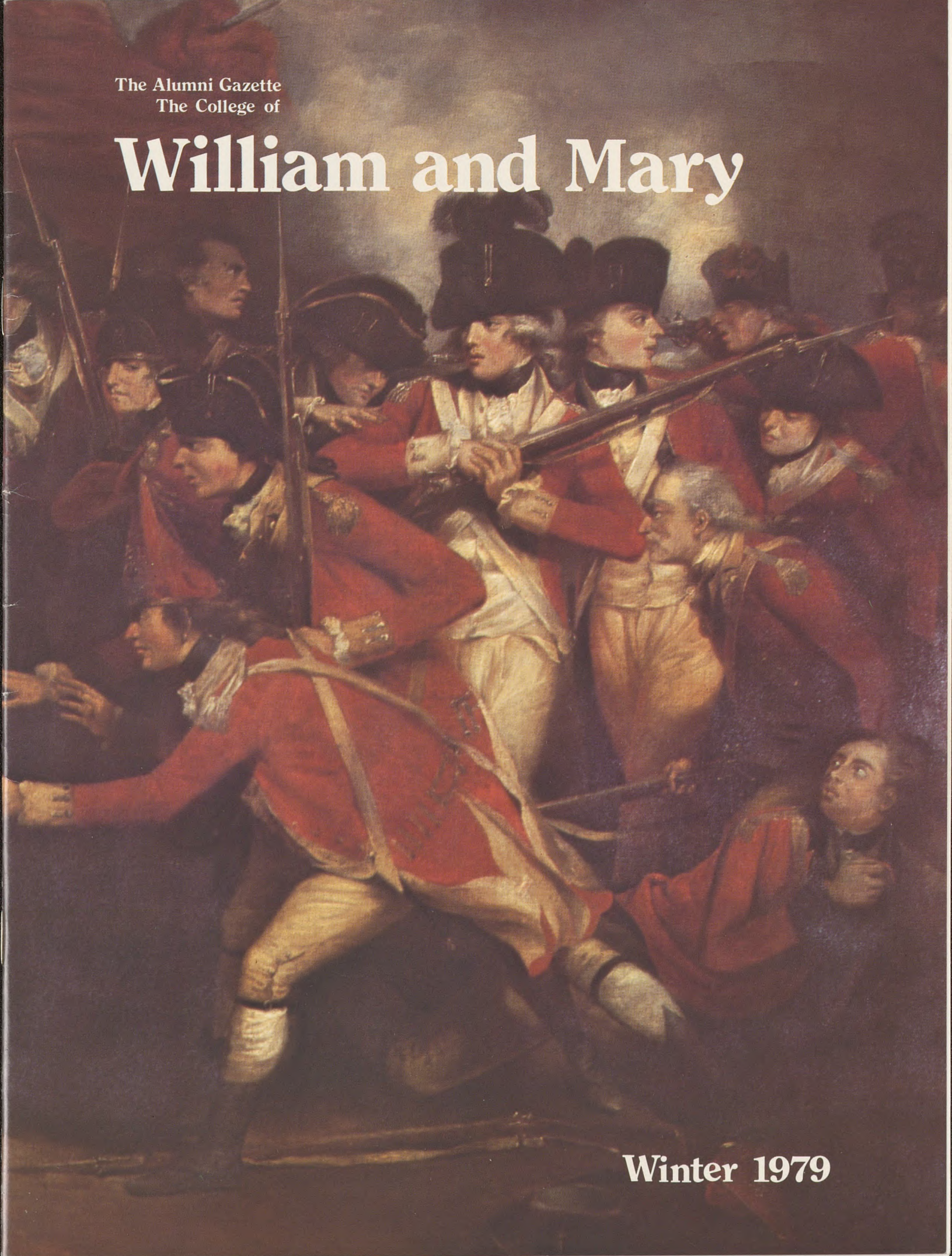


The Alumni Gazette
The College of

William and Mary



Winter 1979



On the Cover

The *Battle of Dunkirk* (oil on canvas, 58 x 94 inches) by John Singleton Copley (American, 1738-1815) was given to the College of William and Mary in 1937 by John Stewart Bryan, President of the College from 1934 until 1942. For many years the painting hung in the College dining hall; later it hung in the Brafferton lounge; and today it is on display in the Virginia Room in the Special Collections division of Swem Library.

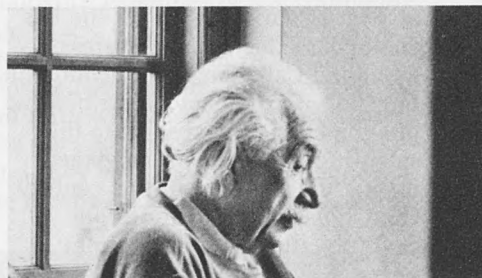
The panoramic scene depicts a skirmish between British and French troops in 1793. Painted in England around 1814 - 1815 at the end of the artist's career and when his health was failing, *The Battle of Dunkirk* is among the last, and is possibly the final, history painting produced by Copley.

Although executed during a period of the artist's decline, in *The Battle of Dunkirk* one still sees elements of the drama, bravura brushwork, and vivid color which characterize Copley's earlier history paintings.

The Alumni Gazette The College of William and Mary

January/February, 1979

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The Task of Keeping Professionals Moral After "60 Minutes" Goes Off the Air

Almost everyone appears concerned about the ethics of professionals. But how long will it last?

By William F. Losito

It is an undeniable fact that there is presently an intense interest in the moral conduct of professionals. For the most part, the media has presented professionals in an unfavorable light.

Imagine this scenario on one typical day. As you drink your morning coffee, you scan an editorial which criticizes one professional association for approving self-interested standards which prohibit consumer-beneficial advertising and competition. On the opposite page, you notice a column by Jack Anderson which points an accusatory finger at several American businesses for dumping their Tris-treated children's clothing in foreign markets.

William F. Losito, associate professor in the School of Education, received an undergraduate degree from the University of Dayton and a doctorate from Indiana University. He currently teaches philosophy of education courses at both undergraduate and graduate levels, and recently developed a graduate course in ethics and education for the School of Education. He has conducted several workshops focusing on moral education for Tidewater school systems, and serves as co-director of a new project to examine the study of religion in public school humanity courses. He is a member of the executive committee for the South Atlantic Philosophy of Education Society.

Later in the morning, you set aside your desk work to skim a journal reviewing the most recent professional books. The first review that catches your eye is *Crisis at the Bar: Lawyers' Unethical Ethics* by Jethro Lieberman in which, among other things, the author castigates lawyers for "inconspicuous production," the practice of assigning high-priced specialists work requiring low grade skills. Next, you read the review of Martin L. Gross's *The Psychological Society*; again, it is a catalogue of abuses among psychologists and psychiatrists. In particular, Gross cites the practice of professional psychologists who continue consultation at great profit with clients long after anything beneficial can come from the therapy sessions. (This last point gives you a new understanding of the seemingly endless sessions between Bob Newhart and Mr. Carlen!) And finally, you glance over a review of John Guinther's *The Malpractitioners*, an anecdotal description of the extent and varieties of medical malpractice.

And on the evening news, you view the unfolding of yet another segment of payoffs for political favor. One of the reports on "60 Minutes" that evening is devoted to exposing the widespread practice of government inspectors overgrading beef for kickbacks. And if your indigestion is not complete, later you go out for entertainment and view the recent film "Coma," which depicts the possibility of humans becoming marionettes on strings held by Macchiavellian members of the medical profession. Who knows what

nightmares await when you return home to attempt a restful night of sleep?

Why have the moral deficiencies of professionals suddenly received such detailed scrutinization? The explanation is simple. It is a well-documented fact of American society that any major event or idea in one respect of our institutional life has analogous effects in other areas. Raymond Callahan, in *Education and the Cult of Efficiency*, describes this phenomenon with respect to the scientific management movement during the first part of this century. He persuasively illustrates, for example, the assimilation from business into public education of the ideology of management based on the principles of the emerging social sciences, e.g., standardized testing, teacher specialization, etc. It is not surprising, then, that a cataclysmic event such as Watergate and other ensuing political scandals would have such a dramatic effect upon our public concern for morality in other sectors of public life.

All of this attention upon unethical professional practices can be understandably disconcerting for the professional. On the one hand, it is a saddening experience for high-minded professionals to become informed about colleagues who misrepresent their credentials, exploit clients, and otherwise undermine public trust. In addition, the professional is no doubt disconcerted by the probable erosion of public credibility and trust that will be the

effects of the continual litanies of professionals' sins.

However, it would be a mistake for the professional to assume that the current focus on professional malpractice is exclusively attributable to parallel concerns in the political arena. This is a costly and demoralizing assumption which none of us can afford to make.

Instead, a more positive perspective can be assumed. Much current discussion of professional ethics is not simply an exercise in muckraking but rather an intellectual challenge. The heightened consciousness of rights because of the civil rights movement, the increased complexity of American life, and the rapid development of knowledge (particularly in the life sciences), has contributed to the posing of positive challenges to our thinking about moral aspects of the professional role, both in its policy and private decision-making dimensions.

The history and effects of the civil rights movement likewise illustrate quite well the thesis of Callahan. The movement, which began by examining racial issues of discrimination in education and busing, continues to unfold into all areas of our institutional life and to be extended to analogous examples of discrimination due to sex, age, handicap, sexual preference, etc. We have not been consciously immoral or expressed bad faith with respect to these issues. The very complexity of these issues (and they are exceedingly complex as the recent Bakke case amply demon-

Imagine hiring a
moral consultant who
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for truth-telling!"

strated) has caused us to become psychologically inattentive to moral concerns. We have kept occupied with business as usual and not let our consciousness drift too far into the consequences and assumptions of our professional practice.

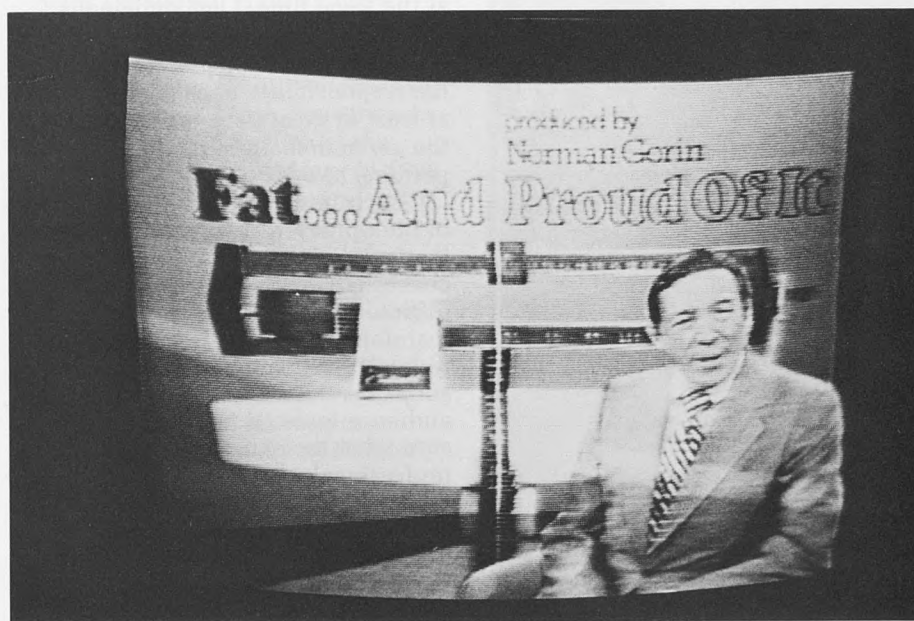
One of Francis Ford Coppola's films, "The Conversation," exemplifies graphically the meaning of psychological inattentiveness. In the movie, the central character, John Caul, is a renowned expert in surveillance who offers his services to any individual who is willing to pay his stipulated fee. Caul makes it his professional practice never to listen too closely to the tapes he makes of conversations or to examine too carefully any of the photographs. Ostensibly, Caul provides the self-serving explanation that his employer should be the sole possessor of any information produced through his surveillance. Beneath that surface reasoning, however, Caul knows that some of his clients have less than honorable intentions, but he fears the confusing burden of scrutinizing too closely his work. Like Caul, for a long

time many of us have had uneasy feelings. Those of us in education have not just recently felt some uneasiness about the exclusion of handicapped children from the normal processes of schooling. And thinking about it at any length would have only produced irreconcilable and confusing considerations. So, we have paid greater attention to the work at hand, leaving for "The Future" or "The Employer" the trying task of thinking through this very complicated problem. And this example can be extended to many other professional areas.

The truth to be learned from all of this is not only that humans have the capacity to avoid complex moral issues. More importantly, we have discovered that the ordinary systems of morality which function so well in most decisions in our personal lives break down when we consider the very complex moral decisions in the professions. We had falsely assumed that the ordinary understanding of morality and the process of moral decision-making is adequate in all contexts. The moral dimension requires the same kind of sophisticated reasoning and attention as the economic, psychological, legal and physiological dimensions of the various professions.

The question remains, however, whether and how we will use this newfound learning to our advantage. The present spotlight on professional morality will soon dim if the law of growth and decline holds which governs every other cultural phenomenon. What will happen when "60 Minutes" goes off the air, Jack Anderson retires to the Azores, and Ralph Nader becomes an executive with General Motors? Like a schoolboy who forgets Friday's spelling list on Monday's essay, we quickly forget what was once thought to be so poignantly important. Remember, if you will, a few years ago the long lines at filling stations and the compelling arguments for the necessity of smaller cars; the popular concern quickly abated when the pumps were humming again.

Surely, there will be a beneficial residue on professional morality as a result of the crisis-nurtured interest. But unless we as professionals seize the opportunity and institutionalize our present heightened understanding, I am afraid that the residue indeed will be small. It will be "business as usual," where abuse and neglect will go unchecked in many quarters, and where the best



Mike Wallace is one of three CBS newsmen who host "60 Minutes" each Sunday night. Together, they investigate a wide range of topics, including many which focus on unethical practices of professionals.

Much current discussion of professional ethics is not simply an exercise in muckraking but rather an intellectual challenge.

intentioned of us muddle through complex moral issues because our modes of thinking about morality are inadequate.

There are some very clear and practical measures that we can take to capitalize on the present opportunity. First, we can revitalize our review boards of professional conduct. Every professional group, I think, has one--at least at the national level. It is no secret that these review boards have served in the past more as protective, fraternal associations than as sages continually vigilant over the service of professionals. Like parents continually worried about what the neighbors might think, they have muffled the cries of negligence and malpractice and kept them from the fresh air where they might be dealt with honestly.

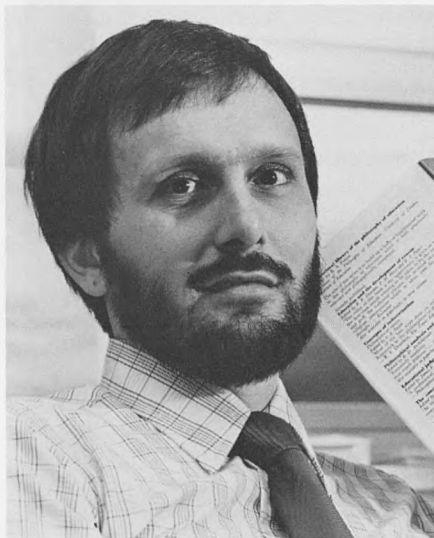
And where these review boards could not avoid the self-evident cases of professional misconduct, they have acted like the overly lenient confessor I remember as a boy who murmured, "Now say three Our Fathers, three Hail Marys, and three Glory Be's as a penance," whether the confessed sin was treason or failure to do the household chores.

There is a second practical step we can take. Every professional group has a code of ethics or standards. In many instances, these codes of ethics are platitudinous boiler-plate statements which are so general as to say very little. It is not surprising that they are largely ignored. As an example, allow me to quote the first principle taken from the statement of ethics for school administrators: "The educational administrator makes the well-being of students the fundamental value of all decision-making and actions." Very little light is shed by this statement, or elsewhere in the code, as to which decisions and actions contribute to the well-being of students. And where professional standards are adequate, it is necessary to continually revise them. The American Psychological Association has recently done an admirable job of comprehensively

revising its professional standards; other professional organizations are beginning to follow this example. Professional codes stand in need of continual revision because professional practice is expanding into more and more areas as it reflects contemporary needs.

But even the development and understanding of good professional standards is not sufficient. For the best of professional codes contain principles that are very general and stand in need of interpretation. That is the very nature of ethical codes--they are intended to express formulations that hold for the essential and most general issues. Since professionals vary both in circumstances and type of work, and since that range of professional work is continually changing to meet new demands, a code of ethics can never adequately set standards for the professions as they are at any one time. Certainly, and more importantly, for the professional to rely exclusively on a professional code in making moral decisions undermines the very notion of professional autonomy, a concept highly esteemed by professionals themselves.

A third necessary step to capitalize on the present concern over pro-



William Losito

fessional morality is the incorporation of applied moral philosophy into the ongoing education of professionals. We have seen that it is misleading to think that the business-person need only know economics, and that the physician need only know medicine. These professionals evidently need the fruit of other inquiry in the social sciences in order to perform effectively. The same is true in the area of moral issues where the relevant form of inquiry is applied moral philosophy. In the past, we have thought common sense moral wisdom to be sufficient, but the revelation of new complexities has proven us wrong. And in recent history moral philosophers have not helped their cause. Earlier in the century, a view popular among moral philosophers was that ethical principles and arguments are merely the expression of personal opinion and preference. Imagine, if you will, hiring a moral consultant who could say no more than, "Hooray for truth-telling!"

Fortunately, times have changed and there is an abundance of substantive work being done in the application of modes of reasoning from moral philosophy to professional issues. Surely, the institutionalization of the importance of moral philosophy to the professions will mean the development of new academic courses, the increased frequency of articles systematically treating moral issues in journals, and the occasional use of consultant ethicists. This is as it should be. But at the same time, I am ambiguous about advocating the creation of a "new breed" of experts. It should be the responsibility of each of us to be, at least in great part, the experts over the given domain of morality that pertains to our field.

Clearly, we should make the most of the opportunity to institutionalize the fruits of our present moral concerns. I realize that this is a difficult challenge. Johnny Carson maintains that there is a rule of three in humor--three jokes about any subject is the maximum before an audience loses its interest. I am not sure what the analogous rule is in professional morality, but I am sure that we will eventually lose our interest in pursuing these matters. While the interest lingers, we need to revitalize our professional review procedures and codes, and imprint the importance of systematic, applied moral philosophy to the many complex moral issues of our professional lives.

Interview

Writing About Writers

Scott Donaldson is a literary detective who relishes moving from one human puzzle to another.

A child of the middle class in the middle west, Scott Donaldson was born and brought up in Minneapolis, across the river from Fitzgerald's home in St. Paul. Hemingway came from a similar background in Oak Park, a suburb of Chicago. This community of origins was one of the things that motivated the William and Mary professor to undertake biographies of these two writers.

He never met either man, but they were about the same age as his parents, and he thinks it entirely possible that his mother, who came from St. Paul, may have known Fitzgerald in her youth.

Scott Donaldson is an ex-newspaper reporter who turned respectable in the mid-60's, earned his Ph.D. in American studies at the University of Minnesota, and took a position in the Department of English at the College of William and Mary in 1966. His newspapering background has served him in good stead in the academic world where "publish or perish" is a dictum not taken lightly even at William and Mary, a college where primary emphasis is on teaching. He has written biographies of Ernest Hemingway and Winfield Townley Scott, and has begun research on a biography of F. Scott Fitzgerald.

Donaldson's biography of Fitzgerald is still in its formative stages, but his *By Force of Will: The Life and Art of Ernest Hemingway* was published by Viking in the spring of 1977 and got good to excellent reviews. Wilfrid Sheed in the *New York Review of Books* called it "the first fresh news" about the relationship

between the man and his work in a long time. Walter Sullivan in the *Sewanee Review* proclaimed that "in its way" the book was "a masterpiece." Penguin brought out a paperback edition last spring. William and Mary recently asked Donaldson some questions about his work as a biographer.



Scott Donaldson outside his office in the Brafferton kitchen.

College: What makes you--or anyone--want to write a biography?

Donaldson: In the case of literary biography you obviously must have an interest, a very strong interest, in what the subject has written.

College: For example?

Donaldson: Well, Winfield Townley Scott was an intensely American poet, sensitive to his heritage in ways that cannot help appealing to anyone who teaches American Literature. "It is so much easier to forget than to have been Mr. Whittier," his long poem on John Greenleaf Whittier begins, and that's very true, and unfortunate. Scott kept such memories green by looking back in moving vignettes, as on the respectable ladies of Camden, New Jersey, drawing their "skirts and kids aside" to avoid contamination by Walt Whitman as the dirty old man hobbled past, "His basket on his arm/ Filled with his book for sale." And he was an extremely personal poet, too, just as both Fitzgerald and Hemingway were very personal, autobiographical writers. Certain poems or stories can make the back of the neck tingle.

College: But many people must feel that way without wanting to commit biographies?

Donaldson: Certainly. You also need arrogance--a belief that you can put the puzzle together as well as or better than others. Then you've got to enjoy solving puzzles in the first place. Like detectives and investigative reporters, biographers must be constantly curious, constantly determined to get to the bottom of

mysteries. There are blank spaces in the life of any biographical subject, even if it's someone as closely watched as Hemingway. The task is to extrapolate from known to unknown and fill in those blanks, rather like a crossword or cryptogram fiend.

College: Don't you run into sensitive material? How do you handle that?

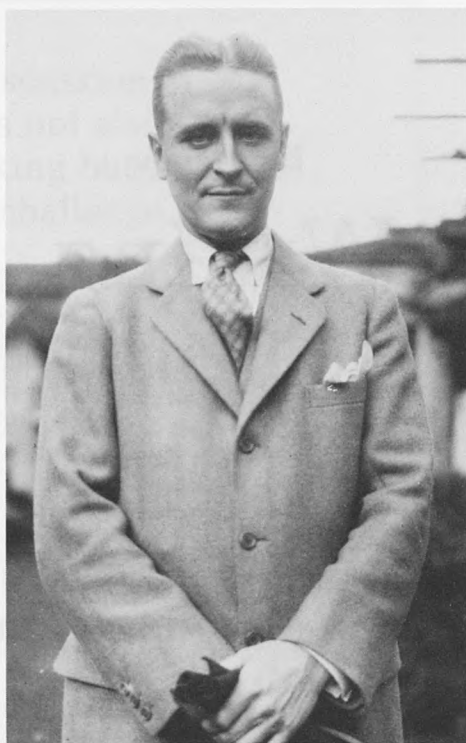
Donaldson: At the beginning of *The Adventures of Augie March*, Saul Bellow's narrator observes that if you hold back one item of information, you're liable to hold back the adjoining ones too. I believe in telling as much of the whole truth as can be dug out, keeping laws on invasion of privacy and libel in mind. In one sense, a biographer becomes something of a voyeur, or, to put it more politely, he tends to experience vicariously what happened to his subject. When people asked me what I was doing the spring term of 1978 (Ed. note: he was a visiting fellow doing research at Princeton) I'd say, "Reading Scott Fitzgerald's mail."

College: What makes a successful biography?

Donaldson: First of all, knowledge--not just the kind of knowledge you can get through directed research in the library, but knowledge of one's subject, and knowledge of history (what it was like, say, to grow up like Hemingway and Fitzgerald in middle-class, middle-western families at the turn of the century), and knowledge of "life" too. That's why young people rarely write great biographies. Usually they haven't suffered through enough disillusionment and disappointment to be able to communicate the thoughts and feelings of those who have lived longer and thought and felt longer too. Probably it's better for young people to stick to creative writing, which is largely writing about themselves in disguise. Then when they understand themselves better they can move on to trying to understand others.

College: Isn't biography a creative genre, then?

Donaldson: Yes, though you can't be creative about the facts. In the process of selection--of choosing from among seven notes the one which best fits--the biographer is exerting imaginative control over his subject. And he should be a good story-teller, too. Like a novelist, he should aim for high spots here and there, use foreshadowing and suspense, alternate description with scene, and so on.



F. Scott Fitzgerald

College: Let's look at the other side of the coin. What makes a biography bad?

Donaldson: Three things, primarily. First and most obvious these days is the impulse to cram every detail into the book. The assumption here is that since any item of information might conceivably be of use, nothing should be omitted. But sometimes so much time and space is spent setting down minutiae--the menu for breakfast on the 18th of May, the number of bags taken on the trip to Florida--that the author abdicates his responsibility to interpret the facts. Books of this sort run to 1,000 pages plus and in heaping up facts tell us more about penguins, as the old gag has it, than we want to know. They are valuable to literary scholars, but practically impossible to read straight through. Joseph Blotner's *Faulkner* and Mark Schorer's *Sinclair Lewis* are examples of this kind of compendium-biography.

The second and almost diametrically opposed problem is one that biography shares with much academic writing: the tendency to adopt a thesis and then force the evidence into supporting the thesis. Once you have a thesis, as someone remarked, the whole world lies at your feet. And so it is, as most of us know from personal experience. Though it's excellent in many ways, Philip Young's book on Hemingway rode its

thesis--that practically everything about Hemingway could be accounted for by his wounding in World War I--pretty hard.

And the third failing, hardest of all to avoid, is that of telling the tale in pedestrian prose.

College: How do you evaluate evidence? Who or what can be trusted?

Donaldson: That's a tricky matter. People who knew the subject or who were related to him almost always want to paint that relationship in the most favorable light, so their memories often distort reality. Usually, what's on paper is more reliable than what can be discovered through interviews. Yet it's well to remember in dealing with fiction writers that they're used to lying on paper.

College: Have your students helped you at all?

Donaldson: Yes, and more so as time goes on. They cannot do your research for you, but they can and do bring fresh insights to books or stories you have read too often. This happens most frequently in seminars, where there's more time to look at any given poem or story or novel than in larger classes. But it can happen even in survey courses. This is one way in which teaching and research work together, for what you learn from your students one year you can pass on to others another year. In the acknowledgements at the back of the Hemingway book are the names of a dozen students who taught or were taught by me.

College: How did you happen to write about Hemingway?

Donaldson: It goes back a long way, at least as far as my senior thesis on Hemingway's short stories at Yale. That was a rotten piece of work, and had to be rewritten before a diploma was delivered, late. So there was probably something like self-justification behind the decision to write a Hemingway book ("I'd show 'em")--that, and not having another book in the works.

College: But there are so many books about Hemingway. What did you do that was different?

Donaldson: Actually, the project began with a scholarly essay on *The Sun Also Rises*, where I argued that the morality of the novel was structured around a financial metaphor: in abbreviated form, that easy money was bad for people, and you had to earn your pleasures if they were not to leave a bad taste in the mouth. That got me thinking about

Hemingway's attitudes on a number of issues, and led to a topical approach toward the man and his writing. Why not do a book, I thought, which took up a number of such topics? Hemingway and . . . love, friendship, religion, politics, sport, war, death, and so on? From such fragments I hoped to divine the figure in the carpet, to unravel the kind of man Hemingway was.

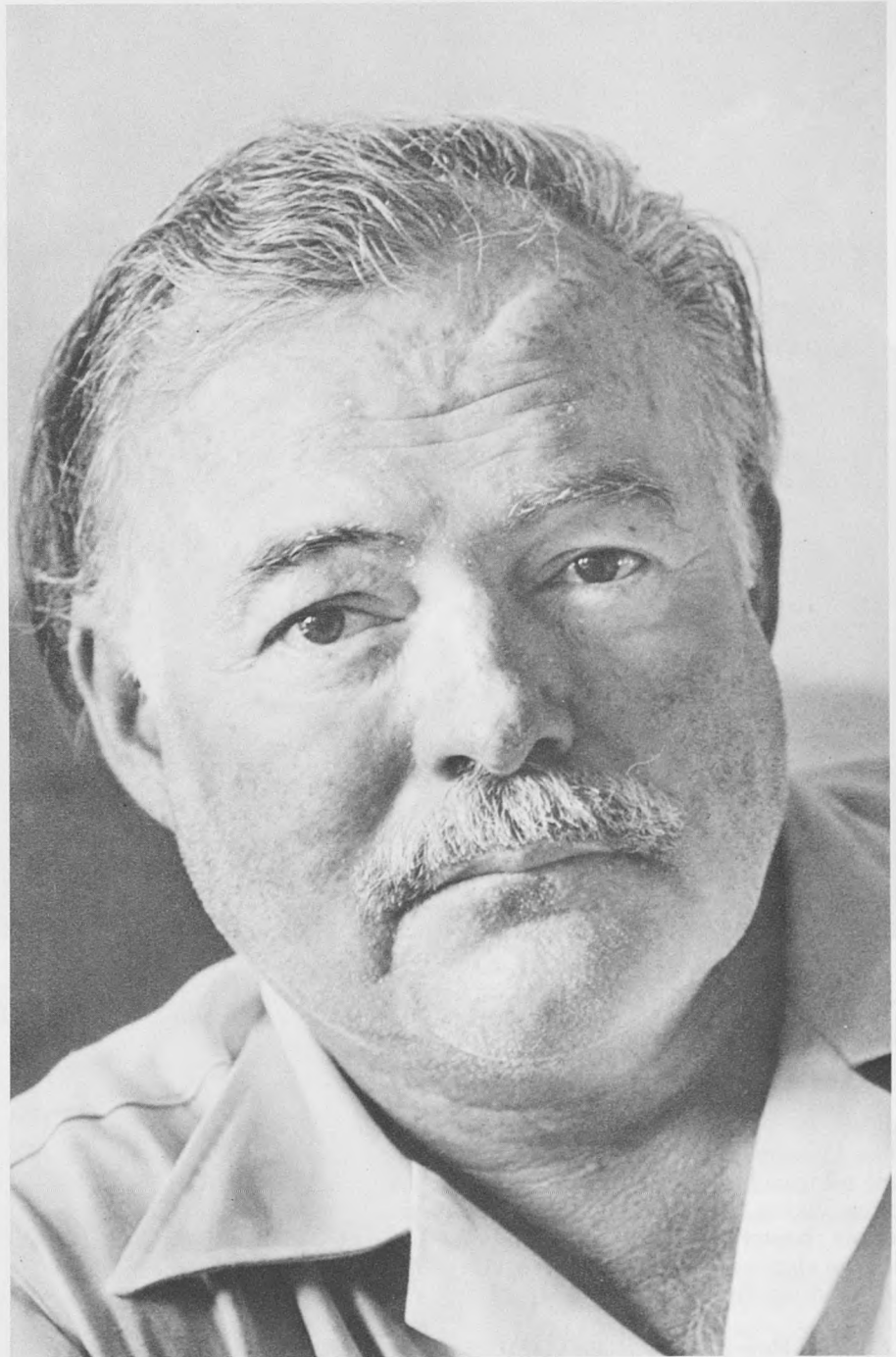
College: How did you go about your work? How long did it take?

Donaldson: I set out to read everything available: everything that Hemingway wrote from published fiction through journalistic essays to personal letters, and everything that others had written about him as well. This took about four years, but could have been accomplished in about half that time were it not for full-time or part-time teaching during the period. Much of the research was done at Princeton, where Carlos Baker had assembled vast stores of information for his indispensable biography. But there were trips to New York, Boston, New Haven, Washington, Charlottesville, College Park, and Austin, Texas, where the Lone Star State places a gatekeeper with a .38 at the entrance to its manuscript collection. Grants from William and Mary's faculty research program and from the American Philosophical Society helped finance these excursions. As the work went along, I collected thousands of 8 1/2 by 11 sheets, one for each note (and never, never with any writing on the reverse side of the paper), and sorted them into categories. Then it was time to shuffle the notes and face the physical labor of writing, which consumed another 12 to 18 months. On a good day I'd produce 10 typed pages, with up to half the verbiage crossed out as I went along. It helps to be able to write at a typewriter, since you can go much faster that way than in longhand.

College: Did you have a publisher all along?

Donaldson: Before embarking on the long writing journey, I put together a sample chapter, parts of which were later distributed here and there in the final manuscript. This chapter, suggesting the scope and intention of the book, went out to several publishers. Such an inquiry process is customary, and gives the prospective author a chance to test the waters while allowing the publisher to secure the eventual manuscript through an advance of some size. Doubleday and Scribner's

This is one way in which teaching and research work together, for what you learn from your students one year you can pass on to others another year.



Ernest Hemingway, one of America's most fascinating authors, often lived in the colorful seaside retreats that frequented his novels.



Lauren Gilpin

The Scott family gathers at a barbecue in Santa Fe. From left are Eleanor, baby Douglas, Winfield Townley Scott, Scott, Susan, Joel, Jeannette and Lindsay.

politely declined the suggestion. Then Malcolm Cowley, who takes time off from his own writing to advise Viking, saw and liked the sample chapter and persuaded Viking to issue an advance. It wasn't large, but provided the incentive to keep going.

College: How did you come to feel about Hemingway?

Donaldson: I suspect there are as many answers to that question as there are subjects for biography and

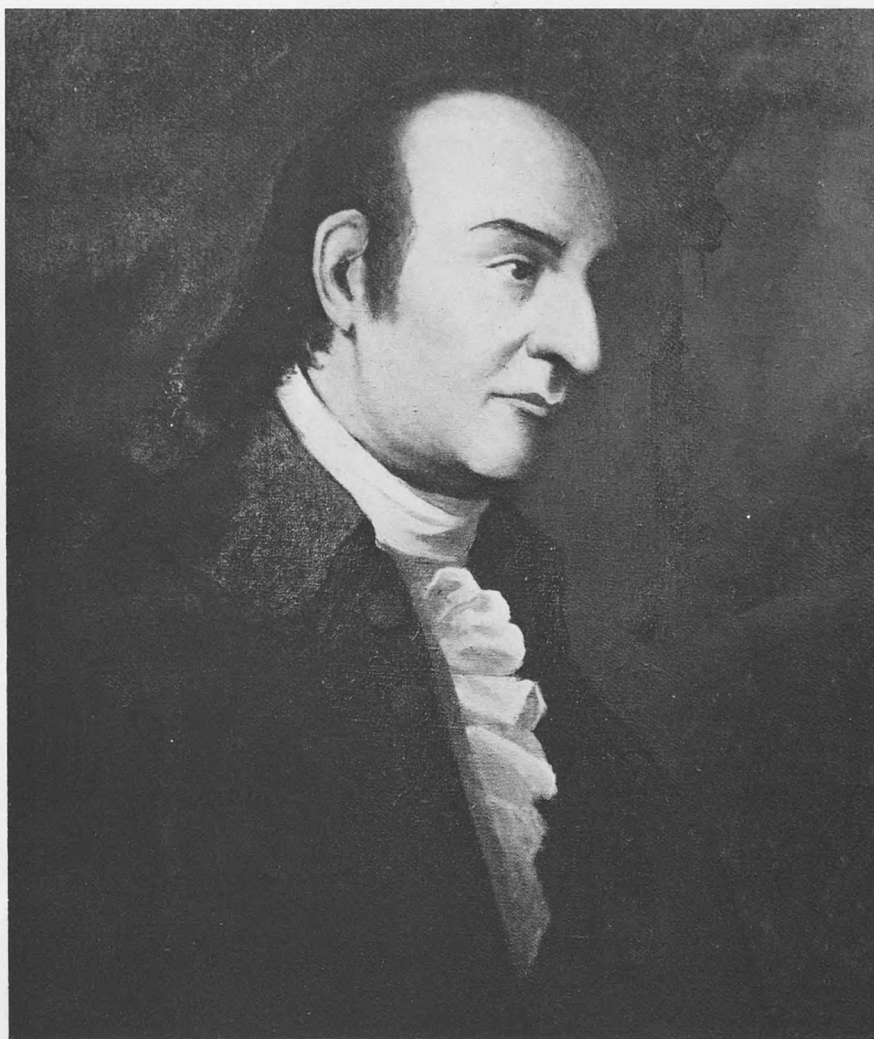
people who want to write about them. There's a story that the first biographer of Malcolm Lowry, a suicide, became so identified with Lowry that he too committed suicide. That may be apocryphal, but certainly a psychological interaction with one's subject takes place. Winfield Townley Scott was a minor poet, certainly, but one who became a hero in sensibility to me the more I found out about him. With Hemingway the case was very nearly the opposite. I began in

admiration for his accomplishment as one of the great prose artists of this century, and ended wondering how so marvelous a writer could occupy the same body as a man capable of so much foolishness and cruelty. But that was a question Hemingway was constantly asking himself as well, and of course he visited the ultimate judgment on himself. My job then was not so much to judge him as to try to understand him, and that's what the book is all about.

The Forgotten Legacy of George Wythe

Americans have often overlooked the contributions of the nation's first professor of law.

By Lisa Liberati Heuvel



Although Wythe was a leading intellectual and moral figure in the colonies for over 50 years, his mild-mannered style and dedication to behind-the-scenes teaching gave him a low profile.

In Williamsburg, George Wythe lives on as the renowned master of the Wythe House. He was a leading intellectual and moral figure in the community for over half a century, and the oldest collegiate law school in the nation, the Marshall-Wythe School of Law at William and Mary, is named for him and his pupil, John Marshall. This year, he is particularly in people's minds because of the 200th anniversary of the Marshall-Wythe School of Law.

The impressive two-story brick building that was Wythe's home is halfway between the College and the Capitol, and its location is significant. He was influential both as a professor and a member of the House of Burgesses, and was held in high esteem by his contemporaries.

In 1762, young Thomas Jefferson was recommended by the College to Mr. Wythe as a reader in law. After five years of intensive law studies under an inspired teacher, he was never the same. There was a lifelong bond between Jefferson and his

Lisa Liberati Heuvel graduated from William and Mary in 1974 with a degree in theatre. Now a research assistant with the Office of University Communications at the College, she has written articles on Virginia history for Commonwealth, Virginia Cavalcade, and Tidewater Life.

“beloved and venerated teacher,” and it has been said that no one can draw a line between where Wythe’s mind ends and Jefferson’s begins. As head of the Virginia Delegation to the Continental Congress, Wythe must have felt pride in signing the Declaration of his former pupil, for it contained concepts of human rights and government that they had pondered a decade before.

As a teacher, Wythe’s influence was felt, not seen, and he was content to let others reap the seeds he sowed. Appointed by the Board of Visitors (of which Governor Jefferson was a member) in 1779, Wythe held the first collegiate chair of law in North America, at the College of William and Mary. Among his students were James Madison, John Marshall, and St. George Tucker, who would himself replace Wythe as the second professor of law at the College.

To his students George Wythe stressed that law was part of the science of government and involved much more than the winning of a case. Jefferson wrote:

... the pride of the Institution is Mr. Wythe, one of the Chancellors of the State and professor of law in the College. He is one of the greatest men of his age, having held without competition the first place at the bar of our general court for twenty-five years, and always distinguished by the most spotless virtue. He gives lectures regularly, and holds moot courts and parliaments, wherein he presides, and the young men debate regularly in law and legislations, learn the rules of parliamentary proceeding and acquire the art of public speaking.

Lawyer, jurist and statesman combined, Wythe was also a brilliant classical scholar. He leaned toward a simplicity of lifestyle that was not then in vogue and quietly turned down the many honors his peers tried to bestow. Not even his friend, President Washington, could persuade Wythe to accept high judicial office in the new federal government he had helped to create.

His ties to Virginia were another reason for George Wythe’s reluctance to go to the Federal City. He was born in 1726 at “Chesterville,” his parents’ plantation seat on the Back River in Hampton.

No one can
draw a line between
where Wythe’s
mind ends and
Jefferson’s begins.

There is a strong tradition that George Wythe himself attended William and Mary when he was sixteen, and it is also likely that he attended the Grammar School for college preparation. While at the College he may have attended lectures in the School of Philosophy, which would have been the finishing touch on his classical and scientific studies before he began the study of law under Stephen Dewey, his uncle.

While little is known of the years that followed, George Wythe was admitted to the bar when he was 20 and became a junior partner of John Lewis, an attorney in Spotsylvania County, who may have been a relation. In 1747 he married Ann Lewis, the sister of his law partner. She died only a year later, possibly in childbirth. Although he continued to practice in Spotsylvania County, Wythe ultimately moved to Williamsburg to rebuild his life and remarried.

In 1755 he wed Elizabeth Taliaferro, daughter of Colonel Richard Taliaferro of “Powhatan” in James City County. Colonel Taliaferro was a talented architect, and gave them a substantial “wedding gift” to live in, the Georgian brick house he had designed and built on the Palace Green in Williamsburg.

In that house, George Wythe showed himself to be a born teacher, happy to teach schoolchildren and law students with equal care. He was



Stuart Wagner

The tombstone in St. John’s cemetery in Richmond was erected in 1922. No one knows exactly where in the cemetery Wythe’s body rests, because he was buried in secrecy by a grand nephew probably responsible for his death.

soon engaged in the leading intellectual circles, in local government and in an important law practice.

These were the happiest days of Wythe's life, spent in the company of a loving wife and men like Governor Francis Fauquier, Dr. William Small of the College, and Thomas Jefferson, who said that in the presence of these men he had heard "more good sense, more rational and philosophical conversation than in all my life besides."

Wythe was increasingly drawn to the issues of independence and constitutional law. He was sent to Congress in 1775, having volunteered enthusiastically as a soldier. Following the Revolution, he, Thomas Jefferson and Edmund Pendleton began the complex task of revising Virginia's laws to make them consistent with the Commonwealth's new identity as a state of the Union, rather than a royal colony.

In addition to being a professor of law, Wythe was also appointed as one of the three judges of the High Court of Chancery of Virginia in 1778, and as Chief Judge, or Chancellor, in 1789. After Mrs. Wythe died in 1787, the Chancellor seems to have moved to Richmond in 1789 so as to fulfill his judicial responsibilities more conveniently. In 1790, the College conferred upon him the honorary degree of LL.D., honoring his character and many contributions.

Wythe's grand nephew and principal beneficiary poisoned him in order to receive his legacy.

Once established in Richmond, Wythe's innate love of teaching reasserted itself. He began to teach law once again, influencing and guiding young men like Henry Clay and Spencer Roane. One of his Williamsburg students, William Munford, accompanied Wythe to Richmond, having written to a friend that nothing could progress him further in the world than the reputation of having been educated by Mr. Wythe, "for such a man casts a light all around him."

That light was to be extinguished in 1806, when Wythe became fatally ill. Tradition has it that George Wythe Sweeney, Wythe's grand nephew and principal beneficiary, poisoned him in order to receive his legacy. Sweeney's plan was to be thwarted when the dying man disinherited him, as a final justice.

Virginians mourned their loss but sorrow turned to forgetfulness over

the years. The Chancellor's body lay in an unmarked grave in the Churchyard of St. John's in Richmond until 1922, when the Virginia Bar Association, the Sons of the American Revolution and the Association for the Preservation of Virginia Antiquities joined forces to place a granite monument over the grave that is believed to be George Wythe's. Also that year, the Law School at William and Mary was designated as the Marshall-Wythe School of Government and Citizenship, now the Marshall-Wythe School of Law.

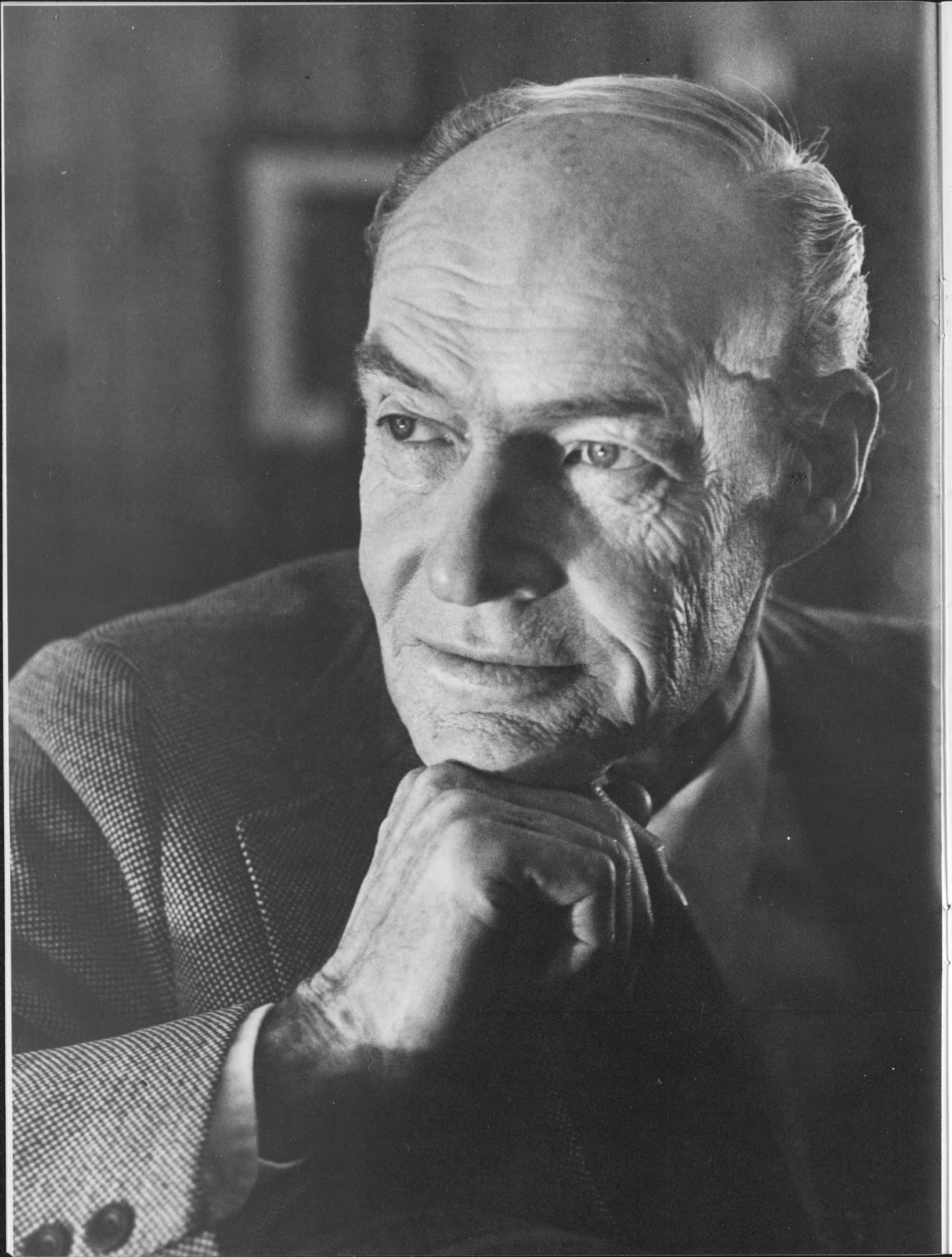
Only the fieldstone foundation of "Chesterville" remains, due to a fire in 1911. Now surrounded by NASA's Langley Research Center in Hampton, it was entered in the National Register of Historic Places in 1973.

Perhaps George Wythe might appreciate being the elusive figure he is today. To find him, one cannot sit comfortably in a library with all the facts at hand, for all too few details are known of his life. After reading his enlightened legal opinions and the warm descriptions of his students and friends, one must go to the surroundings that he knew, from the ancient College to the overgrown foundations of his birthplace, and reach out for new insights about this remarkable man. As a teacher who took great satisfaction in watching his students develop, Mr. Wythe might smile at that.



The Wythe House, adjacent to the Governor's Palace lawn, is one of the most beautiful homes in Colonial Williamsburg.

Hugh Vaughan



A Different Side of Roseberg

William and Mary's favorite sculptor has also created a variety of drawings that capture the intricate beauty of nature.

A famous painter, asked to describe what "art" is, simply said that "art is not a thing; it is a way."

Living in Williamsburg, teaching at William and Mary for almost 30 years, Carl Roseberg has created a way of life and a way with art that invites envy. Roseberg, who has won dozens of awards for his wood and stone sculptures, is a quiet, reserved artist who feels most comfortable in two places. In his studio, side by side with students itching to create, he's the aging sage. Alone in one of his beautiful gardens at home, surrounded by pink thrifts, heavy grape vines and colorful vegetables, he is an artist at rest.

Yet Roseberg is never far from his work--even when ankle-deep in topsoil in his vegetable garden. What looks like a black snake is actually a Roseberg sculpture, peering between plants in a life-like manner. Inside, a contemporary home comes alive with Roseberg sculptures, each with a unique personality, each marking a change of medium and a change of direction for the artist. Most represent hours of tedious work and years of experience.

If William and Mary has ever had an artist it could call its own, Roseberg is that artist. He created majestic profiles of King William and Queen Mary to adorn the medallion commemorating the College's 275th anniversary. He transferred the strength of George Wythe and John Marshall to a similar medallion used by the law school. Bronze plaques he molded to honor Dr. Donald W. Davis and Dr. W. C. Guy add life to the biology and chemistry buildings.

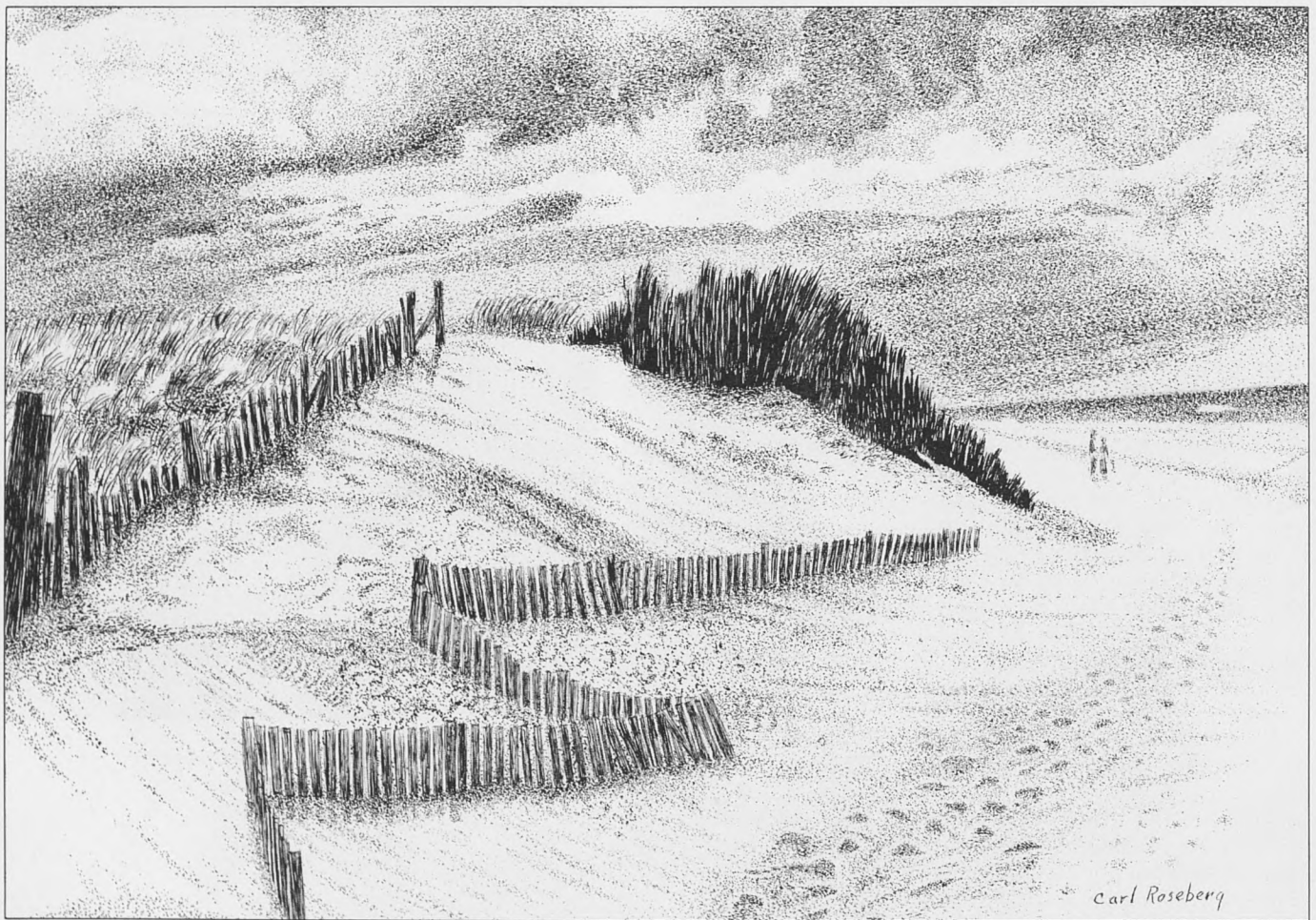
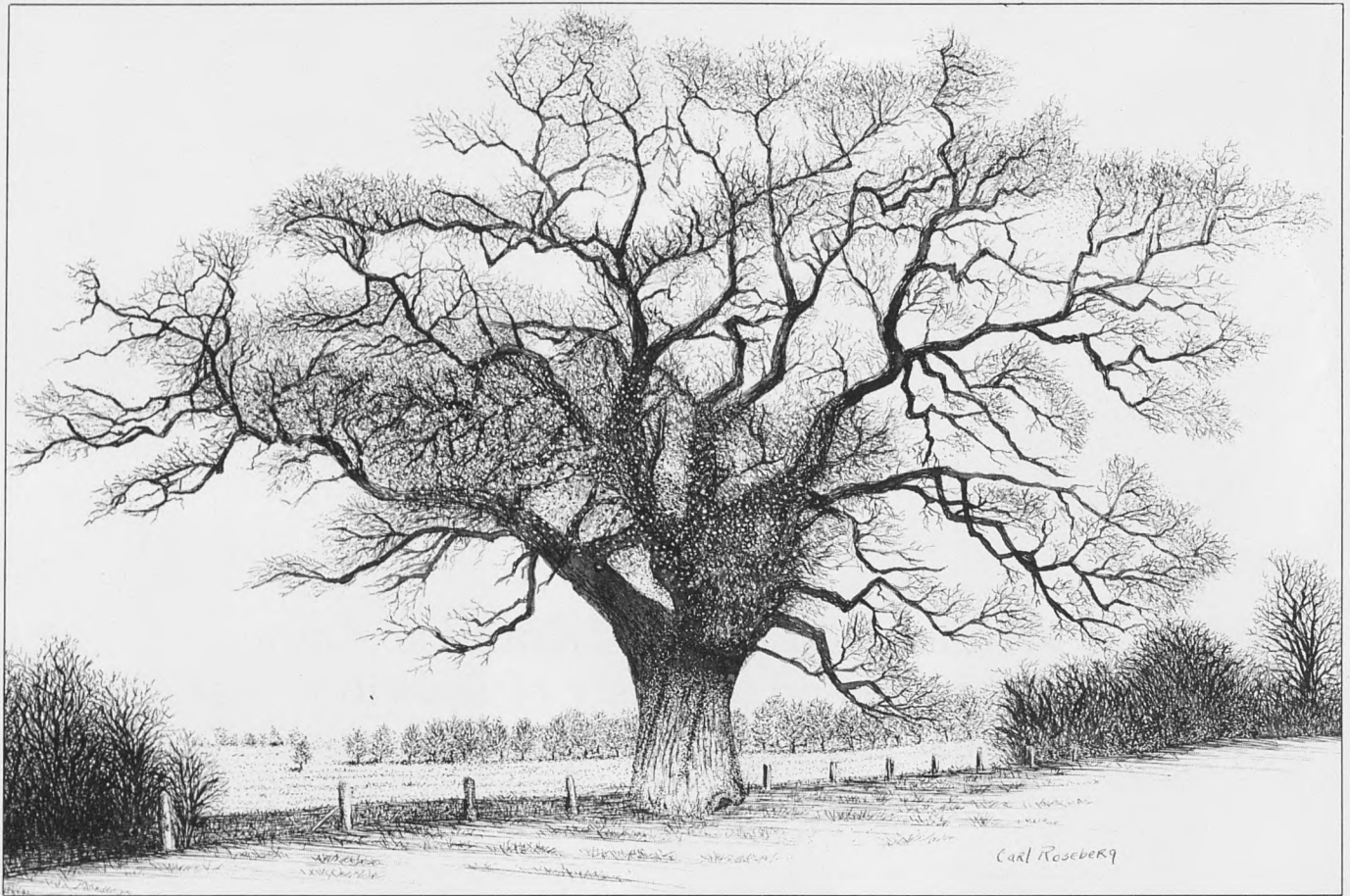
Though most known for his sculpture, Roseberg has in recent years concentrated on detailed paintings and drawings, most of which relate to nature. His trees, even without color, seem alive. Some stand tall and isolated. Others are entwined with each other, blocking the sky and creating a strange sense of natural order.

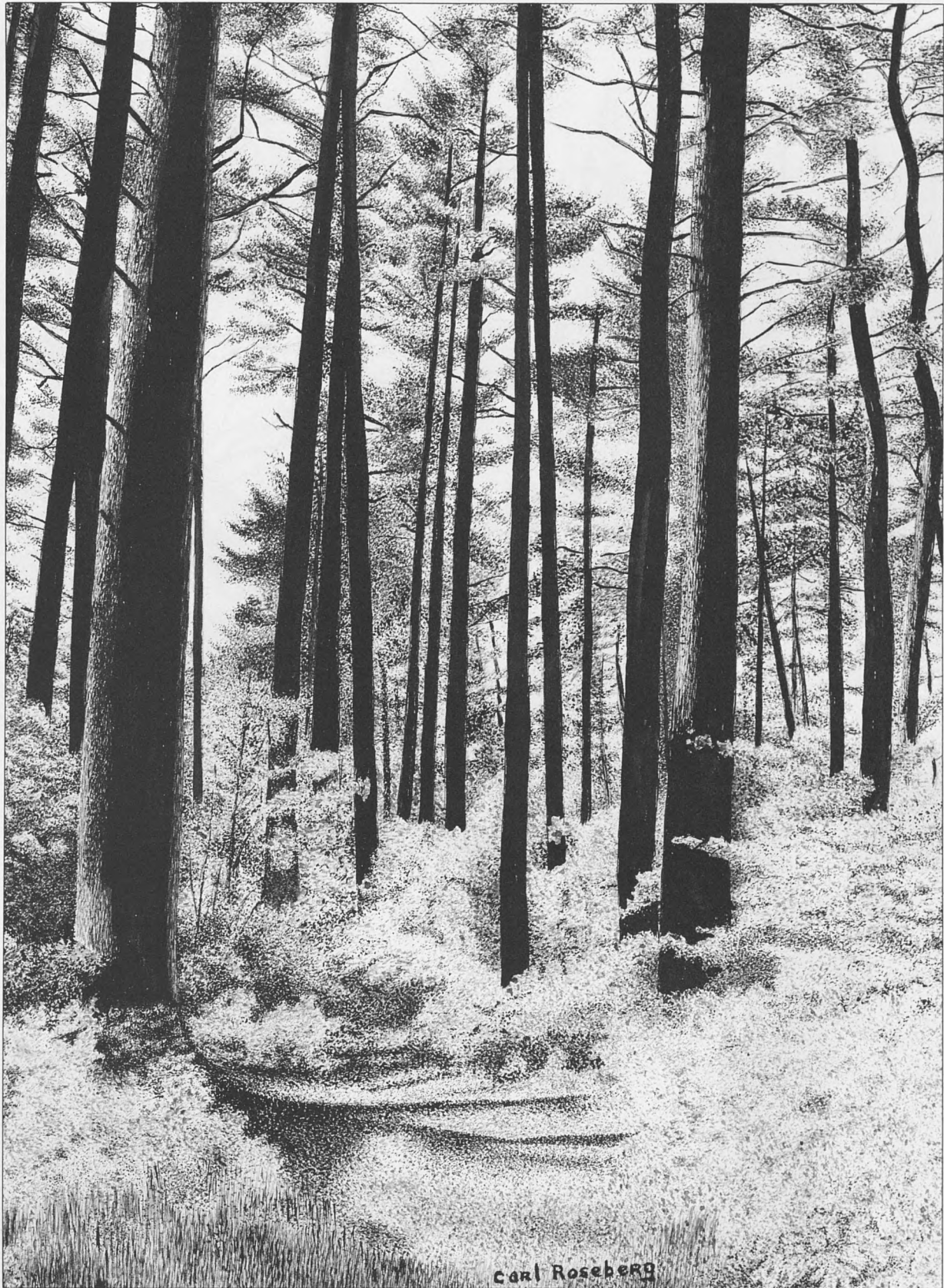
A beach scene speaks of the serene beauty of the Outer Banks in North Carolina. Yet a different ocean scene is turbulent, threatening.

Roseberg, at an age when many artists sit back to appreciate their laurels, is hard at work. There is so much left to perceive, to interpret, to enjoy.

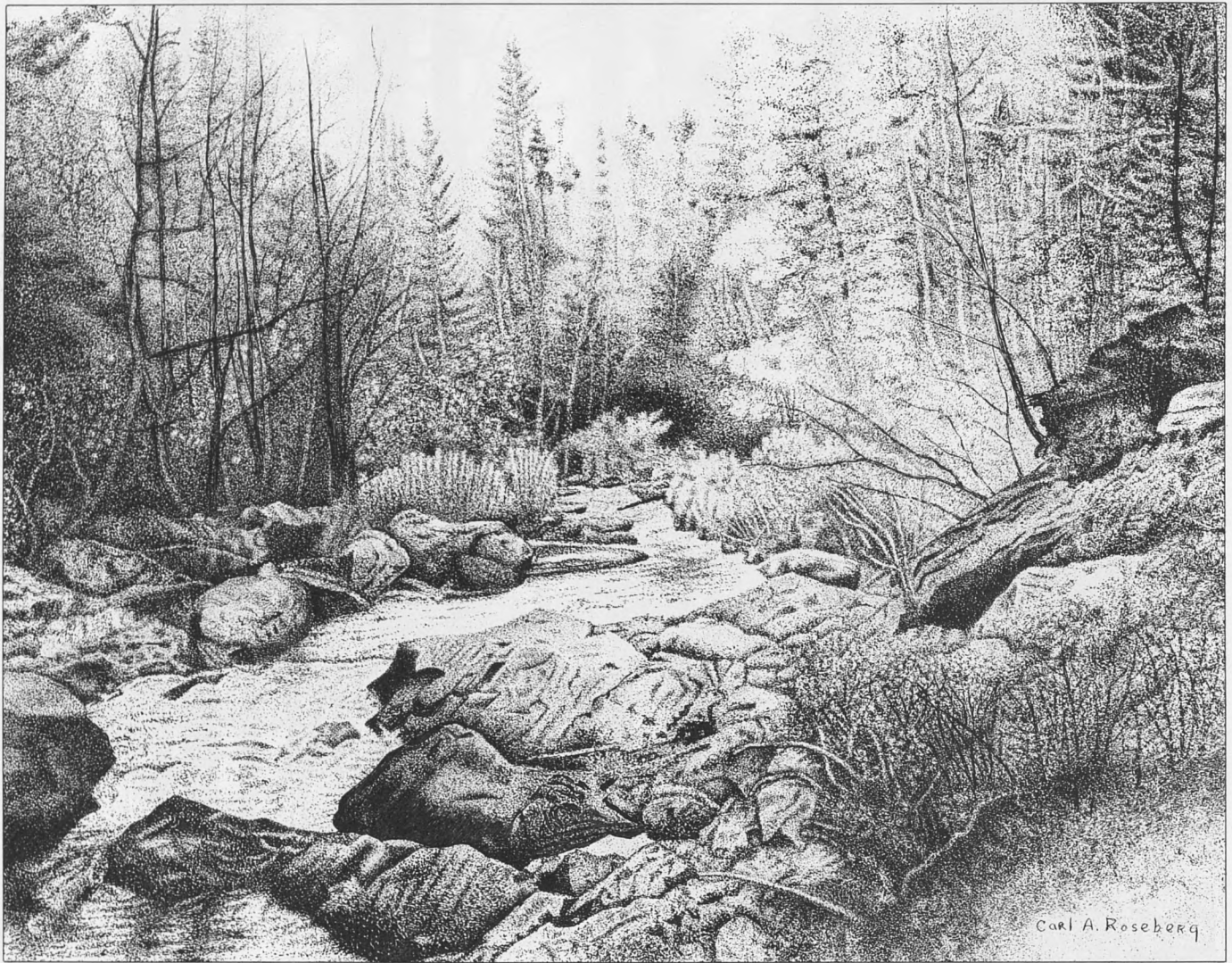


The William and Mary commemorative medallion was created by Roseberg to celebrate the College's 275th anniversary.

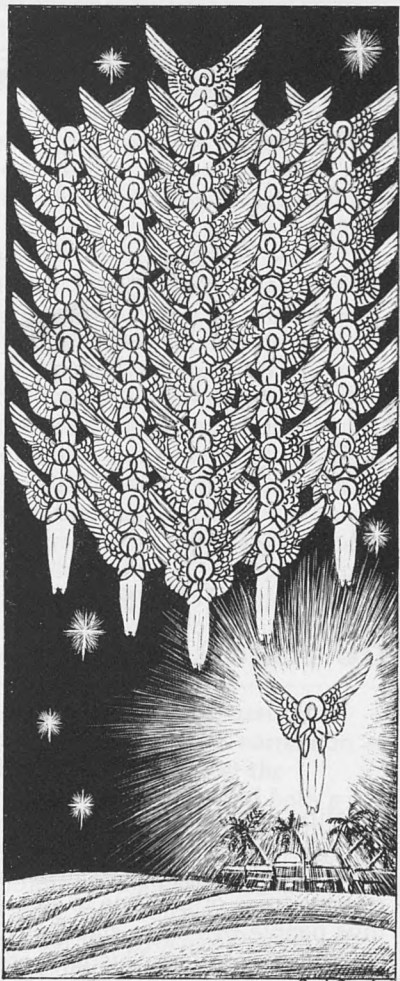




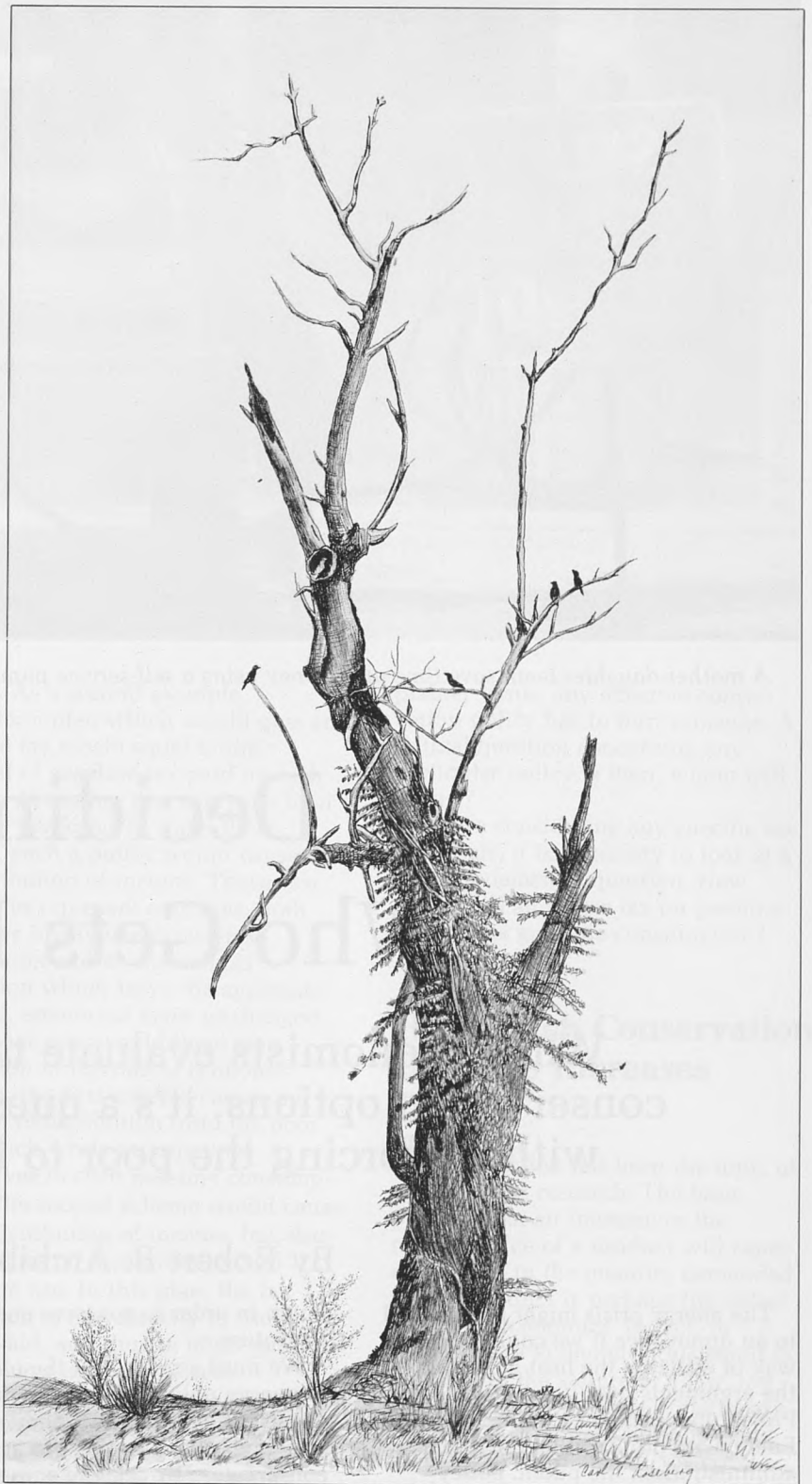
At left top, Roseberg's "Great Oak" is a majestic tribute to one of Virginia's most treasured trees. The "Beach Scene" is a composite of several different beaches on the eastern seaboard. "Virginia Pines," one of Roseberg's entries in the recent faculty exhibit on campus, is a blending of several forests Roseberg has frequented in the Williamsburg area.



Above, "Mountain Stream," a pen and ink drawing taken from a photograph of what Roseberg describes "as no particular place." At far right, the "Old Bird Tree" is the artist's rendition of an old tree, frequented by a variety of birds, once located between Andrews Hall and Swem Library before the bulldozers moved in about 10 years ago. The Christmas card design is one of many that Roseberg's friends have looked forward to receiving over the years.



Carl Rosberg





Bob Brown/Richmond Times-Dispatch

A mother-daughter team save time and money using a self-service pump at a Richmond station.

Deciding Who Gets Hurt

When economists evaluate tax-based energy conservation options, it's a question of saving gas without forcing the poor to leave the roads.

By Robert B. Archibald

The energy crisis might be demoted to an annoyance if we could find a way of utilizing the heat generated in the arguments over its solution. From Project Independence to the National Energy Act proposed by the Carter administration, the public policy debate has been long, complex, and confusing. This is not surprising. Every energy policy decision will call for sacrifices, and there exist a number of alternative methods to determine who will sacrifice how

much in order to conserve energy for the future.

We must assume that the one intent of energy policy is to foster energy conservation. Further, policy makers apparently have decided to achieve conservation by causing energy prices to increase. As of summer 1978, it does not appear that there is agreement upon the appropriate way to make this happen.

Let us assume that the government institutes a federal excise tax on

gasoline (or a tax on crude oil). Such an excise tax will have three important effects. First, it will cause the relative price of gasoline to rise, and thus people will use a smaller amount of gasoline. This is clearly the intent of the policy. The second effect will be that total taxes are raised, which should slow the growth rate of the economy. Third, an excise tax on gasoline will most likely be a regressive tax. It will represent a larger burden on the income of low

income families than of high income families. This will cause after-tax income to differences to be magnified.

The intent of the energy policy is only to conserve gasoline, and thus these second two effects are unwanted side effects. Can we minimize these side effects and if so, how much? Can we conserve gasoline without drastically slowing down the economy and placing more of a tax burden on low income families?

The Carter administration, while advocating the imposition of taxes on energy sources, has always been careful to add that these additional taxes should be offset by tax reductions elsewhere. Opponents who have called the Carter energy plan just another attempt to raise taxes have not been listening closely to the administration. The administration is aware of the first unwanted side effect and the harm it can do to our economy. The energy policy of the Carter administration, if fully enacted, would not slow growth in the economy through an increase in total taxes.

The second unwanted side effect has not been considered as closely in the formulation of policy but has clearly been noted as a problem in several studies. The difficulty involved with the regressive nature of the gasoline excise taxes is hard to overcome—there exists no easy solution. First, consider a gasoline excise tax coupled with a balanced reduction in federal income tax rates. Such a policy would be an increase in the regressive gasoline tax and a decrease in the progressive federal income tax, and the net effect would be a redistribution of income from the poor to the rich. Under this scheme, a poor person who might pay no income tax would still pay gasoline tax, but a rich driver who pays a small percentage of his income in gasoline taxes would get a larger income tax

Robert B. Archibald, assistant professor of economics, earned an undergraduate degree at the University of Arizona and both a master degree and doctorate from Purdue University. An expert on the economic effects of the energy shortage, Archibald conducted research for the Office of Prices and Living Conditions at the Bureau of Labor Statistics in Washington, D.C., before joining the William and Mary faculty in 1976. He formerly served as an instructor at Purdue University and as a research fellow at The Brookings Institution.



The original gas miser, the Volkswagen bug, is an economical mode of travel for students with little money to spare.

rebate. As a second example, consider a plan which would give an income tax rebate equal to the amount of gasoline tax paid by each family. Assuming that everyone filed income tax forms to claim their rebate, such a policy would cause no redistribution of income. These two examples represent extremes. Both schemes involve an excise tax imposition and an income tax reduction which leave the aggregate, or total, amount of taxes unchanged. In neither case would there be a reduction in the rate of economic growth. The first scheme causes an income redistribution from the poor to the rich while introducing incentives to curb gasoline consumption. The second scheme would cause no redistribution of income, but also establishes no incentives to curb gasoline use. In this plan, the tax reduction is tied directly to excise taxes paid, and thus in effect gasoline prices have not been raised.

To summarize, any conservation policy which is chosen will involve a trade-off among three goals: conservation, income distributional equity, and total tax level. It is impossible to construct a scheme which fosters conservation and does not either raise aggregate taxes or cause a redistribution of income. To put it in even

plainer terms, any effective conservation policy has to hurt someone. A critical question concerning any particular policy is then, whom will it hurt?

Before considering any specific tax proposals, it is necessary to look at a very fundamental question. How much will an excise tax on gasoline discourage gasoline consumption?

How Much Conservation Do Price Increases Cause?

This question has been the topic of considerable research. The basic premise that an increase in the relative price of a product will cause reductions in the quantity demanded for the product is perhaps the oldest theory in economics. In fact, in Introductory Economics this result is elevated to the stature of a law, the law of demand. In these inflationary times, it is important to understand that the law of demand concerns relative price movement, not absolute price movements. That is, if the price of gasoline rises relative to other prices, quantity demanded decreases. However, if the price of gasoline rises as fast as the general price level,

quantity demanded will not be affected. For policy, the question is not whether a relative price increase will cause a reduction in the quantity of a product demanded, but how much of a reduction. For gasoline, the answer appears to be that there will be quite a large reduction.

This result is surprising to some. "I've got to have gasoline to drive, and I've got to drive, so I've got to buy gasoline--right?" Only partly right, this analysis ignores two important types of adjustments. In the short run, consumers respond to relative price increases by driving fewer miles (e.g. forming carpools or switching to mass transit) and by driving more efficiently (e.g. accelerating less rapidly, more frequently). In the long run, consumers can be expected to respond to gasoline price increases by purchasing more fuel efficient cars. Several studies have detected these types of responses to gasoline price.

Economists measure the responsiveness of quantity demanded to price changes by estimating what is called the price elasticity of demand. The price elasticity of demand is defined to be the ratio of the percentage change in the quantity of a product demanded to the percentage change in the relative price of the product. We would therefore interpret a price elasticity of demand of -.5 to mean that, other things equal, a 10 percent increase in the relative price would lead to a five percent reduction in quantity demanded. (Price elasticities of demand will always be negative since price increases will cause decreases in quantity demanded.)

There is one further piece of technical information needed to interpret the price elasticities of

gasoline demand presented below. That is the "other things equal" phrase used above. Price elasticities are estimated while holding constant everything else which might affect the demand for gasoline. For the gasoline demand of a family, these other factors include, among others, the family income, the size of the family, particularly the number of drivers, the location of the family and the number and types of automobiles the family owns. Therefore, when considering the total conservation effects of a tax we must also consider, for example, the effects of income growth. The "other things equal" assumption clearly limits the applicability of the results of estimates of price elasticities.

The estimates of price elasticity used below are the result of an extensive study of consumer response to gasoline price difference conducted by Robert Gillingham, the Chief of the Division of Price and Index Number Research of the Bureau of Labor Statistics, and this writer. Our study is unique primarily because we use data on family consumption habits while other estimates of gasoline demand use data collected at the state or national level. The Bureau of Labor Statistics periodically surveys a large number of families to determine if there are any changes in consumption habits. The results of these Consumer Expenditure Surveys are used to construct the typical market basket for use in the Consumer Price Index. Our gasoline price elasticity estimates were derived from data collected in the latest Consumer Expenditure Survey which was conducted in 1972 and 1973.

The factors which explain the amount of gasoline a family demands fall into five categories: (a) the

relative price of gasoline, (b) the income of the family, (c) the location of the family, (d) family type and composition, and (e) the automobiles owned by the family.

For the type of policy questions outlined, our concern will focus on the first two factors, gasoline price and income. Yet, to capture some of the flavor of the analysis, it is interesting to look at some of the other results. Let us consider the effects of the type of automobiles owned by the family. Other things equal, our results show that a family with one four cylinder automobile demands roughly 41 percent less gasoline than a family owning an eight cylinder automobile. Also, families owning a six cylinder automobile, those owning two four cylinder automobiles and those owning one four and one six cylinder automobile all demand less gasoline than a family which owns one eight cylinder automobile.

Table I presents gasoline price elasticity estimates for typical families from five different income classes. These price elasticities are all quite high. According to our estimates, raising the relative price of gasoline will have a substantial effect on gasoline demand. The price elasticities in Table 1 represent short run price elasticities. That is, they are the price elasticities computed while holding constant the number and type of automobiles owned by each family. For the family in the middle income class, our estimates says that when faced with a 10 percent increase in the relative price of gasoline, the family will cut its gasoline demand by 7.5 percent. This 7.5 percent reduction will be achieved by reducing miles driven or driving more efficiently. The reduction which will eventually occur

TABLE I

Price Elasticities for Gasoline

Income Class	Annual Consumption of the Representative Family	% Owning Automobiles	Price Elasticity of Gasoline
Lowest Fifth	\$1,900	44.7	-1.13
Second Fifth	4,800	75.8	-.87
Third Fifth	7,400	88.6	-.75
Fourth Fifth	10,600	95.2	-.65
Highest Fifth	13,600	97.0	-.58

could be larger if the family purchases a more fuel efficient automobile, as it is likely to do.

It is clear from Table I that the price elasticity of gasoline demand is inversely related to income class. The lower the family income, other things equal, the higher the price elasticity. This result may be surprising; in fact, it is contrary to the speculation of several authorities. Apparently a poor family finds it advisable to eliminate more driving or to increase fuel efficiency more than a comparable but richer family. This result will have interesting consequences for the design of a gasoline conservation policy.

Gasoline Tax - Income Tax Policies

The types of policies usually formulated in Washington are combinations of gasoline taxes and income tax reductions. First, consider the effects of simply adding a gasoline tax. Assume that a \$.05 tax is imposed raising gasoline prices an average from 50 to 55 cents per gallon assuming other prices remain constant. Table II displays the effects of this tax. The last column of the table demonstrates that the tax will be regressive. Even though the 10 percent increase in relative prices will lead to a larger decrease in consumption of gasoline for poor families than for rich families, gasoline tax payments would still be a larger percentage of income for poor families than for rich families. In other words, the imposition of such a gasoline tax would magnify after-tax income differences.

The income tax reduction which would accompany this gasoline tax should minimize this income

redistribution while maintaining the conservation effect of the tax. There are several alternative ways to arrange the income tax reduction.

First, find the total gasoline taxes paid by all consumers (\$107.21 for our five families) and the percentage of total income tax payments this represents. If all families have their income tax liability lowered by this percentage, there will have been no total tax increase. However, the income distribution effect would be to further widen after-tax income gaps. For every income class, drivers would lose income to non-drivers. In addition, high income drivers would gain at the expense of low income drivers.

On the other hand, this plan would cause a substantial decrease in gasoline consumption. The income elasticity of gasoline demand (the percentage increase in gasoline consumption caused by a percentage increase in income) is lower for high income families than for low income families. Thus, the high increases in income given to the higher income families will not increase gasoline consumption as much as if they were given to lower income families.

An alternative policy is designed to leave the income distribution unchanged. Under this scheme, for example, the \$13.79 gasoline tax paid by the typical family in the lowest income class would be rebated to members of that income class. This scheme specifically eliminates income redistribution among income classes. Within income classes, however, there would be income redistribution from drivers to non-drivers.

This policy would also foster conservation of gasoline, though less than the first plan. The rebate to drivers in the lowest income class

would be small both because their taxes are small and there are many non-drivers in this income class. This small rebate would not increase gasoline consumption substantially. In income classes where almost everyone owns an automobile, the conservation effects are smaller, because this plan more nearly approximates a plan in which each consumer gets back his own tax payment. However, since families drive vastly different amounts, there would still be an incentive for conservation.

Conclusion

Space limitations prohibit analyzing several other policy options, such as tax rebates based upon miles driven, tax rebates based upon size of automobile, or tax rebates based upon the size of the family. In any case, the evaluation of energy tax policies must follow similar patterns. Considering tax policies which leave the total tax level unchanged, we must ask who is gaining income and who is losing income. Furthermore, in order for the tax policy to be effective, at least some of the income losers must be gasoline users.

In the final analysis, the energy policy chosen will be the result of a political decision. It will be interesting to see who will be the winners and who will be the losers as a result of this decision.

TABLE II

Effects of a \$.05 Tax on Gasoline
(Families Owning Automobiles)

Income Class	Annual Gasoline Consumption Before Tax	Tax Paid	Tax Paid as a % of Total Income
Lowest Fifth	\$311	\$13.79	.50%
Second Fifth	383	17.67	.32%
Third Fifth	473	21.87	.24%
Fourth Fifth	522	24.40	.18%
Highest Fifth	624	29.48	.12%

The Wonder of Gravity

On the centenary of Einstein's birth, scientists are still infatuated with the genius who created the modern theory of gravity

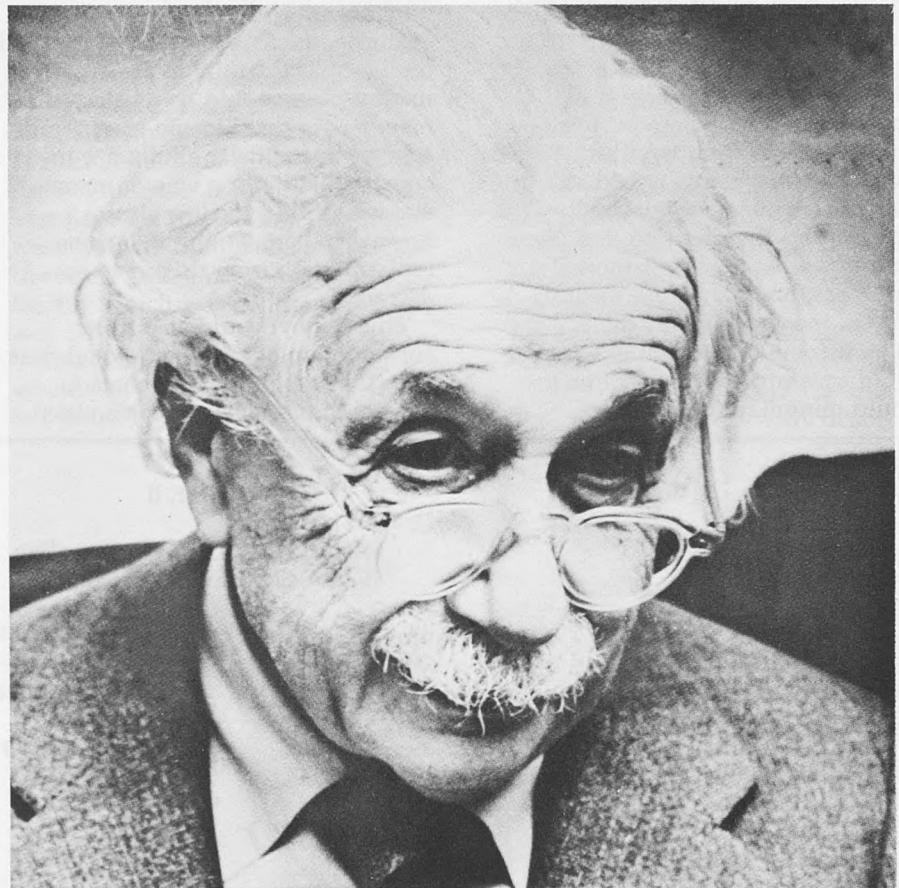
By Hans C. von Baeyer

On the 14th of March, 100 years ago, Albert Einstein was born. The centenary of his birth provides the occasion for a celebration of his achievements and an affirmation of his universal fame. It is a jubilee of pure reason and a memorial to human kindness, humility and decency. For over 60 years Einstein's name has been a household word far beyond the boundaries of the community of physicists. He is a folk-hero, a somewhat mysterious genius whose work is incomprehensible to the uninitiated but whose pronouncements on every subject command respectful attention. His birthday refreshes and enhances this almost mythical reputation. His familiar gentle face, topped by a wild

shock of white hair sticking out as if electrified by overflowing intelligence, will be introduced reverently to younger generations. His opinions will be quoted with approval, his

vision admired and his fame will spread.

But the centenary also brings a twinge of melancholy. Much more sharply than his death in 1955, it



A familiar portrait of Albert Einstein.

Hans C. von Baeyer, professor of physics, earned a bachelor's degree from Columbia University, a master degree from the University of Miami and a doctorate from Vanderbilt University. A specialist in elementary physics and high energy theory, von Baeyer has visited dozens of schools to explain in layman's terms a number of general theories in the physical sciences. During the bicentennial, he traveled to universities across the country to present an original program on 18th century physics. Currently he is on leave to teach at Simon Fraser University in Burnaby and to conduct research in British Columbia, Canada.

marks the passage of the great man over the threshold from the present to the past. Until recently Einstein was a contemporary. His personal influence was still very much felt among professional physicists. Some knew him well and worked with him, others corresponded with him and many have met or at least seen him. They are the links in that charismatic chain-mail which connects Einstein to all scientists past and future. They are proud to be of his era. At the same time, some of the theoreticians who honor Einstein by contributing to commemorative volumes and symposia are too young to have met him. They know him only by his work, distilled in scientific papers or diluted in other people's textbooks. To those young scientists Einstein is only a great name from the past.

The moment when a person ceases to be contemporary and slips into the past is, of course, neither well defined nor, in consequence, very important. Nevertheless, the hundredth anniversary of his birth seems to be a turning point for Einstein's fame. From now on he will no longer be referred to as a scientist who died recently, but more likely as one who was born over a century ago and who flourished around the turn of the century. That places him into a category with other giants who were born, and who flourished, centuries ago. Thus, by enshrining Einstein among the immortals, the centenary robs us of a contemporary and makes our age a little less grand.

The three deep mysteries which occupied Einstein throughout his life can be summed up in three questions: What is space? What is time? What is gravity? He did not answer them, of course. No mortal will. But he did discover relationships among them that had never been suspected, and he provided mathematical formulations which are radical and beautiful and, as far as we know, correct. His theory of gravity, worked out between 1910 and 1916, remains Einstein's greatest monument and probably the most profound feat of pure reasoning in the history of natural philosophy.

Gravity, like space, is ubiquitous and, like time, it cannot be turned off. Electricity, another familiar force, can be switched off, magnetism can be shielded, even the strong force which holds atomic nuclei together can be counteracted by antimatter, but gravity passes through all materials, affects all matter equally and has no opposing force, no shield, no anti-gravity. Only God can turn it on and

The centenary of Einstein's birth also brings a twinge of melancholy. Much more sharply than his death in 1955, it marks the passage of the great man over the threshold from the present to the past.

off, and He is proud of this prowess. "Can you bind the cluster of the Pleiades?" he rhetorically asks Job who replies humbly: "...I have spoken of great things which I have not understood, things too wonderful for me to know." Very few humans, like Isaac Newton and Albert Einstein, were allowed to lift the veil a little.

Because it is always there, and because one cannot affect it, one is rarely conscious of gravity. And yet it dominates life. What triumph when the newborn infant first lifts his wobbly head from the mattress to peer around - the first victory over gravity. From that moment on, life is a constant battle. We win decisively when we first stand up, learn to ride a bicycle, climb a mountain, scramble up a rope, hit a homerun, erect a wall, fly a plane, tie up a tomato plant, build a dam, hang a painting, lift a dumbbell, clear a hurdle, ascend by elevator, hoist a flag or pull ourselves aboard a departing bus. Gravity, on the other hand, wins every time a pin drops, a plane crashes, a tower topples, an avalanche strikes and a baby rolls off the bed.

More significant than these major encounters are the never ending little skirmishes that wear us down. Each day begins with a confrontation. We must rise from bed by lifting our bodies against the seductive, powerful pull of gravity. Sometimes this little conflict escalates into a battle and ends in defeat. Gravity has captured another prisoner. At other times, proud of our early success, we taunt gravity by challenging it to a duel of pushups, kneebends or chinups. The outcome is inevitable: In the end gravity always wins. After the morning trauma we spend a day climbing stairs, rising from chairs, lifting food to our mouths (and occasionally dropping it), moving pots or books around (and occasionally dropping them); in

short, either lowering things that are up or raising things that are down. Meanwhile, the heart is pumping blood against gravity and the muscles are guying bones against collapse. The battle ends only when our bodies are finally abandoned to gravity in the grave.

The world is shaped by gravity and the operations of nature depend on it. After gathering the materials of the earth into a ball, it holds them together. Opposing the titanic convulsions of the young planet, it formed the mountains. It propels the rivers and streams. Gravity pulls the rain from the clouds and flattens the surface of the sea. It gives direction to the trunks of trees and the stems of flowers. Because of gravity, the lower parts of animals differ from the upper parts. Gravity acts as a restraining, organizing, direction-giving principle in nature. Inexorably it draws form out of chaos. It determines the shapes of stars and galaxies, the orbits of planets and the expansion of the universe. It binds the cluster of the Pleiades and keeps our feet firmly planted on the earth.

The organizing role of gravity in the scheme of nature was engrained in Greek philosophy. Aristotle taught that the natural motion of heavy things is down toward the center of the earth. This is a most reassuring state of affairs. The mystery of gravity has dissolved. Why does a stone fall? Well, why shouldn't it, replies the Philosopher, down is its natural tendency, and it just follows that innate inclination. Much rather you should ask, why does it come to rest on the floor? And the answer is that its natural tendency is checked there by the intervention of an artifice in the form of the opposing force of the floor.

To say that a thing is natural removes it from further speculation. Natural means normal, healthy, ordinary, rather than anomalous, pathological, in need of analysis and

The three deep mysteries which occupied Einstein throughout his life can be summed up in three questions:
What is space? What is time?
What is gravity?

interpretation. The word "naturally" serves to end conversations, rather than to start them.

For almost 2000 years, Aristotle's answer satisfied most philosophers. It was in the seventeenth century that Isaac Newton made gravity into something extraordinary, something to be aware of, something in need of explanation. To him, as it was earlier to Galileo, the natural state of an apple, detached from its tree, is at rest. Only under the influence of this special effect, called gravity, does the apple abandon its natural state and begin to fall. To us, who are earthbound, it seems strange that motionlessness should be called natural. An astronaut in mid-flight would find this idea more plausible because he is used to the sight of a hammer calmly remaining in place after he has released it.

Newton, by formalizing and generalizing the concept of gravity, deepened its mystery. He showed that gravity is not only a property of the earth but resides as well in the moon, the sun and the planets. In fact, all material objects in the universe attract each other. The manner in which they do follows certain simple mathematical laws which Newton ingeniously unraveled. But where does this force come from? What makes things attract each other?

The technical name for Newton's description is action-at-a-distance. It means that two objects, far apart, exert a pull on each other without need for an intervening medium or mechanism. It is most strange. To influence another person we must use touch, or sound carried through the air, or we can send a letter, or at least let light reflect from our bodies to reveal us, but the earth influences us, pulls on us, without any such mediation. It pulls on the moon over a distance of thousands of miles. Action-at-a-distance is an idea far from common daily experience.

Newton had no illusions about his discovery. He knew that it explained nothing, even though it described the

motions of the universe with exquisite precision. He believed that only God knows why, and was content that in His wisdom he had permitted a glimpse of His great system by revealing the how. Newton felt that gravity by action-at-a-distance is a mathematical construct which does not have to appeal to human intuition.

Lesser men do not share Newton's lofty detachment. From his day until today many have sought models that make sense, that set the mind at ease in the middle of the night when the awful question haunts them: Why do things attract each other? The history of those who rode forth to tilt against that particular windmill is long and colorful. It is marked by frustration, obsession, insanity, ignorance and delusion. One hopes that it will never be written. As an illustration of an actor in it, consider Cadwallader Colden (1688-1776). Educated in Scotland, he became a botanist in the American colonies and eventually lieutenant-governor of New York. (His competence was recognized by no lesser man than Linnaeus who called him *Summus Perfectus!*) In later life, without much understanding of the Newtonian doctrine which swept the world in the eighteenth century, he began to think about the problem of gravity. It was his aim to answer the Why that had eluded Newton. In 1745 Colden published a pamphlet in New York entitled "An Explication of the First Causes of Action in Matter" to which an English editor appended the tantalizing phrase . . . "and of the Cause of Gravity." Cadwallader Colden's model was immediately rejected by those who understood physics, but it is remarkable in that it is reinvented with monotonous regularity to this very day. It explains gravity by the pressure of the particles of ether which are assumed to fill the universe. Since the earth and the moon partially shield each other from the impact of those particles which come from far away,

their pressure is smaller on the sides of the moon and earth which face each other. The two bodies are therefore pushed together. Cadwallader Colden died in the hope of achieving immortality, not through the little flower which Linnaeus named after him, but as the discoverer of the cause of gravity. His hope was not fulfilled.

Fortunately, most people are not possessed by wonder about gravity. Gullibility is a human foible. "What I tell you three times is true" said the Bellman a-hunting the Snark. Newton's explanation of gravity has been repeated so often, and so authoritatively, that we all believe it and indeed feel that its truth has become part of our intuition. William D. MacMillan, professor of astronomy at the University of Chicago, was moved to put it this way on the occasion of a debate on relativity at Indiana University in 1926 where he was somewhat belatedly opposing that new theory: "The mechanics of Newton, like the geometry of Euclid, was based upon our normal intuitions and it is, therefore, intelligible in the normal sense of the word, just as Euclid is intelligible." Just as the Bellman said. But considered without prejudice, the notion of action-at-a-distance is disturbingly unsatisfactory. (If it were intuitively obvious, it might have been invented sooner than two millennia after Euclid!)

Sloth is another human foible. More than 60 years have passed since Einstein submitted a better description for Newton's action-at-a-distance. Because it is difficult to understand, we rarely hear about it. The old words are so much easier to repeat, and General Relativity can be left to the experts. To be sure, many popularizers, including Einstein himself, have tried to explain it, but the Newtonian view still overwhelmingly predominates.

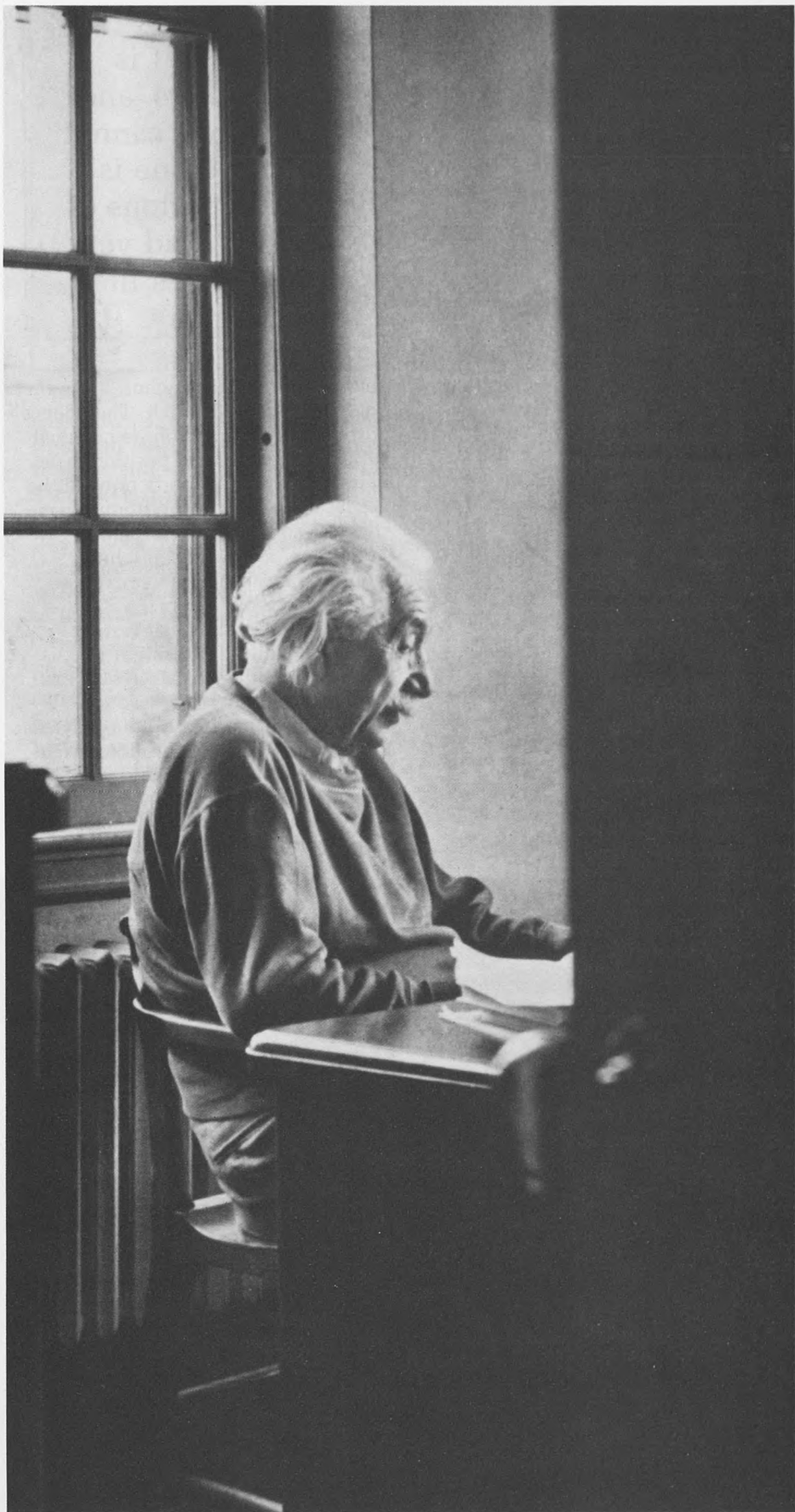
Mathematics, the language of Einstein's theory, is difficult for most people who have no trouble with words. A translation is therefore necessary. Unfortunately, just as it is impossible to capture a poem in prose, it is almost impossible to describe in words the contents of any but the simplest equations. Nevertheless, the attempt must be made. The primary tool of the translator is analogy, a powerful technique in human understanding. Analogies present pictures to symbolize the mathematics, but the images are of necessity imperfect. Perhaps we can find solace in Robert Graves' poem:

He is quick, thinking in
clear images,
I am slow, thinking in
broken images.
He becomes dull, trusting
to his clear images;
I become sharp, mistrust-
ing my broken images.

The most famous prediction of general relativity, and one which is easily amenable to analogy, concerns the deflection of starlight due to the curvature of space. Normally starlight reaches the earth in a straight line. Einstein's theory predicted that a ray of starlight grazing the sun should be bent a little bit, giving the earth-bound observer the illusion that the star's position has shifted. Because the sun is so brilliant, stars which are almost behind it, so that their rays graze it on their way to the earth, cannot normally be seen at all. The only opportunity is afforded by a total solar eclipse when the sun is blocked out. Astronomers looked for the effect as soon as possible after Einstein's prediction and confirmed it. The bending comes about because in the vicinity of the sun, space is curved.

Einstein himself, in his book "The Evolution of Physics," written with Leopold Infeld, made an analogy to explain what is meant by curved space: "Imagine an idealized American town consisting of parallel streets with parallel avenues running perpendicular to them. The distance between the streets and also between the avenues is always the same. With these assumptions fulfilled, the blocks are of exactly the same size. In this way I can easily characterize the position of any block." This image represents ordinary or Euclidian space. Cars follow straight lines defined by streets and avenues. But imagine now that some subterranean upheaval causes a hill to bulge up in the middle of town, taking streets, avenues and houses with it. Then the space represented by the grid of streets is curved or non-Euclidian. A car would still follow the streets and avenues, but if it happened to be on a road that grazes the hill, its path would be bent a little bit along a curve near the hill. In the same way the sun causes curvature of space and a deflection of starlight.

The deflection of starlight and the curvature of space were the talk of the world in September of 1919 when the experimental verification of Einstein's prediction was announced.



Einstein works at his office at Princeton, where he conducted research at the Institute for Advanced Study.

One contemporary enthused later:

"A wave of amazement swept over the continent. . . The mere thought that a living Copernicus was moving in our midst elevated our feelings. Whoever paid him homage had a sensation of soaring above Space and Time."

It is significant that the word gravity is not mentioned here, even though the general theory of relativity is a theory of gravity. The reason for this omission is that the curvature of space is an element of the theory which is easy to visualize because it concerns real three dimensional space. It does not touch upon the true cause of gravity. To come to gravity, it is necessary to dig deeper and to invent other analogies. As they become more profound, the images become increasingly more broken. The following word-picture is offered with some trepidation and in the hope that it will encourage others to improve it.

Consider a stone in outer space. The size of a fist, hard and cold, it drifts in space. (Of course, its appearance makes no difference whatever, but to increase its palpability, imagine it smooth and shiny, a polished piece of fine Greek marble, pink veins delicately etched in the pale matrix.) The earth, the moon, the sun, the stars and galaxies are far away, so prodigiously far that their gravitational forces on the stone are too weak to be registered by even the finest instruments. Only the light from the distant stars, puncturing the translucent blackness, provides a link between the stone and the rest of the universe. The stars form a patterned background, like a vast cage, for the stone. This stellar cage is necessary. It cannot be imagined away, because the stone is real and is placed in the real universe. A universe consisting of a stone, and nothing else besides, is unimaginable.

There is no motion. The stars are so far away that they seem to stand still, like a ship in the distance, which, though under full steam, seems to be at rest on the horizon. There is no sound. The vast clouds of gas and dust which surge around the stars and fill the spiral arms of galaxies are far away. The stars don't twinkle because no air breaks or bends their steady beams of light. There is no change.

The stone is very still. Needing

Because it is
always there, and
because one cannot
affect it, one is
rarely conscious of
gravity. And yet
it dominates life.

neither support nor anchor, it does not tremble, roll or pitch. The images of the stars, reflected on its polished surface, never vary in position by a hair's breadth. (The stars provide the necessary framework. Without them, stillness could not be defined. Trembling, rolling and pitching would be meaningless words in a universe without stars.)

Whether the stone is at rest, or moving steadily in a straight line, is impossible to distinguish. There are no objects nearby to be used as milestones for measuring the progress of the stone: The stars are too distant to serve as markers. On this point, Newton made a mistake. He would have imagined the solitary stone truly at rest, within his own mental framework which he called "Absolute Space." This edifice "in its own nature, without relation to anything external remains always similar and immovable" like a gigantic imaginary scaffold. The position of the stone would be measured along the fixed axes of Absolute Space. Newton justified his conception in the "Principia:"

"I do not define time, space, place and motion as being well known to all. Only I must observe that the common people conceive those quantities under no other notions but from the relation they bear to sensible objects. And thence arise certain prejudices, for the removing of which it will be convenient to distinguish them into absolute and relative, true and apparent, mathematical and common."

Thus he introduced the idea of a fixed space which needs no objects in it to provide reality. For over two centuries, Newton's lofty construction predominated, until Einstein tore

down the scaffold and reintroduced the prejudices which his great predecessor had struggled to remove. What for Newton was a false prejudice was for Einstein the truth. Motion can truly only be thought of in relation to "sensible objects" and without them becomes meaningless. To illustrate this commonplace, Einstein, in the beginning of his first scientific paper on relativity, takes us to a homely railway station where a conductor is timing the arrival of a train by comparing the position of its engine with the position of the hands of his watch. Motion, to Einstein, is common, apparent and relative, rather than mathematical, true and absolute.

The stone is so far removed from sensible objects that its state of motion cannot be defined. (The persistent objector now invents a way of using an astronomical version of a radar speed trap to gauge the stone's motion from the vantage point of some distant planet. The attempt is valiant. However, such a measurement would require untold millennia for its execution, and we must insist on a real stone, in the real universe, with real measurements made by real people. Real people cannot wait millennia for a radar signal to return. In the real common world of Einstein, this objection is sufficient to rule out the radar device and thereby to re-establish the point: Whether the stone is moving in a straight line at constant speed, or not, is a question without an answer.)

Consider the stone, then, in the bleak stillness of outer space. Nothing happens, nothing changes, nothing moves.

To end the monotony, add something to the image. Close by, say 10,000 miles away, let the earth appear, materialized by the power of thought. Round, smooth, white wispy veils of cloud over a bluish mottled surface, cool, silent, familiar and inviting, the space age vision of our home. In relation to this new neighbor, the true motion of the stone can be ascertained. The center of the earth provides a benchmark which now fixes the position of the stone, 10,000 miles away and motionless in outer space.

But the motionlessness is only momentary. Imperceptibly at first, then gathering speed, the stone begins to move toward the earth. More precisely, it falls toward the center of the earth. Gravity is at work. The general theory of relativity

provides a picture of how this comes about.

In Einstein's theory, gravity is related to another concept, hitherto unmentioned and apparently quite different in nature: the idea of time. That time must be considered here has rarely been said more emphatically than by Herrmann Minkowski, who in 1908 ushered in the age of relativity in the ebullient preamble to his lecture on space and time: "The views of space and time which I wish to lay before you have sprung from the soil of experimental physics, and therein lies their strength. They are radical. Henceforth space by itself, and time by itself, are doomed to fade away into mere shadows, and only a kind of union of the two will preserve an independent reality." The union is called space-time and takes the place of Newton's Absolute Space as the stage for physical phenomena, including the fall of the stone in the void. *Space-time* is much further removed from our everyday intuition than is *Absolute Space* or even *curved space*. We are reduced to broken images.

Begin once more. Consider the stone without the earth. Nothing seems to be changing - but silently in the background there is now a gentle unfolding: Time is elapsing. Unlike

Close your eyes and think of a stone in your hand. Imagine letting go. Now picture it carried silently, swiftly, along the river of time which happens to have a little bend in it right here, directed toward the floor.

space, which reaches up and down, right and left, forward and back, time flows relentlessly in one direction. Time, like space, must be measured by a common, sensible, real object like a clock. Let a watch appear on the stone therefore. The word time will be given meaning by the reading of the watch chained to the stone.

The complete union of space and time is unimaginable. The best we can do is to imagine time as a fictitious sort of space. The stone's history can then be thought of in borrowed words: The stone is moving through time. This phrase, almost trite from overuse in science fiction, requires a little amplification. For the

sake of concreteness, a graph can be constructed of space and time. Position (in one dimension) is measured along one axis and time along the other. If a point on the graph represents a real object, like the stone in outer space, then it will move along the graph as time progresses. Successive moments and positions are represented by successive points on the graph. Thus, by translating time into a position along an axis, as is done every day in the graphs on the financial pages of the newspaper, motion in time can be translated into ordinary motion in space.

The flow of time is represented by



A smooth stone wearing a wrist watch helps demonstrate a modern explanation of the theory of gravity.

a flow of an imaginary medium. Time becomes a river. In the bleakness of the void, a stone (carrying its watch) floats in a vast and silent current of clear and subtle liquid which pervades every pore of the universe and bears everything within it inexorably forward. The current is time. Its motion cannot be stopped, its depth cannot be plumbed, its substance cannot be detected - because it is not real. Unlike a real river in real space, this current exists in the four dimensional space-time.

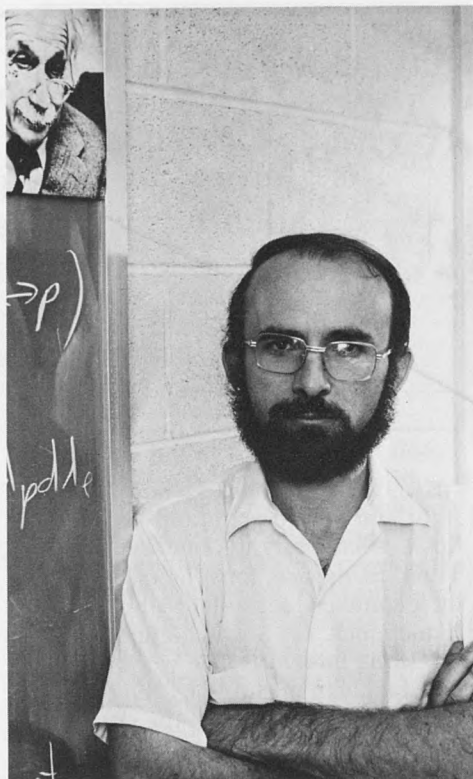
The stone, like a stick of wood on the water, has no motion of its own, but drifts wherever it is carried by the imaginary river of time.

Finally, in our imagination, the earth appears again, 10,000 miles away. On the river of time, both stone and earth are carried along. At first they seem to travel in parallel lines, keeping their distance. But soon it becomes apparent that the streamlines are bent gently toward the earth. The current, its flow modified by the presence of the huge mass of the earth, carries the stone closer and closer to its neighbor. The bending of the streamlines is barely perceptible at a great distance, but close in it becomes more pronounced. At the earth's surface, finally, the flow is wildly distorted from its original direction.

This is an image of curved space-time which is the crux of Einstein's theory of gravity. It is different, more profound and more subtle than the idea of curved space. The stone, when released, does not find itself in the mysterious grip of the earth, acting at a distance of 10,000 miles. Instead, it abandons itself to the soft embrace of the river of time which envelops it and inexorably carries it along.

Thus we return to the harmonious Greek conception of falling as a natural motion. In Newtonian physics, the earth does violence to the stone's natural inclination, which is to remain where it started. A force is needed to overcome its inertia. In Einstein's universe, the stone simply does what is most natural. It drifts along the curves of space-time toward the earth. With respect to the imaginary water of the river of time, it simply remains where it started.

Gravity, instead of pulling directly on objects far away, is mediated by space-time. The earth affects the streamlines, and the streamlines in turn guide the stone. Cause and effect are proximate: each point affects only the surrounding points, and they in



Hans C. von Baeyer

turn pass the effect along the stream.

Einstein, who wrote equations rather than words, coaxed from them a number of definite experimental predictions. The most compelling one provided his motivation from the beginning. Galileo had observed that different masses fall at the same rate. (Air resistance modifies this fact a little bit, but let us pretend that there is no air and concentrate, instead, on gravity itself.) Since the pull of gravity is obviously stronger on larger masses (i.e. they are heavier) this observation is difficult to understand. Why shouldn't heavier things fall faster, just as Aristotle taught? Newton's explanation was that nature has devised a cunning conspiracy: Although a heavy stone experiences a stronger pull of gravity than a light one, it has just precisely so much more inertia, it is just precisely so much harder to budge, that the two stones end up falling at equal rates. This theory explains the facts, but it is contrived to give the right answer. How much simpler, in comparison, is curved space-time. Place into the stream of time a second stone, 10 times heavier than the first, and right next to it. The two will drift on and down toward the earth at precisely the same rate, because the current carries both together. A feather will do the same thing. And so will a

piano or a grain of sand. The proposition that all objects fall at the same rate fits so effortlessly into the context of the curvature of space-time that the incomprehensible becomes obvious, and the abstruse compelling.

Another prediction of the theory, more difficult to put into words, was Einstein's explanation of a tiny irregularity in the motion of the planet Mercury which had plagued astronomers since the middle of the 19th century. We might imagine the planet travelling around the sun in an ellipse, while both glide down the stream of time. Because the streamlines are curved by the mass of the sun, the path is not a perfect ellipse. Of course Mercury responds only to the slight perturbations far from the sun because it never approaches the solar surface where the curvature is violent.

The deflection of starlight, the equality of rates of fall, the motion of Mercury, and other successes of Einstein's theory, impossible to duplicate in Newton's, have forever relegated action-at-a-distance to the shelf of historical curiosities. But there is no final answer. What is missing in the new way of thinking is an explanation of why a mass, such as the earth's or the sun's, distorts the streamlines. Once we accept the fact that they are curved, the motion of any body is easily understood, but why do masses curve space-time in the first place? Einstein provided an answer, but he was not very happy with it. In his equations, the curvature of space-time appears on the left and the mass of the earth or sun which causes it on the right. He once likened the left-hand side to a beautiful palace made of marble, and the right-hand side to a wooden building attached to it. He left the task of reconstructing the annex to future generations.

Curved space and curved space-time are difficult ideas - but they are better than action-at-a-distance. We could offer Albert Einstein no greater gift on his hundredth birthday than to move away from the rigid, cold, mystical view of Newton and toward his gentler and more homely way of thinking. Try it: Close your eyes and think of a stone in your hand. Imagine letting go. Now picture it carried silently, swiftly, along the river of time which happens to have a little bend in it right here, directed toward the floor. The stone follows the streamline of space-time just as a twig follows a stream. What could be more natural?

The Common Market:

Moving into the Realm of Human Rights

By John W. Bridge

The subject of this article will probably strike many readers of this magazine as distinctly unpromising. What possible connection can there be between an organization of nine European countries which have joined forces for certain economic purposes and the rights of the individual? Can this be anything other than a product of the ingenious imaginings of a foreign academic? I hope to be able to demonstrate the falsity of that understandable impression and to show that my subject is very real and topical. It is a subject which in a novel way contributes to the continuing story of the rights of the individual and the means of protecting them.

The European Common Market was set up in 1957 by a treaty between Belgium, France, Holland, Italy, Luxembourg and West Germany. In 1973 those original member countries were joined by Denmark, Ireland and the United Kingdom. The aims of the Common Market are undeniably economic. The member countries

have pledged themselves to create one integrated economy out of nine separate national economies. That objective is being achieved by the progressive co-ordination of the national economies until complete integration results. This process involves the Common Market in interfering in matters of policy which were previously under the control of individual national governments and legislatures. The matters affected by this interference include trade between the member countries and with the outside world, anti-trust regulation, the adoption of common policies for the agricultural and transport industries and the free movement of workers within the territory of the Common Market. Such an unprecedented integrating movement is inherently likely to impinge on the rights of the individual citizens of the member countries. Indeed, there is a close relationship between the regulation and control of economic activity and the rights of the individual whether in his capacity as employer, employee or consumer.

In view of this relationship, it is surprising to find that the Common Market Treaty does not contain any general provisions concerned with the protection of the rights of the individual. The Treaty specifies only a limited number of rights concerning individuals, such as the rights of a citizen of a member country to seek employment or to set up in business

in any of the member countries, without being discriminated against on grounds of nationality. The Treaty also recognizes the individual's right to be compensated for loss resulting from any unlawful acts of the agencies of the Common Market. Supporting these express rights of the individual is the Court of Justice of the Common Market, which is under a duty to ensure that the law is observed. The Court of Justice respects and upholds the principles of fair judicial and administrative procedures, and offers the individual the opportunity to appeal specific violations of human rights.

There are two principle reasons why the authors of the Common Market Treaty adopted a limited approach to individual rights. Because the Treaty is essentially an instrument of economic integration, objective individual rights have always been regarded as rather peripheral. The authors of the Treaty were also conscious of the adoption some seven years earlier of the European Convention on Human Rights. That convention, which was drawn up under the auspices of another organization, the Council of Europe, was no doubt believed to be a more appropriate place to establish a "European Bill of Rights."

Those who created the Common Market in 1957 could not foresee the way in which the Common Market would develop under the influence of changing economic and political

John W. Bridge, professor of law at the University of Exeter in England, was an "exchange professor" at the Marshall-Wythe School of Law during the 1977-78 school term. During his year in Williamsburg, he taught two courses, delivered special lectures and conducted research on environmental law of the European Economic Community.

Clearly what is needed
is a device to ensure that
Common Market individual rights are
compatible with national individual rights.

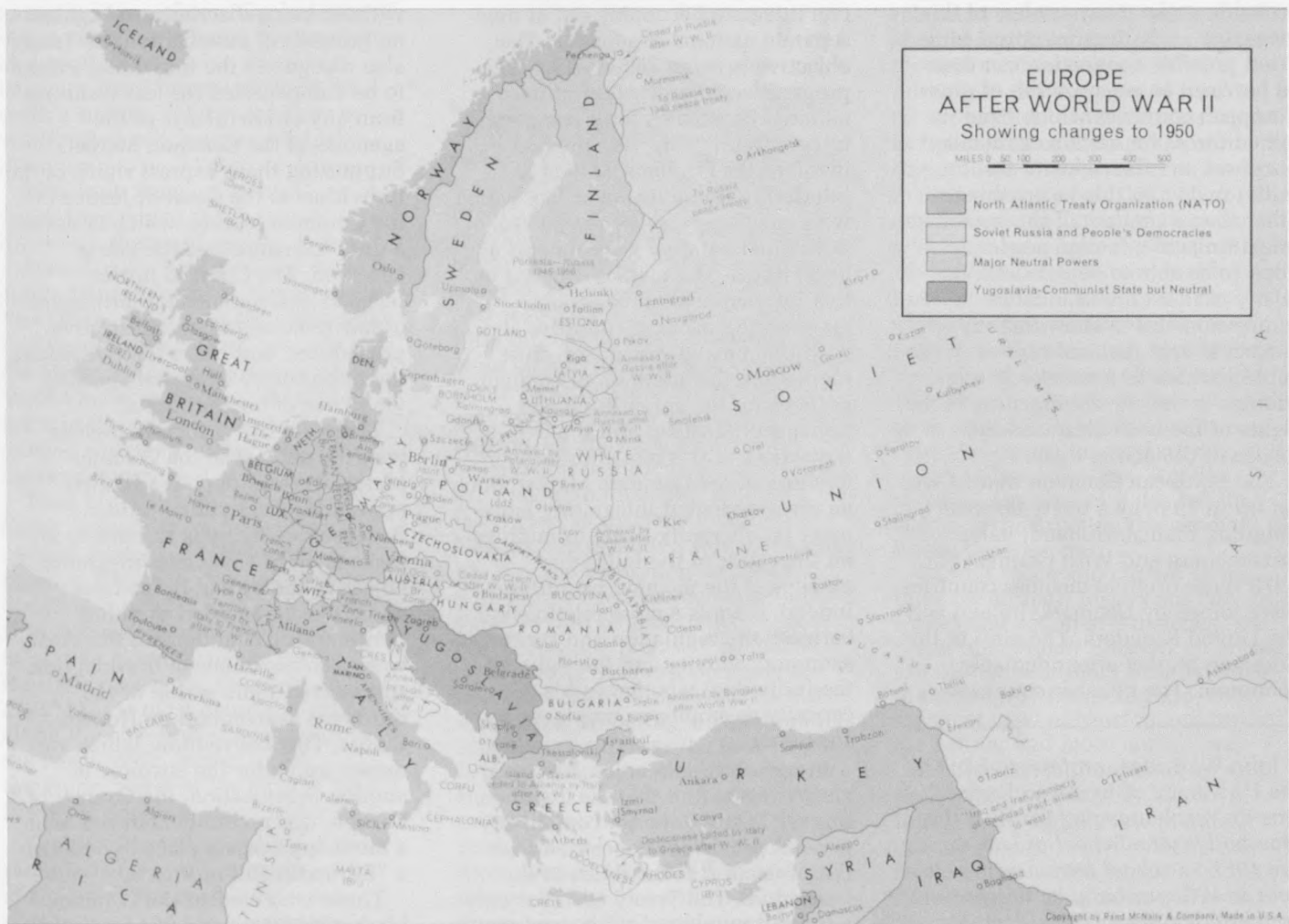
factors. So the Treaty was deliberately drafted in rather general terms, to create a legal skeleton outlining the objectives of the Common Market and the principle means of achieving them. The addition of flesh to the bones to make that skeleton viable is being accomplished by policy and by law-making decisions taken by the Council of the Common Market, an agency made up of representatives of the governments of the member countries.

During the years since 1957, there has been a continuous process of implementing, elaborating and defining the basic principles set out in the

Treaty. The Council of the Common Market has made thousands of decisions, either adopting policies to advance the objectives of the Common Market or making rules of law designed to implement and to enforce those policies. In numerous ways these decisions have augmented the Treaty provisions concerned with individual rights. For example, the Treaty elaborates on the right of a worker from one member country to enter another member country in order to take up employment there. A good illustration is provided by a recent case involving the United Kingdom. Miss Van Duyn, a Dutch

citizen, was a member of the Church of Scientology, a religio-scientific movement founded in the United States in the 1950's. She was then appointed to a post with that Church in England. The British Government regarded the activities of the Church of Scientology as contrary to public policy, but there existed no legal restrictions in England to becoming a member of or seeking employment with that Church. When Miss Van Duyn sought admission to the United Kingdom to take up her appointment, it was refused. In a subsequent action against the British government, Miss Van Duyn asserted that she had a right to enter under the Common Market Treaty. The Common Market Court ruled that the case fell within reserved powers given to the member countries to refuse admission on grounds of public policy, public security or public health. These powers were elaborated in a decision taken in 1964.

As the Van Duyn case suggests, the Common Market Court also con-



A map showing European boundaries established soon after World War II. The Common Market unites nine of these countries for economic reasons, and more recently, to help protect individual rights.

tributes to the development of the law concerning individual rights. It interprets and applies the law of the Common Market and rules on the validity of policy and law-making decisions in the light of the provisions of the Treaty. These twin aspects of the Court's activities are analogous to the role of the U.S. Supreme Court in both expounding the U.S. Constitution and also exercising a power of judicial review of the constitutionality of legislation. In recent cases, the Common Market Court has held, for example, that a Belgian air hostess who had been paid less than male members of the cabin staff for performing identical duties was entitled to arrears of salary. The case was decided on the basis of a Treaty provision that specified men and women would receive equal pay for equal work. In another case, the Court held that when the activities of a corporation were being investigated to discover whether it was in breach of Common Market antitrust rules, the corporation had the right to state its case and to defend its conduct before a final decision was reached. The right to be heard was expressed in a decision made in 1963.

Yet the Common Market Court has not merely contented itself with upholding individual rights on the basis of the express terms of the law. The Court has also interpreted its task of ensuring the observance of the law as entitling it to uphold rights enshrined in a body of unwritten legal principles which are common to the legal and constitutional systems of the member countries. In protecting these unwritten rights, the Court acts in an innovative and dynamic way. By means of a comparative analysis of the protection of individual rights in the laws and the constitutions of the member countries, the Court deduces common legal principles. It regards those principles as the underlying premises upon which membership of the Common Market was accepted. The individual rights expressed in the Treaty and in decisions taken to implement the Treaty are now supplemented by further rights implicit in the common legal traditions of the member countries.

A striking example of the way in which these unwritten principles are applied to protect individual rights is supplied by a case decided in 1970. There existed a large butter surplus in the Common Market, and so it was decided to sell that butter at a

What possible connection can there be between an organization of nine European Countries which have joined forces for certain economic purposes and the rights of the individual?

reduced price to citizens receiving social security benefits. A separate decision to that effect was issued to each of the member countries. Those entitled to buy this butter were to be issued coupons. But the information on the coupons varied from country to country. In most cases, the coupons referred to the person to whom they were issued. But in the case of the German version, the coupons included the holder's name itself. A German beneficiary who was issued coupons bearing his name complained that to reveal his name to a storekeeper as one entitled to cheap butter would humiliate him and violate his fundamental right to human dignity. The Court agreed and stated that it was its duty to ensure the protection of basic personal rights contained in the general principles of Common Market law. The right to human dignity was such a right. Therefore, the German coupons were ordered changed to include some method of identifying beneficiaries other than by name, such as by a number.

There is great evidence that the Common Market has responded to the need to make sure that its activities are compatible with basic conceptions of individual rights. But the nature and scope of this response is limited by the nature and scope of the Common Market itself. The Common Market is not a political institution in the sense that it is not a substitute for national government. The *raison d'être* of the Common Market remains predominantly economic. The gradually emerging "Common Market Bill of Rights" will, therefore, tend to relate to those economic aims rather than to any objective notions of what is an individual right. The member countries accept that Common Market law must be uniformly applied in their territories and that their national laws must not conflict with it. But the member countries retain a primary responsibility for protecting the individual rights of

their citizens in compliance with their national constitutions. The emergence of individual rights protected by the Common Market and the existence of parallel rights protected by national constitutions provides the basis of potential conflict. The rights and the extent of their protection under one system may differ from that under the other. Which system should prevail? This is a sensitive issue for the member countries, particularly in West Germany, where the constitution contains permanently guaranteed rights. Clearly what is needed is a device to ensure that Common Market individual rights are compatible with national individual rights.

The Common Market Court has made a start on this harmonizing process. All the members of the Common Market are also parties to the European Convention on Human Rights. That Convention can be regarded both as a repository of individual rights which the member countries commonly recognize, and also as a reflection of general world opinion. In very recent cases the Common Market Court, when faced with a question of individual rights, has not only sought inspiration from the laws and constitutions of the member countries, but also from the European Convention. This development has recently been given unqualified support by the governments of all the member countries. At the moment, there is no organic link between the Common Market Treaty and the European Convention. But the use of the convention as a yardstick will help to make sure that the law of individual rights in the Common Market will follow the broad trend of contemporary thought concerning individual rights. That will be good for both the individual and the general development of this increasingly important branch of the law.

On Education

A Governor's Agenda For Higher Education

By John N. Dalton '53, Governor of Virginia

I would start out by saying that I think we have to change our game plan.

For the past 20 years or more, those of us in the South have been playing catch-up ball in higher education.

When you are playing catch-up ball, you are reacting to the breaks of the game, and pushing hard to turn them to your own advantage.

For the next several years, I think we ought to do more looking at the films, more planning of general strategy, and less figuring out new plays.

We reacted to our low scores on the percentage of our college-age population that was actually in college by building more of the same kinds of college plants that we had been building before, and teaching more of the same courses.

Now the scoreboard is telling us that our definition of college age has changed. Those Southern Regional Education Board figures used to say 18 to 25. In many of our State-supported colleges in Virginia today, the average age of all the students is 27.

One reason for that is the way we reacted to the low scores of our graduate schools.

We poured money into masters and doctoral programs, with the result that we created a surplus of Ph.D.'s.

But we are still accepting the standings from the academic world that tell us the doctoral institutions are the top of the league.

The second reason for that change in the definition of college age is the number of students who are coming back to college.

At some of our four-year Virginia colleges, nearly 50 per cent of all the students are part time. At our community colleges, the figures are even higher.

We reacted to the industrial development of the South by creating community colleges, filling out the bench with craftsmen and with technicians, to back up the engineers

and the doctors and the lawyers.

Now we are finding that those classes are filling up with do-it-yourself enthusiasts.

We reacted to the migration from the farm to the city by creating urban universities to match the new cities that grew up to rival the finest in the nation.

But in our haste to put the colleges where the people were, we sometimes put the offensive team in to play defense, by simply moving the college town university to the city.

We set as our long range building goal the creation of a flexible, graduated system of colleges and universities in which every young man and woman could find a place suited to his or her academic abilities.

And we recorded some pretty satisfactory scores. Since 1966, enrollment in Virginia's colleges and universities has more than tripled.

But we also discovered that our all-out recruiting system produced some unfortunate side effects.

A lot of students wound up in the wrong positions in the wrong scrimmage teams.

A lot of other students showed up for practice who were just not professional calibre and didn't make the cut.

And we also found that some of our coaches got fed up and carried players along until they could be traded.

We also began to hear a rising crescendo of complaints from the private league that our competition was taking their students and reducing their financial support.

In addition to all those troubles, we were faced with continuing interference from the League president and his staff in Washington.

And, finally, we found that the gate receipts were drying up.

I think my essential agenda for higher education over the next several years would be to ask our-

selves several pointed questions:

One of those would be, which courses are we going to support primarily from State funds in the name of a better educated citizenry, and which courses are we going to ask the student to pay for because they are primarily for his own benefit?

We need to ask ourselves if we ought to modify the traditional score card for colleges that puts the doctoral institution at the top of the heap, when we have more than enough graduate degree holders.

This is particularly true when we look at our urban universities.

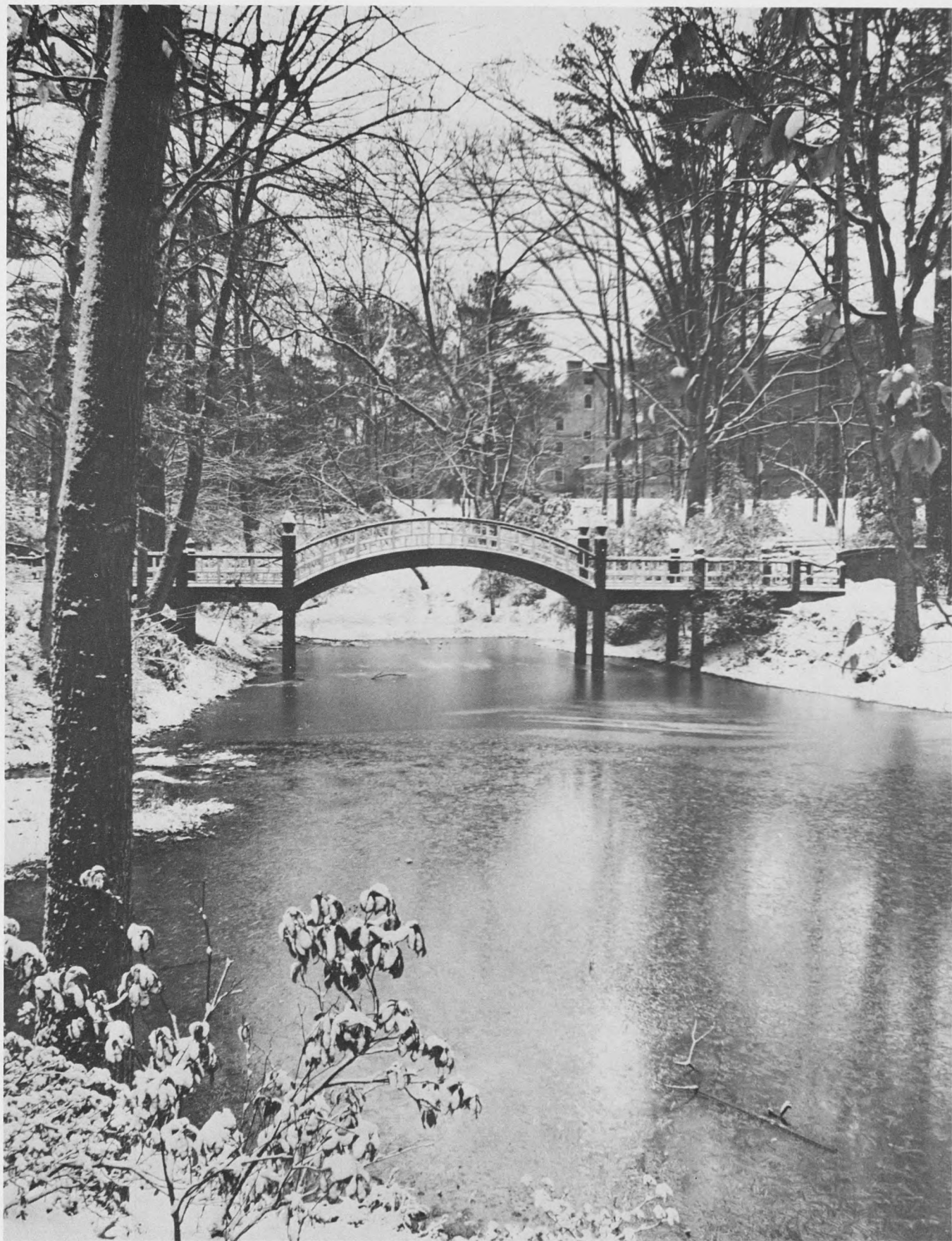
In Virginia, after 200 years, we have just about completed Thomas Jefferson's dream of college classrooms within a day's horseback ride of every citizen. I think we need to spend more time thinking about what the urban university should be doing to serve the urban community.

We need to take inventory of potential jobs that require special skills and determine whether we have cranked up to produce craftsmen and technicians for whom there will be limited opportunities.

We need to ask whether we are de-emphasizing courses like history and economics and government that a self-governing people need so desperately in this country in today's world, and perhaps how we can combine them with studies that lead to careers for the next generation, who will run America.

And, finally, we must ask as the bottom line to all these questions, whether we can afford to continue expanding higher education in accordance with the current game plan, in the face of stabilizing enrollments and declining tax revenues.

(Excerpted from remarks delivered by Governor Dalton during the 1978 meeting of the Southern Regional Education Board, held at Key Biscayne, Florida.)



When the snow starts to fall and temperatures drop far below freezing, there is no place on the William and Mary campus as beautiful and as inviting as Crim Dell Pond. From the oriental-style bridge which spans the pond, a traveler can view both the old and new campuses.

