care about learning. All professors may not be as confident as Bloom is about having found the Truth or about being in tune with the natural order of things, but many share his contempt for the young and their enthusiasms. Many, like Bloom, seem to think things are getting worse. And many will perhaps feel uneasy when they reflect on how closely Bloom's

doubts about education in a democracy are echoed in their day-to-day complaints about lowered standards and their cravings for "excellence."

It would be convenient if Bloom, a professor on the Committee on Social Thought at the University of Chicago, could simply be dismissed as an oddity, a crusty curmudgeon whose freewheeling blasts at everything (from affirmative action to feminist criticism) and everyone (from Margaret Mead to Woody Allen) contemporary and American indicate nothing more than a midlife malaise accompanied by a longing for a golden age of American higher education. (Bloom nominates the 1950's!) Unfortunately, he has to be taken seriously, if for no other reason than the fact that the book is a bestseller, presumably read and taken seriously by large numbers of people who share at least a portion of his anger at the way things have turned out. An irony not to be missed is that this university professor, who clearly sees himself as one of the fortunate few still capable of autonomous thought and as one who has successfully distanced himself from popular opinion, has produced a book whose position on the charts places it firmly in the mainstream of current reactionary discontent.

Bloom is trying to play Jeremiah—or perhaps Zarathustra—come down from the mountain, toting a load of "the great books" to use as clubs to chastise the unbelievers. But he simply doesn't have what it takes. Or maybe we just don't need prophets

right now. One can imagine a thoughtful questioning of bourgeois liberal pieties, an exposure of their sentimentalities, their failure to see the contradictions between opposing claims of freedom and equality. However, instead of careful analysis and argument, Bloom offers us dogmatic assertions of the authority of the classics and of democracy's failure to pay proper homage to its own antithesis.

Bloom loves the great books: "the substance of my being has been informed by the books I learned to care for." To somehow communicate this love, to show what possibilities it contains, is the formidable task of the teacher. Fine. But wait—look also at the questionable role Bloom assigns to those works in a democratic society: "In aristocracies there was also a party of the people but in a democracy there is no aristocratic party. This means that there is no protection for the opponents of the governing principles as well as no respectability for them." For Bloom, "the great books," presented as a firmly established, unchanging canon, are a substitute for an aristocratic party. What they offer is a critique of democracy. Tocqueville is seen as an authority on democracy precisely because "his judgments were informed by an experience we cannot have: his direct experience of an alternative regime and temper of soul—aristocracy. If we cannot in any way have access to something like that experience, our understanding of the range of human possibilities is impoverished and our

capacity to assess our strengths and weaknesses is diminished." Because the truth is, the great books can be and are used to maintain social distinctions that democracies have sought to dissolve. It can come as a great shock to realize that the study of the humanities does not necessarily lead to a concern for humanity; that, indeed, as practiced, it may more easily lead to a carefully nourished solicitude for what Bloom calls "the high human types" at the expense of just about everyone else.

There is in Bloom's book no evidence of his either sympathizing with or even understanding the epic project of the open university—the belief that higher education and its benefits, both educational and economic, can and should be made available to all. If one thinks, as Bloom obviously does, that modern democratic culture has nothing to offer the university, that the experiences of the majority of our citizens are irrelevant to the pursuit of knowledge, then of course it necessarily follows that open admissions policies would be seen as diluting rather than enriching the educational process.

I would suggest that the opening of the doors of the university has in fact been only an enrichment, if such things are measured by subtler instruments than SAT scores. If educators cannot be educated by the influx of the "other," the new, then that only demonstrates that there are different forms of "cultural illiteracy." When the acquisition of knowledge becomes a one-way street, passing strictly from teachers to students, teachers are in danger of prematurely ending their own education. Has anyone obtained statistics on the number of dropouts facing the class? ■

MICHAEL BOYD
Associate Professor of English

HER MOTHER'S DAUGHTER

by Marilyn French

Summit Books, New York
1987

*"Mother, what I feel for you
is more
and less
than love."*

from "Needlepoint" by Erica Jong

*"Oh the ties that bind mothers
and daughters together!
and the knots in the ties!
Sometimes our fingers meet
as we try to untangle
the cats cradle they make
Untangle one string and we twist another
Whose fault is it? Nobody's fault
The ties are there. It is their
nature to knot,
Our nature to struggle with them.
And often our fingers touch."*

"Dear Daughter" by Erica Jong

things better for the kids,
to preserve the children."

The lives of four mothers and daughters, Frances, Belle, Anastasia and Arden, are an interconnected web. The reader follows one strand, often not knowing for a time whose tale is being woven. And one realizes that the spider-mothers are both poisonous and vulnerable.

Anastasia moves from frightened, sheltered daughter to complex adolescent, to pregnant bride, to mother alone in suburbia as her husband "makes it." She falls into a career originally begun as a hobby to stave off boredom. It is at an interstice of that career that the story is told. As she recounts her life, she spirals from her own through those in her matrifocal heritage, picking up the meshed threads as she repeats the patterns, in her story and in her life, woven by those women before her.

Her Mother's Daughter is about a woman struggling to free herself and her daughters.

"What I wanted to escape from was not the past, but the pain, and for me they were identical, because by

the time I was sixteen, I knew my mother's story, and her mother's and I saw the bloody cord connecting us. I set my teeth to bite myself free. I would not take my place in the sacrificial ranks, would not live the way they did, would not pass on to my children — if indeed, I ever had any — a legacy of suffering selflessness. I would not repeat their experience. Above all, I would construct a new personality for myself that did not, like hers, absorb all the light and air surrounding it and turn it into darkness, into a hunched-over shadowy mass in a dim room, surrounded by the proofs of my enslavement."

Anastasia does escape — a little — does free herself and her guilt; if not totally severing the "bloody cord," at least unwrapping it from her neck so that she is free to breathe. She forges a career, and a life, for herself. Her awareness, though certainly nothing for headlines, allows her to be a more complete woman, to "have it all" — her career, her family, her lover. She comes

I needed these poems when I was trying to explain. I was nestled in a corner of a dark room, curled around the book; they were in another room drinking Chivas and recounting adolescent First Night adventures. One woman ventured to my corner, asking what engrossed me so. And my words could not detail the depth of the book nor the self-searching that it produced.

Then I found a passage by Anastasia, the main character of *Her Mother's Daughter*, as she talks about her own novel.

"I'm not writing a heroic tale, a tragedy or an epic. I'm trying to recount a life, my life, a woman's life — and lives are made up of small events that wear us down. It is not great crises that mark us, that make us what we are, but the small details of ordinary living that stiffen us into shape gradually."

Her Mother's Daughter is not an epic in the traditional sense; however in the exposition of the realities of being a woman, it is grand and heroic. It is heroic in its accounting of the sacrifices, of "the legacy of suffering selflessness." One mother sacrifices her children to an orphanage — temporarily — while she works to support them. Another sacrifices her career; another, her freedom as she marries in order to keep her children.

None of the lives in the book are "worthy of headlines"; that's what makes the story more captivating. The women are "plain, ordinary women."

"... for millennia women have dedicated their lives to saving the kids and we were continuing the tradition. Sweet, martyred and sighing; honest, angry and yelling; tender, tough and mean, whatever, however they acted, women gave up their lives, any hope of a life, to raise the kids, to make

to a place of maturity as she comes to terms with her life.

Marilyn French's prose employs magnificent metaphors and rich descriptions. She lets the reader see the "sacred in the ordinary, the everyday." Through her exposition, the generations of kitchens, the physical and emotional starvation, the suffocating need to please blend with one's own reality. The reader is transported to the dimly lit porch sheltered by screens while peering out on frightening reality.

As French exposes the "raw nerve" of "the primal, inescapable bond between mothers and daughters," the reader is impelled to explore her own legacy. I wanted to know more about the sacrifices of selfhood made by my mother . . . and my mother's mother . . . And I pledged to try, in my own awareness of the sacrifices I have made, not to "pass that cost onto the next generation."

Her Mother's Daughter begins with the tale of the "midge mother."

"Midge mothers do not lay eggs, they reproduce young from inside their bodies without benefit of clergy, state, or even any informal male assistance. And the baby develops inside the mother's body, not in a uterus, but in her tissues, and eventually, she fills her whole body, devouring it from the inside. When she is ready to be born, she breaks out of her mother/prison, leaving behind only a chitinous shell."

Her Mother's Daughter is a "subtly shaded, powerfully written" book for all women and men struggling to understand "the ties that bind mothers and daughters together . . . and the knots in the ties." ■

SUSAN A. HOLTON
Associate Professor of
Speech Communication

Recently I traveled with my wife and daughter to Italy to explore its architectural and artistic treasures. While in Rome we were naturally fascinated by the Pantheon, Coliseum and Via Sacra, but I seemed to be more interested in how the present day institutions worked. What about the transportation systems, the flow of traffic, the commerce and public safety? And, of course, there was the infamous Italian Postal Service with its international reputation for inefficiency and waste. Someone suggested we avoid it by using the Vatican Post Office. It seemed an especially good idea after we heard, from several sources, that a few years ago a postal worker had dealt with a huge backlog of undelivered letters and packages by heaving the load in a dumpster.

Perhaps this person's behavior was justifiable given what I observed to be overwhelming circumstances, namely, an entire institution gone haywire. Our tendency to laugh at this singular example of Italian bureaucratic inefficiency was based on our sense of superiority. By comparison, the American Postal Service seems a model of efficiency. The Italians may have the longevity, but we get the job done much better. At least that was my smug view until we got home.

I had sent my son a postcard of the Coliseum with a beautiful Vatican stamp on it and expected to see it stuck to the refrigerator when we got in the door. However, in response to my inquiry about the card my son set before me two shopping bags filled with junk mail. He said that the card might be "lost in this stuff." This was, you understand, TWELVE POUNDS of mail that had accumulated over a period of just two weeks. And it didn't include a single piece of first class mail.

So began the search for the lost post card, and searching

forced me to look closely, for the first time, at the sort of mail I had been tossing with only a quick glance for identification purposes. There were seed catalogs, endless "plea" mail, and contest gimmicks. Many informed me that I "may already have won \$..." (You fill in the amount.) About an equal volume were invitation to pick up some gift I had already won if I would

attend a sales talk at some place like Brewster-by-the-Sea ("Your prize is one of the following: A vacation for two to Hawaii, a new Buick, or a beautiful set of rare leaf prints.") Choices, choices, what to do?

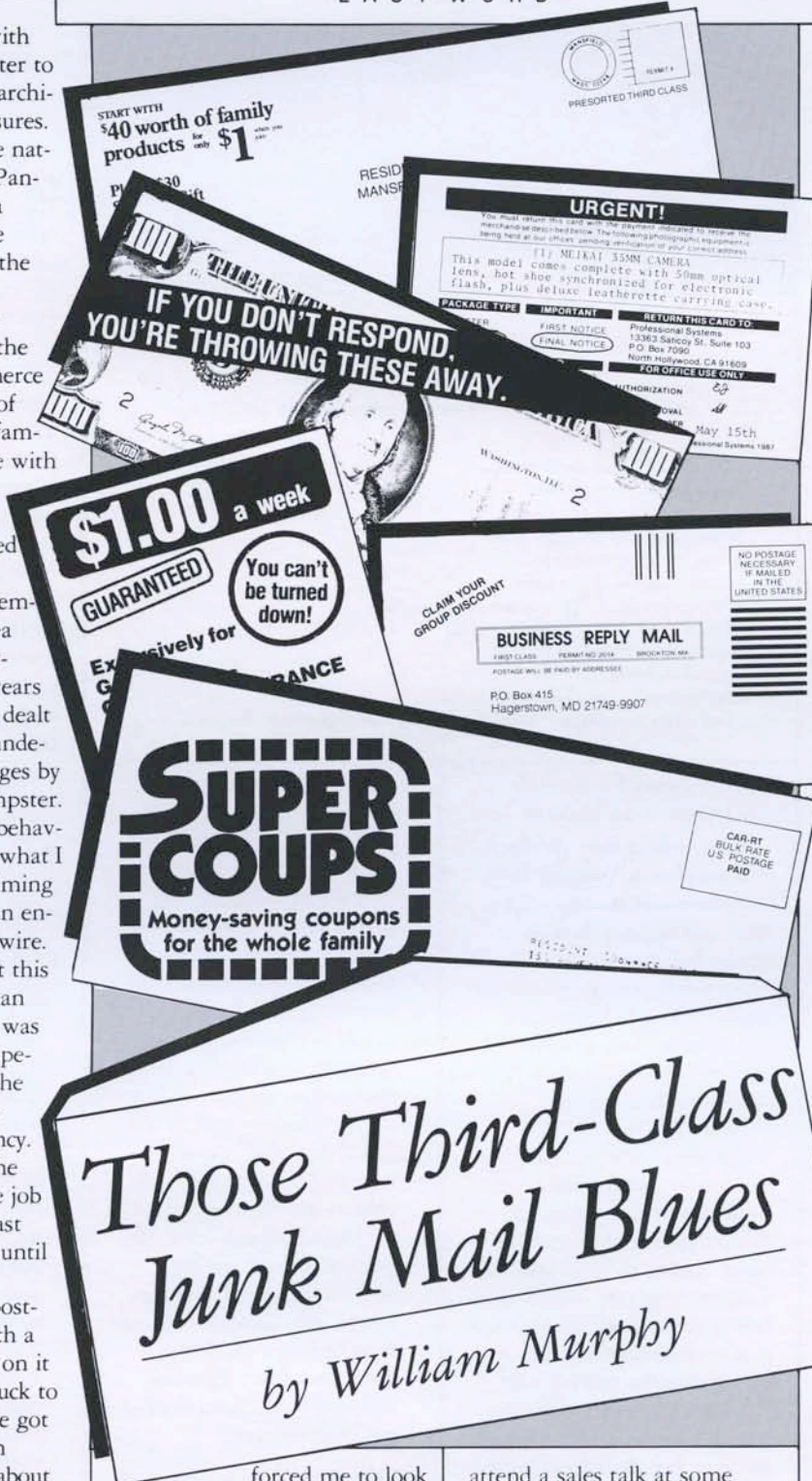
I began to rethink my evaluation of the Roman postal worker who had dumped all that mail. Did I really need to open an envelope that said on

the front "non-transferable cash voucher enclosed," or an offer for a portfolio of breathtaking photographs by Ansel Adams. Do I want wildlife stamps? More memberships? Free trees? I was beginning to feel like a victim, frustrated, angry, ready to tear stuff up. And no postcard. I decided to do something.

I called the post office to insist that deliveries to my house no longer include third class items. I was told that the post office was in the business of making money and that delivering third class mail was lucrative for the postal service. Therefore the junk mail delivered to homes like mine would be against the interests of the postal service, and of course the United States. In a sense opposing junk mail is un-American.

However, I was given the name of a firm that could have my address removed from those mailing lists that make the mass mailing industry what it is today. If all works out they will bring my junk mail blues to an end. I was promised that my name would be removed from mailing lists of catalogs, charities, religious organizations and sweepstakes. I was assured that in approximately three months I would notice a decrease in mail volume. No longer was my name and address to be sold. I would be free of the pleas from Ed McMahon, the Smithsonian Institution, the Cousteau Society, St. Labre Indian School and many others who buy access to mailing lists. Good-bye to discount coupons, catalogs, free samples of detergents and offers of books, records and tapes. No longer will those Coliseum postcards remain lost in piles of third class mail, assuming, of course, that they aren't first thrown out in the name of efficiency in Rome. ■

WILLIAM MURPHY
Professor of Special Education





*Scenes
from
Stonehenge*
by Roger Dunn



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