"I think that one of the reasons people go into University administration is that they like to work with students," Washington University's new Chancellor, William H. Danforth, remarked in the course of the interview which opens this issue. In an informal interview with the editor, Chancellor Danforth answers questions on subjects ranging from his conception of the University's major goals and objectives to his opinion of the dress and hair styles of today's students. See "An Interview With the Chancellor," beginning on page 2.
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Washington University Magazine is published quarterly by Washington University at 1201-05 Bluff Street, Fulton, Missouri 65251. Second-class postage paid at Fulton, Missouri.
Since becoming Chancellor in June, Dr. William H. Danforth has met and talked with hundreds: students, parents, fellow faculty members, alumni, people of the community. They all had one thing in common: a great interest in the Chancellor's views of the University and his new job. Below are a few of the questions the Chancellor is asked most frequently, and his answers.

AN INTERVIEW
WITH THE CHANCELLOR

Q. What are your top priorities for Washington University in the years ahead? What do you consider the most important goals and objectives?

A. To be a first-rate university. To do everything we do exceedingly well. Beyond these simple statements, the goals become multiple: We teach, we do research, we perform services. Moreover, each of these endeavors has multiple goals. Consider teaching for example. The range of subjects is vast: We teach about areas as diverse as archaeology and theoretical physics; we educate professional teachers, physicians, lawyers, architects, engineers, painters, and businessmen. We want to do each of these things exceedingly well so that Washington University will be an exciting, stimulating place to learn and so that our graduates will be well educated. Consider also the role of the University in research—in the advancement of knowledge. Faculty members explore the limits of man's understanding in a wide variety of areas, ranging from the structure of medieval cities to the structure of the molecule. My hope is for Washington University always to be a place for people of high intelligence, energy, and imagination, so that the research and teaching that is done here will be first rate. We have a running start. I believe Washington University is already a superb place to teach and to learn, but that does not make the job any easier. The kind of excellence we have here is neither easily attained nor, once attained, easily maintained.

Q. Within this framework, have you any more specific goals?

A. I hope to see the University maintain a balance among its many goals. We have here a very interesting mix. We have an excellent program in arts and sciences and also first-rate professional programs all combined in a medium-sized university. We are large enough to have a variety of strong programs and yet small enough to communicate easily across disciplinary lines. I should like to see us capitalize on our high quality and medium size. We can have educational opportunities of enormous variety without becoming impersonal or bureaucratized. In addition, we need to strengthen both graduate and undergraduate programs. The two are inter-related. High quality graduate programs contribute to the excellence of the undergraduate programs. Importantly, they help attract top-level faculty members to Washington University, who then teach undergraduate courses.

Q. What do you see as the major problems confronting the University?

A. The financial problem is, of course, the most serious, both now and long range. Universities are not businesses which can be evaluated by profit and loss statements. However, neither can universities ignore their financial affairs. No institution can spend more than it has and survive. In the last few years the costs of higher education have risen very rapidly. The result has inevitably been rapidly rising tuitions, making it harder for students to attend Washington University and other private universities. We have made and are making efforts to control our expenses. I believe that considerable success has been achieved, but costs have continued to rise and trimming is getting harder and harder. The reason for the difficulty is that most of the University's budget goes for salaries. Great people, of course, are what make a great university.
Q. Given the financial problems facing private higher education, are you optimistic or pessimistic about the future?

A. Optimistic. I draw confidence from the fact that higher education is so important to the American people that we simply cannot allow it to fail. Our complex urban society is based on knowledge. We cannot operate our economy, our agriculture, our health care, our transportation, and many of our other vital functions without knowledgeable specialists. Just as important, as the major democracy of the world, we must have a broadly educated citizenry if we are to deal with the new challenges that are now before us, including overpopulation, pollution, and the maintenance of a peaceful world. The American people know the importance of education. We have always had faith in our institutions of higher education and will continue to support them.

There is another set of factors that makes me optimistic. The problem of financing higher education is well recognized. The trustees, the alumni, government officials, and the man on the street all recognize that we have problems. Many are doing their best to give us support, both financially and morally, to tide us over this difficult period. Equally important, within the University, the faculty, the students, and the administrators recognize that we are operating under somewhat changed conditions and are showing a desire and ability to contribute to making Washington University work. Those of us who care about higher education, of course, have a special responsibility to work doubly hard, not only to hold our own, but to continue to improve despite general financial stringencies. I am confident that we will succeed.

Q. In other words, you do not feel that the American people are disenchanted or disaffected with higher education in the wake of recent student protests and riots?

A. Of course, there was an adverse reaction among many people, but I do not think this reaction will be permanent. Education is too important to our society. Our civilization needs to make some very difficult choices in the future on how to control population, cope with environmental problems, achieve racial harmony, prevent war, relieve poverty and sickness. These things cannot be done without an educated populace. Thoughtful people recognize this fact and will continue to recognize it.

Q. What do you think the relationship between the University and its community should be? Does the University have an obligation to help solve community problems?

A. The major service the University offers the community and the nation is education. The benefits of education to the individual and to society are incalculable. The University, in addition, is comprised of persons who are working to expand human knowledge and understanding. The twin functions of teaching and advancement of knowledge are the traditional and, in my view, the central function of those of us who make up the University. These functions are, of course, not all that we should do or, in fact, are doing. The University is part of the community and interacts with it in many ways. Washington University brings talented people to the St. Louis community, and their influence becomes very strongly felt in better health care, in stronger social agencies, in cooperative programs with industry, in the community's schools, in the cultural life, and in many, many other ways.

To some persons, "community service" implies direct participation in solving the social problems that plague the community. When we talk about community service in this sense, we must be realistic and keep our priorities in mind. Washington University cannot, even in concert with our sister institutions, solve all the problems in St. Louis. If all of our faculty and students gave up their educational pursuits and their research and devoted all their time to community service, they would not solve the major problems. They would, however, end up destroying the educational system that, hopefully, will produce the ideas and people on which a better future can be built. Let me draw an analogy: In primitive societies, a certain amount of grain was harvested. Some was eaten and some was set aside for seed. If a society ate its reserves for seed, it ate its future. A university is like seed corn—an investment in the future.
Q. In the coming years, do you think that Washington University will become more deeply involved with the St. Louis area and its problems?

A. Yes, one might generalize to suggest that universities are becoming more involved in American life. Both the problems of St. Louis and the problems of our society require all the intelligence and wisdom that we can bring to bear on them. Universities have no monopoly on either intelligence or wisdom, but many very intelligent, well trained, and gifted people are associated with Washington University. Many of these people are of great help to the St. Louis community, and I expect more will be of help in the future.

Q. Is state aid needed for private institutions of higher education?

A. We do not have any kind of state subsidy in Missouri. I think that a state scholarship program along the lines of helping students go to the college of their choice in Missouri by carrying their scholarship with them will have great benefits. It will have great benefits for the student because it will give him a much broader choice, great benefits for the state because it will spare the state enormous capital expenditures and make the tax dollar go much further, and great benefits to the nation because it will provide a healthy variety of education for the people of the country. State aid would certainly benefit our institutions. I believe that the state legislature will also see the wisdom of this course and will enact such legislation.

Q. Why should an alumnus who paid his own way through Washington University give money to the University?

A. Washington University is a valuable institution. It performs an important service to the people who come here and to society at large by being a private institution of academic excellence. I would hope that alumni would want to continue to keep Washington University strong because they value it and value the services it can perform. The University has never existed on tuition alone. At present, only about 43 per cent of the central budget expenditures come from tuition, which means that the University cannot survive without additional support.

Q. Is the University doing everything it can to save money? Is the University being run on sound business principles?

A. Washington University operates on a stringent budget that is set by the Board of Trustees and is audited every year by both internal and outside auditors. Washington University has the same kind of controls and operates on the same principles of economy and efficiency as any comparable business firm. In fact, people I know who are familiar with both the University and with large business firms are convinced that Washington University runs a very tight ship.

Q. Is the University spread too thin? In a time of financial pressures, would it be wiser to curtail some activities and to concentrate only in those areas where the University is especially strong?

A. For historical reasons, Washington University has a large number of professional schools—engineering, law, medicine, business, architecture, dentistry, fine arts, social work. We have looked into the matter in some depth and feel that no real economy would be made by discontinuing a school or a major department. We are dependent on the tuition income and on the dormitory and food service income from existing facilities. Dropping a school or major department would eliminate income as well as outgo, resulting in little, if any, net savings.

Q. There has been a great deal written lately about today's students. Do you feel that students today differ greatly from those of a few years ago?

A. I think that students today come to the University with considerably different experiences than in the past. They come from high school much better prepared for university life—both academically and socially. Many of them have traveled widely, often on their own; many have worked at summer jobs. They seem far more mature.
and sophisticated than the freshman of a generation ago. In addition, the kind of freshman we get at Washington University is better prepared by his high school for serious intellectual work than he used to be. It seems to me more difficult today to offer something new, exciting, and intellectually stimulating.

Q. Do you feel that today's students are more career-oriented than they used to be? Do they have the same goals, the same ambitions?

A. Perhaps neither more nor less career-minded. They are, however, seeking different kinds of careers. Interests vary greatly from year to year and are hard to predict. Last year we saw an enormous increase in applications for the law school, while the number of applications for the engineering school declined. This year, there is a greater than usual interest in biology among the entering freshmen. These changes may indicate a greater interest in careers centered on serving society and humanity, but then students have always been idealistic. Perhaps they are merely expressing their idealism in different ways.

Q. Do you intend, as Chancellor, to attempt to create closer ties with students, to make yourself readily accessible to students?

A. I think that one of the reasons people go into University administration is that they like to work with students. I hope that I will have a great deal of interaction with students, and I intend to make myself available readily to students individually or in groups. With more than 7000 students on this campus, there is no way the Chancellor can get to know all of them personally or even a large percentage of them. Washington University is small enough, however, that every student will be known by someone on the administration or the faculty, and every student who wishes to should be able to find a friend among the administration or faculty.

Q. Will the University in the years ahead attempt to create a more diversified student body by vigorously recruiting disadvantaged and minority students?

A. For some time we have been vigorously recruiting students from minority groups and from the disadvantaged. We hope to continue and to accelerate these efforts. Let me give two examples. As a nation we have a shortage of minority professionals. Only two per cent of the physicians in the country are Black, and only about one per cent of the lawyers. This country urgently needs more minority professionals, and Washington University, like other universities, has an obligation to train them.

Q. Is the University prepared to lower its entrance requirements for minority students or to make other concessions to the fact that minority students often have different educational backgrounds than other applicants for admission?

A. We are trying always to improve our entrance requirements and admissions procedures to try to recognize which students will do a good job at Washington University and will get through successfully. There is no question of lowering entrance requirements to accommodate minority students. We do recognize, however, that some of the criteria for admission employed in the past were not very good predictors of success or failure on a student's part. We are always looking for better methods of prediction for all students, and we are trying especially to evolve better ways of recognizing talent in people who come from deprived backgrounds and may not do well on the standard tests, but who do have the intellectual capacity for the work.

Q. Do you feel that the new "life style" that many students profess is truly significant? Do you think that long hair and beards and highly informal dress are just passing fads or that they represent a basic change in young people's attitudes and feelings?

A. I think that people are getting more used to the new life styles and find them far less a barrier to communication. When you begin to talk with students, you find that dress and hair styles don't tell you much about their personality, their moral outlook, or their career commitments. You can't judge a person on his dress or hair style. I think people today are beginning to be far less concerned about these superficial things and can take them in their stride.
Service in the Seventies At Washington University, thousands of us go about our diverse daily duties, actively involved with each other but often only vaguely aware of the hundreds of activities generated on our campuses which spread their influence in ever-widening circles beyond campus, beyond community, beyond national boundaries. Some months ago, the University's Development Office asked if this influence—especially as it applies to the St. Louis community—could be graphically presented. The result is a twenty-minute film strip entitled "Service in the Seventies." As we researched, compiled data, took pictures, and prepared a script, we became aware of how many small individual projects, as well as the larger, often highly visible endeavors, were a part of the overall picture. En masse, the impact of the University upon its community and beyond is far greater than any of us had realized. We present here excerpted narrative and photographs which represent the multiplicity and diversity of the community services and influences generated by the University's teaching and research activities.
St. Louis, hub of a metropolitan center of more than two million.

St. Louis, a city of problems and potential, and of resources, the greatest of which is education.

Washington University has a vital impact upon the well being of the St. Louis community through its nearly 18,000 part-time students, and through the educational and research programs of its ten schools.

Washington University provides much of the brain power which makes St. Louis an international center of commerce and industry.
The University attracts talented young people, many of whom remain to make St. Louis their home.

Although two-thirds of the business students come from outside St. Louis, half remain here.

And 80 per cent of last year's engineering graduates accepted employment with St. Louis companies.

The University, with 24,000 local alumni, its nearly one thousand full-time faculty members, its 7500 full-time students, and 80 per cent of last year's engineering graduates accepted employment with St. Louis companies.
Countless business firms recruit junior executives from the University's master of business administration programs.

The University provides continuing education and professional development for thousands of working St. Louisans.

Last year the School of Continuing Education, working with other divisions, served 18,000 persons.

In large measure the University's long-range influence upon St. Louis and the nation lies in the contributions which flow from research.

The Washington University School of Medicine and its fourteen associated hospitals are a priceless asset to the community.

One-third of all physicians practicing in St. Louis.
Washington University opens a door of opportunity to the disadvantaged. From a minority high school enrichment program through its MBA program for minority college graduates, it offers continuing education. Faculty members in every discipline serve as board members or consultants to business, industries, social agencies, and government bodies.

Last year more than 54,000 patients were admitted to hospitals in the medical center, and its clinics handled 217,000 patient visits. In addition, the Dental School clinics recorded 48,000 patient visits.
These community services go hand in hand with health-care research which extends the University influence far beyond St. Louis and, at the same time, draws thousands of persons to the city.

Washington University contributes directly to solving crucial problems in public education. It is a major trainer of teachers, counselors, and administrators.

The University's Graduate Institute of Education works directly with city and county schools. In a pilot program at Hamilton School, University personnel work with teachers to upgrade inner city education.

Today some 175 social work students serve in forty-one agencies on both sides of the Mississippi.

And as alumni they will staff a major portion of the metropolitan social welfare efforts.

Washington University alumni, faculty, and students historically have been concerned about the environment of the city in which they live and work. It was a University professor, who later served as mayor,
Developing a program to teach the importance of heritance.

And University students themselves volunteer as tutors, lecturers, and group leaders.

Washington University has pioneered in improvement of the urban environment through the application of science and technology to the problems of our cities.

It was a University professor who pioneered in the field of ecology long before the word and the work became fashionable.

The University's Center for the Biology of Natural Systems brings together scientists and engineers to deal with such problems as extraction of reusable materials from trash, rat control, air pollution.
The School of Architecture involves students, faculty members, and alumni in improvement of our community life through urban planning and design.

Washington University's presence in St. Louis makes the city a Midwestern center for culture and recreation. Through faculty and alumni it is a working partner in almost every cultural institution.

And the University campus itself is one of St. Louis's finest cultural centers. Visitors come to the campus to visit Steinberg Hall, a major art gallery, to see plays, operas, dance concerts.

The University itself is a customer of many St. Louis businesses. The greater part of its operating budget—currently 75 million dollars—goes directly into the St. Louis economy.

It is one of the top twenty employers in the area, with more than 7000 employees and an annual payroll of approximately 35 million dollars.

Over the past ten years the University has spent more than 42 million dollars for construction.
to attend concerts which range from classical to contemporary.

The University, its faculty and students, make a direct impact upon the economy of the community. Each year, out-of-town students and their parents spend an estimated four million dollars in the St. Louis area.

The conservative estimate that a dollar changes hands twice before diffusing over a broader area, in the past ten years the University’s impact on the St. Louis economy was nearly a billion dollars.

We must never forget that the fundamental commitment of any university worthy of the name is to teaching and research.

The better Washington University is equipped to serve this commitment, the greater and more widespread will be its total impact upon the welfare of the community and the advancement of man.
Pepper Schwartz and Janet Lever both graduated from Washington University in June, 1968, and both entered Yale the following fall as graduate students in sociology. Their experiences in a traditionally all-male seat of learning both before and after it went coeducational led them to write *Women at Yale*, described by *Publishers' Weekly* as "the first full-length study of the coming of the sexual revolution to an ivied citadel of masculinity." In this article, they compare and contrast the role of women at Yale today and at the Washington University they knew in the late sixties.
When we entered Yale in the fall of 1968, we felt the somber presence of academic tradition. The Gothic buildings, the leaded windows, the heavy stone fireplaces, the colleges and courtyards modeled after Oxford, all made us feel like trespassers in the world of the elite.

Both of us graduated from Washington University and enrolled at Yale as graduate students in sociology. When we were in St. Louis, people at Washington University had half-humorously called the place the “Harvard of the Midwest.” We had joked about it at the time as a kind of upwardly mobile dream-statement emanating from a Midwestern inferiority complex. Now, standing among the original halls of ivy, we knew how institutions like Harvard and Yale had set themselves up as the standard bearers. We were intimidated.

As the year wore on, comparisons with our undergraduate school became easier to make. First of all, we overcame our awe, but even so, East Coast chauvinism is an insidious sort of philosophy. Eastern students feel that no one else is on a par with them, and they communicate that feeling to the “foreigner.” So of course the Midwesterner’s ego is insulted and he enters intellectual combat to prove that he is the equal of his condescending hosts. But even if he “wins,” the individual is still beleaguered by self-doubt. Was he really outclassed in the beginning? Is the Midwest the wasteland Easterners think it is, or does the Easterner have a parochial vision of the world?

Our self-image was reassured when we found that we could compete. We could take on the Eastern style, and in fact, we discovered that that was more than half the battle. The game was one of one-upmanship: respect was won by achieving small, esoteric points in some nicely engineered polemic. We found that our undergraduate education was equal to that of Yale; it was our “style” that needed polishing. As for our fellow students, we felt that while Washington University has somewhat fewer stars and a few more strugglers, the general intellectual level is comparable. Yale students did seem to be more creative and more diverse, but then we had gone to Washington in a period when campuses across the country were more quiescent, bored, and boring.

In the end, it was not the scholastic comparisons between Washington and Yale that shocked us. It was the social arena that puzzled us and pushed us to write Women at Yale. For the first time in our lives, we were in an all-male environment. Undergraduate co-education was still a debated issue in 1968, so we took our place in the ranks of the few graduate women who participated in campus life. Of course, we immediately became objects of curiosity and interest—but still definitely objects.

It’s hard to explain one’s reaction to being categorized as intellectually dismissable. As women, much more than as Midwesterners, we were looked upon as intruders by the ruling class. As Midwesterners we could change our style, become a part of the East Coast circle, and settle down to take over some sphere of influence, but even if we had wanted to, our status as women blocked our way.

For a white, liberal, middle class person to recognize that he is being discriminated against comes as a thunderbolt. It immediately radicalizes him. When discrimination is somebody else’s problem, it is far too easy to regard it as something that can be dealt with slowly and methodically. When it hits home, exposure and action become necessary.

As sociologists, we wanted to investigate the problem systematically. We knew that as women at Yale we had had to fight to make our minds as important as our
bodies, but we also knew that we had only scratched the surface of the way this male elite world reacted to women and other outsiders. So, when coeducation was announced, we decided to study the first year in depth. We were curious to learn if the male Yale students would allow the new women to participate as friends and fellow students in the same way male-male relationships had evolved. And we wanted to know a lot about how the women would react to the demands of their entrance into the “inner sanctum.” How would they treat each other, what would this show us about same-sex friendship, and what would we learn about the effect of institutionally sanctioned patterns of interaction on individual personality and values?

After a year of interviewing a random sample of one hundred students and participating in student groups and classes, our first reaction to our data was that Yale men and Yale women provided an extreme case study of male chauvinism and how it affected male-female relationships and same-sex friendships. But as we reflected on our experiences at Washington University, we realized that Yale was only a caricature of things we had experienced elsewhere. We had met this beast before, but we had not recognized it in its subtler expressions. Coming to terms with the continuity of our lives was for us a great revelation. Today, some women’s liberation groups call it “consciousness-raising.”

“In a year when women’s liberation has become a national movement,” we pointed out in the introduction to Women at Yale, “Yale’s super-male atmosphere gives us a dramatic staging of the female’s attempt to gain admittance to male territory. The same resentfulness and questioning are going on in other places, but they are more obvious at Yale, and therefore more valuable to those of us who want to know why things are happening.”

One of the Yale institutions that gave us the most insight into questions we were seeking to answer was the Yale mixer. The mixer is a dance for singles, where girls from girls’ schools are shipped in on buses to meet men from men’s schools in the hope that some kind of on-going relationship can be effected. However, as the girls troop off the buses and parade through the assembled men intently looking them over, the event takes on a mechanical quality. Men and women alike call it “flesh on hoof” and reluctantly go through the humiliating process because it is the quickest way to meet the opposite sex. Since the monosexual school offers only isolated opportunities to socialize, these moments have a frantic quality about them. People recognize the artificiality in choosing a partner or lover in a four-hour period, but they have few other options.

Even with women on campus, many men continue to use this method of meeting women. The mixer is a courtship ritual on the same-sex campus, and its participants have become quite adept at adjusting to its rules and regulations. The products are often a harder, more protected person, and a set of unrealistic relationships between a man and a woman. Premiums are placed on the most superficial qualities, and social education takes the form of defensive maneuvering instead of honest interchange.

A typical mixer starts around 8:30 in the evening, when the buses from the surrounding women’s colleges begin to arrive. Until very recently these same buses left promptly at midnight. Although it is now easier for a girl to get permission to stay overnight, the majority still leave that same night. So the time pressure is there. In fact, the element of time points to one major difference between the mixer and other kinds of formal dating. The mixer is unlike a dance on a coeducational campus in that the girl will not be there throughout the week. Both male and female are aware that they have approximately four hours to find out if they want to get to know each other better.

People must quickly evaluate each other and attempt to make contact with those they have decided are desirable partners for the evening. Some are mutually attracted, but many more get rebuffed or end up with someone they don’t really want to be with. All night long people are being approved or discarded on the basis of the one characteristic that they are least able to rationalize or discount— their appearance.

Thus, of course, is a threatening situation to all but the most attractive. One’s worthiness becomes equated with one’s face and figure, and personal values and self-esteem get washed away in a flood of inadequacy feelings. When rejection is obvious, and even recurrent within the same four-hour period, it makes inroads on the individual’s perception of himself and his relationship to
YIN AND YANG

others. A strong approach-avoidance tension fills the air. The general strategy of both sexes becomes a question of how to achieve the maximum exposure with the least amount of personal risk; that is, how to be seen and appreciated and asked for a dance (or be given the cue that someone would like to ask for a dance) without being seen as alone and needing someone.

Throughout the evening men and women are conscious of being constantly evaluated and desired or discarded. Because everyone’s ego is threatened, people devise ways to protect themselves. Verbal patter and social maneuvering are “fun,” but here they are used as protective devices, not as an end in themselves.

The people we talked to felt that they had suffered “But as we reflected on our experiences at Washington University, we realized that Yale was only a caricature of things we had experienced elsewhere. We had met this beast before, but we had not recognized it in its subtler expressions.”

because of the structure of their formal dating system. When students talked about a mixer, or mixer-like situations, they often saw the members of the opposite sex as the Enemy. Men, especially, tended to reserve real friendship for their fellow men, and women tended to regard each other as competitors in a close race. Instead of gathering together for support and communication, women saw their own status in terms of success with the opposite sex. Until the very end of the first year it was unusual to see Yale coeds eating lunch with women or having more than one female friend. Women surrounded themselves with men and felt that a lot of time spent with girls indicated failure in the social arena.

Evaluation of personal worth was often based on one’s market value, and definitions of masculinity and femininity followed cultural stereotypes rather than individual ponderings on selfhood. This objectification is not blatant to either sex because flattery and manners and the chance to be on someone’s pedestal are easier than taking on the responsibility of portraying the range of one’s flawed, but more complex self.

People trade on fast banter and surface qualities, and if the interaction is not successful, at least they have not risked their real selves.

Many of the women and the men were possessive and afraid because they had had little interaction with the opposite sex and little time to allow relationships to evolve naturally. Others, much like relationships we remember as we were going through Washington University, were bound by this intense need to “have someone,” because it was in someone else that one’s identity and the respect of others lay (i.e., being known as “David’s girl” often described a girl better than her own name). Once a person found someone he liked, he rarely dated around. At Yale, a guy saw his girl friend every weekend possible and eagerly awaited her next visit. When she came, it was intense and idealized. Each saw the other at his best. There was enough time between visits to keep the glamour and myths alive.

The weekend situation creates an unreal view of the opposite sex. We felt that the idealistic conceptions that people had of one another were predicated upon unreal expectations and thus were potentially destructive. The intensity that was produced so rapidly did not allow people to get to know each other and appreciate each other in the same way they did their friends. Most important of all, a separation was created between the idea of “lover” and the idea of “friend.”

Men and women seem afraid of one another—afraid of being hurt, of being alone, of being vulnerable. So they rush into the first secure and kind relationship they can find with a less discriminating fervor than their own intelligence would otherwise allow. Especially at graduation time, when leaving “Mother Yale” is imminent, we found that a great many men began to look around seriously for something that would make the weaning process less painful. Often this something was a wife. A respectable percentage of Yale, Smithies, girls from Holyoke, and a few other schools were married or engaged by the end of their senior year.

Perhaps this all sounds exaggerated and extreme, but we recognized a great deal of what we saw at Yale in male and female relationships in general. Certainly our
years at Washington University, even taking into account that we were not hampered by the weekend system, suffered from some of the same over-idealizations, lack of communication, insecurities, and the search for status through one's dates that we have described at Yale. Both of us were sorority members and we can remember the mixers with fraternities, muted perhaps because we would know some of the men from other campus situations, but stressful nevertheless. You knew you were being evaluated as a "piece of meat"; you knew some men found you unsatisfactory, and the sheer crassness of it all left you defenseless.

So you built a social shell and pretended that no one could penetrate it. And you developed the same kinds of hostilities and self-doubts that we have described. In some ways you were even unluckier if you were one of those people who was attractive enough to be a smashing success at every event. Then you were paraded around as a trophy by your date, by your fraternal group, and in the end by yourself. It was a destructive process all the way around.

As we remember the formal dating situations at Washington, they were mercurial: great if it was your night to win and devastating if things were going badly. The dances were carbonated, full of forced animation, "purple passion," competition, and cattiness (on the part of both the sexes) and again based on the kinds of games that the sexes had chosen to play with one another. As at Yale, most people wanted to get out of that pattern. They were searching for someone to love or at least someone with whom they felt comfortable.

For the boys, the pressure was there to "score"; for the girls it was important to show that one was worthy of the attentions of a desirable man. People sought intimacy and intensity before the relationship warranted it, but at least they were not limited to weekends. So things often burned out before they got too serious. But we also knew many couples who fell into early marriages for security's sake or for many of the reasons that motivate people on non-co-educational campuses. In either case a natural evolution of male and female friendship was usually thwarted.

By the last of our years at Washington, things were starting to change. At least a small group of people—generally those who had never needed or wanted sorority and fraternity attachments—were discarding formal dating and structuring their relationships in a less demanding form. But this was a real minority, and the rest of us were trapped into following the only pattern we felt was acceptable.

Today formal dating is breaking down on many campuses. The fraternity-sorority system is fading and new forms are seen as relevant to a new philosophy. Communes and sensitivity sessions are popular ways of organizing student life, and there is a renewed value on open and honest friendship between people. Of course, this way of relating may be more than a reaction to formal dating patterns; it may be part of a general philosophical rejection of standards that promote achievement, accomplishment, and success while devaluing the worth of the individual person.

In trying to be less manipulative and more honest in dealing with others, students are merely being consistent in their counter-response to a whole social code. At Yale this is taking the form of socializing in groups, avoiding mixer situations, and attempting to relate as fellow students in and out of the classroom. We suspect these are no longer adaptations to a strange male-female ratio, but part of a growing phenomenon across the country. People are trying to be less possessive and exploitative of one another.

How permanent all this is remains to be seen. Sex roles seem less vulnerable to change than sexual behavior or cultural mores. Often people find communes and sensitivity groups just a new kind of game—the same old code dressed up in a contemporary style. And style, as we said in the beginning of this article, is easy to take on.

At Yale, some students, especially the younger ones, seem to be trying to avoid this pitfall. This is not easy and the sexes on campus are still in conflict, but this is the healthiest development we've seen at the school since we've been there. At least now there is a chance for discovery and change. The Washington University we knew—in fact the whole era of our undergraduate years—was unconcerned about the ways men and women were treating one another. No one was thinking about alternatives.

**HOPEFULLY,** the Washington University of today, encouraged by the national dialogue on male and female roles and operating from a base where men and women live their daily lives together, will be able to correct this situation. Hopefully, the "Harvard of the Midwest" is over its undeserved inferiority complex and has ceased to look east for direction. No one has the "answers," but the coeducational school is at least free from the traditions and obstacles that impede the homosexual institution. The sexes need a new way of dealing with one another. Washington University might see that its intellectual obligations are equalled by the contributions it should make to the social history of each individual who spends four of his most formative years in college life.
Dr. Ernest L. Wynder had already earned a place in medical research circles by the time he graduated from Washington University School of Medicine in 1950. It was while he was still a medical student that he and famed chest surgeon Dr. Evarts A. Graham did the first large-scale statistical study linking cigarette smoking and lung cancer. From there he went on to Sloan-Kettering Institute for Cancer Research, where he became one of the nation's foremost epidemiologists. He is now president of the American Health Foundation, an organization he founded in 1969 to advance the cause of preventive medicine in this country. The Foundation's motto could also describe Dr. Wynder's life work—

"To Help People Die Young—As Late as Possible"

By MARGARET KAUFMAN
Office of Information

One of the few genuine heroes of our scientific age is the young man with a Startling New Idea. The theme is legendary, but it happens just often enough in real life to keep the legend alive. There was Copernicus and his astronomy, Pasteur and his germs, the Wright brothers and their airplane. And, more recently, there's Dr. Ernest L. Wynder and his cigarettes. You see, Dr. Wynder had this crazy idea back in the 1940's that cigarette smoking caused lung cancer.

He was a medical student at Washington University when he first started trying to prove this theory. At the time, magazines were full of cigarette ads with doctors recommending various brands for "smoothness" and "mildness."

Today Dr. Wynder is president of the American Health Foundation in New York City. Doctors no longer help advertise cigarettes, and cigarette commercials were recently banned from TV to be replaced by anti-smoking ads. By law, all cigarette packages must carry health warning labels.

Dr. Wynder played a key role in bringing about this radical change in attitudes toward smoking. He was one of the first medical researchers to prove the relationship between smoking and lung cancer. His initial findings were published in 1950 just as he was graduating from Washington University Medical School. The paper was a bombshell that set off repercussions all over the world.

As a medical student, Wynder first became interested in lung cancer when he heard Washington University's famed chest surgeon Dr. Evarts A. Graham remark that he had been seeing a lot more cases of lung cancer recently than ever before. What had been a relatively rare disease was suddenly becoming common.

His curiosity aroused, Wynder began to research the medical literature for clues. He found that Drs. Alton Ochsner, MD 20, and Michael DeBakey, among others, had noted that most of their recent lung surgery patients were men over forty who had long been heavy smokers. Could this be a case of cause and effect?

Wynder wanted to find out. He reasoned that the best approach would be to compare statistics on the smoking habits of lung cancer patients and patients without lung cancer. He went to Dr. Graham, presented his idea, and asked for permission to collect smoking data on lung cancer patients and others admitted to Barnes Hospital and other selected hospitals throughout the country. Much to Wynder's disappointment, Graham was anything but enthusiastic about the smoking-and-cancer theory, although he gave permission for the data collection.

Dr. Edmund V. Cowdry, former director of the Wernse Cancer Research Laboratory and Wynder's anatomy professor at the time, recently recalled the incident. "I remember that Graham was convinced Wynder was dead wrong and was wasting his time."

Wynder proceeded anyway and the results of his study were startling. Of 605 male lung cancer patients, 98.7 per cent smoked, and 96.4 per cent smoked more than half a pack a day. Wynder and the now-convinced Graham published the findings in the May, 1950, Journal of the American Medical Association and were immediately attacked from all sides.
Some critics said that such statistics didn’t prove anything. Everyone knew you could twist figures around. Maybe it was something else entirely. Maybe the cigarettes were just a coincidence.

In answer to critics from the first school, twelve other statistical studies were carried out in four countries by other investigators. These studies involved more than 6000 cases of human lung cancer, and the results were practically identical to the Washington University study. The chance of developing lung cancer appeared to depend on the twin factors of how long and how much a man smoked.

To back up their statistical findings, Wynder and Graham attempted to produce cancer from cigarette tars under experimental conditions in the laboratory, although previous attempts by other investigators to do this had proved inconclusive. They built a smoking machine to collect the tars from cigarettes (one of the first such machines ever built) and painted the shaved backs of mice with the tar. Mouse skin was selected because it has the same histologic structure as human lung tissue and shows similar reactions. After almost a year, they scored another medical “first”: 44 per cent of the eighty-one mice had developed malignant tumors on their shaved backs.

These findings were published in December, 1953. But all the critics weren’t convinced. Some hinted that the Washington University researchers had used a strain of mouse that was unusually cancer-prone, when in fact they had deliberately selected a strain known to be nonsusceptible to the spontaneous development of cancer. Others said that the experimental mice were exposed to the tar for a much longer percentage of their life span than human smokers are, so the situations were not analogous. Not so, replied Wynder. The mice were painted for approximately half their adult lives before they developed cancer—just as men must smoke for twenty-five to thirty years before they get lung cancer. (In the original study, 96.1 per cent of the lung cancer patients had smoked for more than twenty years.)

Next, Wynder and Graham went on to refute these arguments in the laboratory by producing cancer from cigarette tar both in other strains of mice and in a totally unrelated species of animal, the rabbit.

By this time, Graham had given up smoking, but in one of those ironic tragedies, it was too late. In March, 1957, Dr. Graham died of lung cancer.

Thus ended the remarkable research partnership between Graham and Wynder, which had continued in spite of Wynder’s going to Memorial Sloan-Kettering...
Cancer Center in New York for his residency in 1951. Wynder had returned to Washington University frequently to collaborate with Graham and set up the experiments already described with Graham's research assistant, Adele Graninger. After completing his residency and joining the staff of the Sloan-Kettering Institute as an assistant of the Division of Preventive Medicine, the young doctor's picture began to appear regularly in *Time* magazine under the heading "Smoking and Cancer (Cont.)." At Sloan-Kettering he conducted a series of experiments to measure and analyze the cancer-causing properties of various fractions of tobacco tar with his colleague, Dr. Dietrich Hoffmann. About this time he became convinced that since most people obviously weren't going to quit smoking, the answer to the problem lay in making a less hazardous cigarette.

**HE SAW THIS AS BEING PRACTICAL ABOUT HUMAN NATURE.** Others, however, saw it as treason to the anti-smoking crusade. Wynder didn't go along with this harsh judgment. "Apparently society isn't prepared to abandon smoking. That is why it is the duty of physicians, scientists, the tobacco industry, and the government to develop less harmful smoking products."

Wynder believed that safer cigarettes could be achieved by selecting tobaccos low in carcinogenic agents, by making cigarettes that burn at a lower temperature, and by developing filters that remove at least 40 per cent of the remaining tars. In 1970, Wynder reported that during the past decade there had in fact been a marked reduction in the amount of tars in most American cigarettes.

Wynder also turned his attention to other forms of cancer and conducted many epidemiological studies on the occurrence and distribution of cancer of the cervix, larynx, breast, stomach, and bladder. Several of these studies received a great deal of publicity and established Wynder as one of the leading epidemiologists in the U.S. The first was a study done in 1954 which suggested that sexual relations with uncircumcised males may be a causative factor in the development of cervical cancer in women.

Next was a study, published in 1956, linking cancer of the larynx with both heavy smoking and heavy drinking. This answered a popular argument that smoking could hardly cause cancer of the lung without also causing cancer of the larynx, which had not shown the same increase in fatalities. Wynder's study showed that larynx cancer had indeed become more common, but did not cause as many deaths as lung cancer because it was easier to detect at an earlier, operable stage.

Then in 1958 came his well-known study in collaboration with Dr. Frank R. Lemon of the College of Medical Evangelists in Loma Linda, California, comparing the incidence of cancer and coronary artery disease among Seventh-Day Adventists with the rest of the population. The study was based on data from 5692 patients admitted to eight hospitals in California from 1952-56. Of these, 564 were Seventh-Day Adventists who had never smoked nor drunk. Basically, the study found that the Adventists had only about 10 per cent as much lung, mouth, and larynx cancer as the rest of the patients. And the sole case of lung cancer in the Adventists turned out to be a man who had smoked heavily for twenty-five to thirty years before joining the church.

Heart attacks were only 60 per cent as common among Adventist men as among other men and occurred at later ages. Besides being linked to cancer, cigarettes apparently boosted the rate of death from cardiovascular disease, America's number one killer.

**IN THE 1960'S, WYNDRER BECAME INCREASINGLY INTERESTED IN THE PROBLEM OF PREVENTIVE MEDICINE.** He had held a teaching appointment in preventive medicine at Cornell University Medical College since 1954. More and more, Wynder came to feel that epidemiology studies identifying harmful things in the environment were just the first step. Once they were identified, immediate action should be taken to eliminate or minimize these harmful influences.

Here again, Wynder's approach differed from that of some of his colleagues. Many researchers felt that action on the basis of epidemiological evidence alone was premature, that the next logical step was to clarify the biochemical activity of these substances.

Wynder disagreed. "You don't have to wait to find out exactly how something works before you can take action. The history of preventive medicine has shown that time and again. Cholera, for example, was eliminated in London by simply avoiding the use of polluted water, fifty years before scientists identified the actual bacteria responsible. Would it not be wise to use the same approach to prevent diseases caused by smoking today?"

In 1969, Wynder left Sloan-Kettering to found the American Health Foundation, a research and education center dedicated to the advancement of preventive medicine. He did this out of his growing conviction that the time had come for a revolutionary change in the goals and practice of medicine.
At last Wynder was taking on the role of crusader that people had been trying to cast him in since that first smoking and cancer paper appeared in 1950. Physically, he is an impressive advertisement for the rewards of good health habits: swarthily handsome and trim, he looks ten to fifteen years younger than his forty-nine years. He neither smokes nor drinks, and practices what he preaches about getting adequate exercise and avoiding the pitfalls of a diet of potato chips, hamburgers, and french fries. However, unlike his fellow crusader, Ralph Nader, Wynder is no Spartan. He enjoys travel, the theatre, and his country home in Pound Ridge, N.Y.

Wynnder was born in Germany; his family came to this country in the late 1930's. He still has a slight accent, which adds to his considerable flair as a public speaker. He has the uncanny ability to captivate and convince any audience, no matter how hostile. He found this to be an especially valuable trait when he laid his career on the line and set out to enlist support for his new foundation.

Wynder organized the American Health Foundation to counteract the low place of preventive medicine on the health totem pole. Traditionally, preventive medicine has always had to take a back seat to clinical medicine. He emphasizes that most of a doctor's medical education consists of learning how to treat disease; most of his time is spent taking care of people who are already sick. And American medicine as a whole is geared to the health totem pole. Traditionally, preventive medicine is summarized in the Foundation's observation that "a majority of chronic illnesses and accidents which kill and afflicting Americans can be considered preventable. By our own hand—by what we eat, drink, and smoke, and by inactivity—we ruin our health and risk disease.

Adolescences, by inactivity, we ruin our health and risk disease. By our own hand—by what we eat, drink, and smoke, and by inactivity—we ruin our health and risk disease. . . . We literally invite the major chronic illnesses of heart disease, cancer, and stroke." But the simple task of changing these things is made extremely difficult by the stubborn combination of human nature, legal barriers, and industrial and governmental inertia.

Wynder believes that the problem must be approached logically. "Preventive medicine is really consists of the answers to two questions: First, what are the factors that cause disease? Second, once a disease factor has been identified, what are we going to do about it?"

In regard to the first question, the American Health Foundation has a staff of sixty full-time researchers investigating the epidemiological relationship of cigarette smoking to cancer and cardiovascular diseases, of birth control pills to cancer of the breast and cervix, identifying cancer-causing agents in tobacco and marijuana tar and air pollution, analyzing the relationship between certain dietary factors and colon cancer, between blood lipids and breast cancer.

Although it is unusual for a small voluntary agency to have its own research program, Wynder says in this case it is necessary. "Relatively little research is being done in the field of practical preventive medicine so the Foundation hopes to serve as a means of giving impetus and direction to others."

In the what-are-we-going-to-do-about-it area, the Foundation is involved in the setting up of a demonstration Health Surveillance Center in Manhattan, scheduled to open in March, 1972. The Center will test one of preventive medicine's basic tenets: that by identifying indi-
individuals with a high risk of developing a certain disease, and by eliminating the risk factor, you can decrease a person's chances of contracting that particular disease.

Patients at the Center will go through a battery of screening tests, including a detailed medical history, a blood count, urinalysis, blood chemistry test, EKG, chest X-ray, mammography, cytology, tonometry, audiometry, vision testing, pulmonary function studies and a physical examination.

The results of these tests, automatically processed, will be available in about one hour, allowing a physician to discuss the results with the patient on the spot. Computers will be used to calculate a patient's "risk profile" for certain diseases, and all information, in computerized form, will be kept in a central data bank for immediate recall by a physician. In addition to screening, the Center will offer follow-up care through clinics in smoking withdrawal, nutrition, physical exercise, and hypertension. These are factors which help place someone in a high risk category. Individuals with problems in these areas will be assigned to the appropriate clinic. Long-range statistical studies will determine the effectiveness of this approach in actually lowering disease incidence.

Developing a comprehensive one-hour medical examination, for a minimal charge, has been a real challenge to Wynder and the Foundation. The final result represents the expertise of many fields, including the computer industry. About 18,000 persons will be screened the first year; if the Center is successful, it will serve as a model for others of this type throughout the country.

Other Foundation projects include the development of a safer cigarette; pressing for the enforcement of existing laws to control drunken driving; working with Federal agencies which regulate the labeling of food and chemical products.

The Foundation puts out a free monthly newsletter to inform lay people about what's happening in preventive medicine; in January, 1972, it will begin publishing Preventive Medicine, a new scientific journal with Wynder as editor.

The Foundation plans to open an information center near the screening clinic stocked with books, pamphlets, and posters. With the voluntary help of an advertising agency, the Foundation has produced a cartoon character named Dr. Aaah who will star in TV commercials. Hopefully, Dr. Aaah will instruct children about good health habits as effectively as Smoky the Bear taught them not to start forest fires.

One of Wynder's big concerns is poor eating habits, leading both to obesity and high serum levels of cholesterol and triglycerides, which may be linked with heart disease. A special Foundation committee, which includes a number of high-level persons from the food industry, has just issued a 37-page position paper which states baldly that "our present diet is not right for the way we live." It makes the following observations and recommendations:

1. Within the last 50 years the American diet has changed to include more meat, poultry, dairy products, and simple sugars, and less cereals, potatoes, and other complex carbohydrates.

2. The proportion of calories derived from fat has risen from about 30 per cent in 1930 to at least 40 per cent in 1970, with a 3:10 ratio of unsaturated to saturated fats.

3. Americans should consume fewer calories and get more exercise, to avoid obesity.

4. Americans should decrease their total dietary fat to 35 per cent of daily calorie intake, and eat mostly unsaturated fats.

5. Americans eat too much salt, which increases the tendency toward hypertension. Under normal conditions, salt intake should be limited to approximately five grams a day.

Getting people to follow these recommendations would be a major triumph for preventive medicine, Wynder believes. On the other hand, he admits it's incredibly difficult to persuade people to change ingrained habits, even to save their lives.

Nevertheless, he refuses to give up on them. He believes that "a scientist has an obligation to society," and he meets that obligation in full measure: besides directing the Foundation, he's a lecturer in community medicine at Mount Sinai School of Medicine, an adjunct professor of public health at Columbia University School of Public Health, and his numerous voluntary positions include membership on various government and other smoking and health committees and the arteriosclerosis task force of the National Heart and Lung Institute.

Recently, he was invited to participate in the forthcoming sessions of President Nixon's national program for the conquest of cancer. The choice of Ernest Wynder is more than a symbolic gesture. It is a very real recognition of the growing importance of preventive medicine in this country.
"Of the many things we have done to democracy in the past, the worst has been the indignity of taking it for granted."

Max Lerner MA 25

Gerald Greiman, a former County intern, received his A.B. degree with a major in political science last June. He looks over a burned-out building that he arranged to have torn down.
THE INTERNS

"I do not own that house," the man snapped into the phone.

At the other end of the line, Gerry Greiman calmly reviewed some history he had collected about the house—an abandoned, two-story, frame structure which a St. Louis County building inspector had found to be a dangerous fire hazard.

After a pause, the indignant man said, "Well, all I was trying to get across to you, young man, is that I don't own the house. I sold it to my brother-in-law. But he moved out of town a couple of years ago and I don't know how he can be reached."

Gerry Greiman got the brother-in-law's name, and after two more days of phoning, tracked him down, only to find that the brother-in-law had sold the house to a developer. Several additional calls located the right man within the developer's firm. He readily admitted that his company held the deed to the house. "We plan to take the house down eventually, but recently we've been involved in some more urgent problems," the man said.

When Greiman gave him the details of the building inspector's report and pointed out that the abandoned house posed a threat to nearby residents, the company set an early date to have the house razed.

Greiman, who received an A.B. degree from Washington University last spring and plans to study law next year, explained that even if the developer did not take action, the St. Louis County building regulations division (in which Greiman works) can take administrative steps to remove abandoned houses in unincorporated areas.

"Until recently, County action on houses such as these might have taken years through long court proceedings," Greiman explained. "But the County Council passed an ordinance last February enabling the Public Works Department to act, once a building inspector rules on a house. The department—which includes my building regulations division—can give an owner sixty days either to fix up a house or tear it down. If the owner doesn't do anything, the department then gives him thirty days' notice to appear at a hearing. If the hearing verifies the inspector's report, another thirty-day waiting period is given. If the owner still hasn't acted, the department can let bids for demolition of the house and apply the cost through a tax lien on the owner's property."

Now working full time as Tracer of Lost Landlords Greiman had served in the County's Summer Internship Program. In its fourth year, the program is for students of this area who have had at least three years of college. This summer, the program employed eight students—including Greiman and two other students from Washington University—who were assigned to various County divisions. The students were paid $441 a month for definite work assignments; but two basic ideas behind the program—which was initiated by County Supervisor Lawrence K. Roos—are to teach students about County government and encourage them to enter government as a career. The County program does not attempt to coordinate the internships with classroom studies, although a student's specific academic background is important in being considered for an internship.

A long-time advocate of the kind of effort being made by St. Louis County is Burton M. Wheeler, dean of Washington University's College of Arts and Sciences. "Meaningful student involvement in government can be of immense value to both the student's personal development and to society in general," Dean Wheeler said. After two years of student-faculty groundwork, the College began a Field Study Program this fall to relate studies to work experiences. "The program will have no more than sixteen students this semester, as we want to be as sure as possible that studies and job assignments are blended in an academically sound way," Dean Wheeler explained.

Greiman's experience as an intern was an exceptional one. When he was assigned to Public Works, he immediately started to work assisting the Chief Building Inspector, Ray Bernsen, in developing procedures to follow
through on the new legislation regarding abandoned buildings. Then, suddenly and tragically, Mr. Bernsen died. The burden of carrying out new procedures was left to Greiman, who did his job so efficiently that he was offered a full-time position when his internship ran out.

"I've enjoyed the job in that I've been free to set up my own methods so that they are at least coherent to me. I'm getting a head start on my law studies, too, because there are many legal problems that come with the job."

Not the least rewarding aspect of the work is being directly involved in removing life-threatening hazards, Greiman continued. At the end of September, he saw the first fire-trap razed as a result of his investigations. In this regard, Greiman's labors, although they may seem painstakingly slow, are actually the kinds of projects coveted by young people, who, in general, feel a great deal of frustration not only in having trouble finding employment in the first place but in getting a job in which they can bring about some change for the better.

"The system seems so big, the government so abstract, the authorities so far away," journalist Lewis Lapham wrote about the alienation of students, perhaps thinking more in terms of federal government. But if federal government seems remote, local government is essentially unknown to most young people. And that is the problem St. Louis County hopes to attack through summer internships and by Supervisor Roos's appointment of youths to ex-officio posts on various County committees.

"The focus everywhere today is on the federal government, and this is reflected in the schools, which don't pay much attention to local government," Greiman continued. "I've always been interested in government and urban law. I see these fields as probably the most expedient instruments for changing society—government and law are at the base of everything. What really helped me in my present work was an urban law course by Dr. Mandelker [Daniel Mandelker, Washington University law professor]. That course gave me a practical grasp of the law and techniques in legal research."

How does St. Louis County government in general shape up in the eyes of a relatively idealistic student of political science? "Well, you've got to remember," said Greiman, "I'm from Chicago and that's my major frame of reference for local government. St. Louis County is a 700 per cent improvement over that."

Washington University's other summer interns, Tom Story and Randy Lowe, did not share Greiman's experience in finding a long-range project to settle into immediately. Their internships were more typical in the variety of assignments they received and in the focus on the educational rather than the vocational nature of the program.

Tom Story, now in his third year of law studies at Washington University, agrees with Greiman that, while most people at least think negatively or positively about federal government, "they simply don't give a damn about local government. Most of us just pigeonhole 'County government' in our minds and forget it."

Story was skeptical when he was asked to comment on the quality of the Summer Internship Program. He asked with a smile, "Is this an article to show that, Yes, Virginia, there are students who want to work within the system?" Story, who is conservative in most of his philosophies, meant that he was weary of the tendency of the press to stereotype students. Also, he meant that he would pull no punches.

"I'm not awed by the program—if that's the sort of thing you're looking for," Story continued. "First, I think most students realize that the program is set up to do a selling job, so I think I can avoid being prejudiced by that angle. That part of it aside, I think it's a worthwhile program."

Assigned to the County Counselor's office, Story had several different assignments. He did considerable research, for example, on the validity of an administrative order to license private watchmen and private detectives. While he felt that his work "definitely did carry weight in influencing anyone," he also knew that some of his material was incorporated into memos to the Circuit Court.

"As far as my University study is concerned, I did learn to what extent policy and politics are behind the cases I read about—not that I think the political side is necessarily bad. But, I don't think I learned anything about law that was a great revelation. You'd have to be a regular employee for that. To me, it was an educational program and I learned a great deal about how the County government works. We met most of the department heads and had plenty of time to ask questions on controversial subjects. That's something few residents ever get to do."

"In essence, the County Counselor's office really is a law firm," Story said. "I think that young people in it are
given more initial responsibility than you'd find in a private firm. Some young men in the County Counselor's office are gaining valuable practical experience because they have a pretty free rein. Also, the starting salaries in government are fairly good. But in the long run, you're going to earn more in private practice. The taxpayer is very touchy about higher salaries. I know some fellows in the County office who could name their own salaries outside of government, but they stay. Obviously their motives are other than money.

"My first instinct when I get out of school would be to go for the most money. If the pressure from private practice doesn't prove to be worth the higher salary, then I'd consider seeking work in a government agency. You know, it's easy to talk about sacrificing and being idealistic when you're in school. When you get out, economics becomes more of a real concern. I've also got to consider a four-year hitch with the Air Force coming up for me, and I don't know how that might influence my outlook."

The St. Louis County administration's effort to interest promising students in governmental careers would be more effective through "a comprehensive program of part-time jobs," Story added. "And not just jobs in which college students would do menial work. I think well-motivated students can take on significant assignments. Although there are formidable limits to this sort of thing in any governmental set-up, it probably would be possible. A lot of details would have to be worked out. But, first, the politicians would have to be firmly committed."

Randy Lowe, a second-year law student at Washington University, was assigned to the County Council's office. What impressed him the most was how accessible the councilmen made themselves to residents. Very idealistic and broadly critical, he commented, "The councilmen actually asked my opinion on one important matter. It shocked the hell out of me."

Unlike Story and Greiman, Lowe has had previous experience in governmental offices. He worked one summer in the State House in Providence, Rhode Island (where he also attended the University of Rhode Island). He spent another summer in the offices of two Rhode Island Congressmen. But he admitted his knowledge of local government was very limited—a deficiency which was corrected through his County internship.

"Basically, I think the County government here is good and efficient." In areas where he feels there is a
need for improvement and innovation, Lowe does not think County officials or a majority of the residents share his concern. "These areas are providing more low-cost housing and making certain prison reforms. But these two subjects don't make highly popular issues in the County or anywhere else for that matter."

In visiting the County's correctional center at Gumbo, Missouri, Lowe was favorably impressed with its operation in general. He had some specific criticisms—censorship of mail being one—but he noted that the director of correctional institutions, Robert Grunsfelder, was receptive to the students' ideas. "It should be pointed out that Mr. Grunsfelder must have had a great deal of political acumen to put across the need for the Gumbo correctional center in the first place," Lowe added.

"Much more needs to be done about housing for people with low incomes," he continued. "There's no place for these people to go in the County. Because of racism in the County, I think that the politicians feel it's too great a risk to make low-cost housing an issue. But I think they may be politically wrong in the long run. There's a growing minority that wants things done on such issues and, if this minority is ignored for too long, then government will suffer. I think this is true even on the so-called sacred issue of the pocketbook."

He recalled that in Rhode Island drastic tax reforms had been needed for years. "But top state officials feared making this a campaign issue because it would require introducing a personal income tax for the first time. Later, the same administration was faced with fiscal ruin. To avoid bankruptcy the incumbent governor proposed a personal income tax in the next election campaign. He was defeated by a candidate who ran on an anti-income-tax platform. Then, the new governor, faced with bankruptcy, actually instituted the personal income tax."

One of Lowe's major assignments in the County Council's office was preparation of a detailed report on recommendations of the Intergovernmental Relations Commission. These covered uniform building and housing codes, a uniform arterial road system, and establishment of a Uniform Police Standards and Performance Commission in the County. Lowe felt that his report was not given serious consideration. In general, his major complaint was: "The people in charge really did not take my work very seriously. The councilmen may have asked me questions, but I don't think they really listened."

Robert Kersten, who, as training director for the County's personnel department, listened to the students for many hours during the summer, disagreed with Lowe. "I think that maybe some key people did listen, but the students won't see the results of their work and influence. If someone like Randy talks to a number of councilmen, for example, he's going to make an impression on some points. At least someone is bound to say to himself: 'Here is a sharp young man with a realistic approach.' Maybe that individual will use one of his ideas later on."

"There always is a gap between what is and what should be," Kersten said. "It's up to the students and to all of us to make a realistic appraisal of the constraints of government. You have to remember that there are many decisions to be made in every department, and with a limited amount of money you have to strike a delicate balance among many needs. The important point is that you carry on your work in spite of these limitations."

"I had many discussions with the students and they made me think whether I might have been too docile in my job at times. Yet I know that the head of my department wants to hear all opinions, no matter how controversial they may be. I think today that more County departments are beginning to have this point of view, and that this is true in industry as well."

With the County's current personnel department manpower and budget, the maximum number of interns who can be employed is eight, Kersten explained. "Supervisor Roos does feel that this is an important program," Kersten continued. "He met with the students on their first day, and saw them again before they left to hear their opinions. You don't get that sort of reception for just any program. The Council also has taken a special interest in the interns, who were introduced to the councilmen after a few weeks on the job. On their own initiative, this summer, the councilmen invited the students back for a question and answer period."

"We're egotistical enough to think of this as an elite program. The students are carefully selected—eight were chosen from some sixty-five candidates. Before they were accepted, they took graduate-level examinations and were interviewed by a personnel department board. During the summer, I spend most of my time setting up the program, arranging for the departmental visits, and holding weekly discussions with the students. This group of interns was particularly bright and they interacted very well as a group—which improved their effectiveness," Kersten added. (Other schools represented in the program were St. Louis University, University of Missouri, University of Texas, Radcliffe College, and St. Mary's University.)

But what did the supervisors at the departmental level think of the students? Weren't they resentful about having to find room for critical "college kids"?

"Well, the best answer to that," Kersten replied, "is that a number of the departments already have requested interns for next summer."
Dr. Watson is a philosopher who also holds an advance degree in geology and has done geological research in Iran, Turkey, and the Yukon. He and his wife, anthropologist Patty Jo Watson, are co-authors of Man and Nature: An Anthropological Essay in Human Ecology. This article, based on an Earth Day address at the University of Iowa, incorporates ideas developed in the author’s discussions with Philip M. Smith, deputy director, Polar Programs, National Science Foundation.

TECHNOLOGY

AND

RESPONSIBILITY

By RICHARD A. WATSON
Associate Professor of Philosophy

ONE MAKES mistakes—even a conservationist. Technology tricks us all; but who is really responsible? Consider the Great Conservationist Pollute-In. Conservationists play musical chairs these days—those from San Francisco fly to New York and those from New York fly to San Francisco. We wave from our aluminum coffins as we meet in the air over Kansas, helplessly working on our speeches. We travel by internal combustion engine to airports and back, and by jet engine to other cities and back; we add to the debris of dirty air by burning nonrenewable petrochemicals as fuel; we add to the clutter, confusion, and busyness of everyone’s life by contributing our bodies and emotional energies to the teeming crowds.

How much better if conservationists stayed home to contribute by example. Our symbolic gesture could be to speak anywhere within walking distance of home. We could have our say where words could be followed by local action. Oh, a few with national reputations—David Brower, Barry Commoner, Paul Ehrlich (do we need many more?)—can do valuable work flying about. Most of us, however, set a bad example.

Is it just a bad cosmological joke? Can we decide not to use technology wastefully? Or is it impossible even for the critics to avoid being caught in Madison Avenue scenarios as ideal consumers of those very facilities that pollute the earth by wasting its resources? This is the paradox: We must use the machine to deplorize it. So who is responsible?

It is clear that we cannot avoid using the facilities of technological civilization; nor do we want to destroy the machine. We want simply to domesticate technological civilization so that it is not destructive of resources and life. We want a good life in which back-breaking toil and poverty are eliminated, and proper use of technology leads to that goal. Can we reach it? It depends on our technique.

When men use their intelligence systematically, they do things with technique, i.e., mechanistically with set procedures. Technique leads to technology—the systematic control of materials and men. By forming plans for the future based on experiences of the past, men have raised themselves to be masters of nature and their own and other men’s lives. Most spectacularly, this has been done through the development and use of machines powered by fossil fuels.

But more insidiously significant are religious, political, and psychological techniques for manipulating men. Modern civilization is technological because mechanistic techniques are used to control both materials and men to keep business, industry, and government functioning. This is the most efficient way to maintain social order.

Mechanism began in the modern world with the invention of the clock that keeps us all on time. Workers must behave like machines if a great city is to be kept in operation, or if an assembly line is to turn out an automobile.
TECHNOLOGY AND RESPONSIBILITY

We all dance to a mechanical tune, and when this leads to polluted environments and to lives that seem meaningless and monotonous, then we come to the questions: Is this necessary? Must technology develop and be used the way it is? Are we trapped by the mechanistic system?

Must industry continue to grow and use up resources to prevent our economy from collapsing? Is war the only industry that will sustain this progression because armaments are produced for the most efficient total destruction? Must the production of internal combustion engines continue because the changeover would be too disruptive for our economy to survive? And what of the social structure? Must population continue to grow and people to live in ever larger cities so that we increasingly must work as slaves to time and be governed as masses to avoid chaos? Would understanding among men and nations be destroyed if no one negotiated on the basis of power and threatened force? Is the growth, development, and direction of our mechanistic technological civilization autonomous?

Do we really have any major free choices about the basic course of our lives in technological civilization, or must we continue on a course already set? For example, who can resist the pressures of existing automobile industries and superhighway systems? Capital investments here run to hundreds of billions of dollars, with livings provided for millions of people and convenience of transportation for everyone. We should stop using steel wastefully. We should preserve petrochemicals for recycling use. It is, of course, utopian nonsense to suggest that a changeover could be done at once as it should be. The crucial question is whether it is possible to do it at all without a complete revolution of society and technology.

We want to know whether individuals can act independently in a technological society. Ironically, individuals acting independently seem to be major causes of the present trouble. Relatively free choice for the agrarian pioneers and urban builders has led to lock step lives for many businessmen, industrialists, and workers, and to the seeming necessity for near totalitarian control of all human behavior. The autonomy of the individual appears to result in the autonomy of technology which now threatens individual freedom. Who is responsible?

I believe that only individuals can be responsible for anything. Abstract entities such as universities, industries,
corporations, classes, governments, and churches cannot be responsible for anything. Men who speak in the name of institutions are accountable for the actions, good or bad, of institutions. This includes the overall action of that grandest of institutions, technological civilization. Who decides to pollute the Mississippi River? Who decides that the air of downtown St. Louis will be unbreathable? Who is responsible for the destruction of neighborhood communities in the urban redevelopment of St. Louis? Not just managers, but also you and I. Everyone is responsible to some degree because everyone makes individual decisions which add up to the constitution and actions of institutions. With our pioneer ethic, our individualism, our desire to be left alone to do our own thing, hundreds of millions of individual decisions lead to results that no one desired or planned for and that no one wants to take individual responsibility for.

A major result is that there are not enough of the basic necessities of life for all the people on earth today. Who is responsible for half the world’s population being undernourished? Everyone who manages to eat well. What else can fortunate people do? United Nations’ statistics suggest that if all food were distributed equitably, everyone would be undernourished; so if the species is to survive, some must starve so others can thrive. Given limited goods on earth, for some people to be comfortable, others must be deprived.

Two sets of decisions stand out as primary causes of these cruel strictures: the loosely coordinated individual decisions leading to the present development and exploitative use of a wasteful technology, and the largely uncoordinated individual decisions of hundreds of millions of people to have children. These decisions have resulted in a world population size larger than the earth can support at the present high standards of technological civilization.

Because the basic necessities of life are fundamental for all men, the size of the population and the use it makes of technology are central in considering whether our civilization is going in a direction and with a growing speed that we cannot change.

One way to increase supplies to maintain our present course would be to develop means of refining ordinary rocks and sea water and to grow more food; but even these are finite and could not support an ever-growing population. More serious is the fact that such (so far undeveloped) techniques would demand immense supplies of energy. This energy could be provided only by atomic reactors, and would be needed in such quantities that radioactive wastes or even just the great increase in heat would endanger all life on the planet.

Rather than a superior technology of dissipation, what is needed is a new technology of equilibrium that recycles all resources. But to develop a technology on the ecological model would require an immense turnover and probably a considerable diminishment of total wealth and power. It is difficult to conceive of the powers-that-be acting so as to jeopardize so seriously their present status. But, by acting to maintain the status quo, they are probably hastening the downfall of our present technological civilization and thus the collapse of their own empires. It would be better to convert now than to try to rebuild from ashes.

The major problem with the ecological model is that it dictates a population size considerably smaller than the present one. Philip M. Smith and I argue that the population size that could be supported today with every individual enjoying a modestly civilized standard of living is no more than 500 million (“The Limit: 500 Million,” Focus/Midwest, 1970). But even that many people could not be supported for long, because there is a finite time limit to the existence of the present technological civilization, precisely measured by the finite quantity of concentrated resources on earth that it can use. As resources are dissipated, population would drop to the size that could be supported by hunting, gathering, and elementary farming. Some critics say this will happen by the year 2000; but even if it does not happen for hundreds of years, it appears to be inevitable on our present course.

Given the destruction of the environment, the earth will be capable of supporting fewer human beings at an elemental level after the present episode of technological civilization than it was before. Because most concentrated resources will have been destroyed, there will not exist the material possibility for mankind to rise through the use of fossil fuels and ores to a civilization of this technological sort again. Obviously, also, the longer we continue with the dissipating technology, fewer will be the resources that remain for use by a recycling technology. If we do convert to the ecological model to save civilization, the longer we wait the fewer people the new technology will be able to support.
What is to be done? The first step would be to reduce population to reduce demands. We can expect calm reconstruction of technology only when the imperative to fulfill basic human needs becomes less extreme. However, humane reduction of population will go slowly, while needs increase. A catastrophic transition, returning man to ecologic balance with nature at a very elementary technological level, seems more probable than a smooth transition to a new technology.

Individuals who control governments and corporations are beginning to recognize that population size is central in issues of power, control, wealth, individual freedom, and human survival. The most terrifying response is the move toward totalitarianism. We do have massively large populations in the world today, and the people who make them up must be controlled to coordinate their activities. Otherwise, none of their needs could be satisfied adequately and there would be social chaos. Therefore, we are tied more closely to the hands of the clock—to mechanical ways of working and living—because there are so many of us that we should not be able to move at all if we did not move in syncopated rhythm. The new technology that is being developed is for controlling the masses, not with hardware (although there is some of that, too), but with techniques of persuasion, conditioning, and deceit. The professionals who use these techniques are politicians, advertisers, managers, and teachers. I teach philosophy, but I also help to keep young people off the street and out of trouble until they can enter the job market without disrupting the system.

We are all persuaded in various ways. Why do I continue to live and to work by the polluted waters in the sulphur dioxide smog of an urban catastrophe? I, who do not drink alcohol, drink treated water that may harm me more. I, who do not smoke, breathe the harmful equivalent of two packs every day. I, who love peace and quiet, live in St. Louis. We are all co-opted by our technological civilization. Given what I (and millions of others) want to do, it can be done now only in a city. When will we change things for the better? Can we?

We know how to begin: Reduce population to reduce the need for wasteful technology and for mass controls. To do this humanely, zero population growth is not enough; stopping at two is not enough; for a number of generations no couple should have more than one child.

It is as difficult to conceive of this social revolution taking place in time as it is to conceive of the technological revolution taking place in time. Yet, given that mass population reduction seems inevitable soon, voluntary restriction to one child a family is the only humane, non-chaotic way.

Probably world population will continue to increase and voluntary methods will not be sufficient to avert disaster. Thus, government curbs on procreation will be legislated. As an infringement on individual freedom, the use of involuntary birth control methods will be justified as being logically no more extreme than many other controls we accept. Most people admit the right of the state, church, and family to regulate individuals' sex lives; the regulation of conception is just another step—a step toward survival.

Will even involuntary methods slow population growth in time to avoid world-wide famine, pestilence, and war? It seems doubtful that they will be effective enough. Given this, one can develop a pessimistic scenario of a final solution to the population problem. The text for this theme is President Johnson's statement in 1967 that there are "three billion of them and only 200 million of us, and they want what we've got, but we're not going to give it to them." I do not advocate it, but it could go like this:

Population would continue to increase, and with it demands for resources. The East would need food, and the West raw materials, particularly rare ones. Famines would lead to chaos and anarchy in the East, frustrating the West's desire for resources from the East. So the first move of the West—some combination of North America, Europe, and Russia—would be to cordon off the plantations, mines, and oil fields of the East, including Africa, Latin America, and South America. These areas would be occupied and defended with no other effort being made to harm (and none to help) the surrounding, starving masses unless they stormed the defense lines. Then they would be shot.

Pestilence which follows famine, however, does not limit itself to the poor. Facing this, the leaders of the West might decide that the starving, pestiferous, Eastern masses must be wiped out to save (Western) mankind. (Competing industrial Japan could be destroyed at the same time.) The people of the West might be convinced that the people of the East are so miserable that extermination would be for their own good. More than likely, the view would be promoted that Easterners are not really
human because they are colored, or not Anglo-Saxon, or not Christians. In this scenario, then, a pseudo-justification for racial-religious genocide—a “natural” way to reduce population—would be based on the myth of white, Christian superiority.

It does not matter that genocide is immoral, that the “facts” are wrong, and that the arguments used to support it are illogical. No human being should ever forget that human beings have been wiping out other human beings as far back as we know anything about the species. Six million Jews do not begin to fill the bloody bucket of peoples who have been destroyed by man’s propensity for genocide.

Who, the ideological apologists might say, will know or suffer from this in a hundred years? In 500, it would be deplored only by historians; in 5000, forgotten. Is this too much of a price to pay for the survival of the species? The fallacy in such casuistry is the assumption that genocide would succeed without so brutalizing its perpetrators that civilization would collapse in the madness of every man at every other man’s throat. Extreme racial, religious, or even economic differences are not needed to set one group against another. The Jews are white, and of the Book, Catholic and Protestant Christians battle today in Ireland, Germans were portrayed as monsters during World War II, and brothers fought across the lines in the American Civil War. Genocide against the East would almost certainly release (or has already released) such violence as to destroy all life, or at least all human life, on earth. Genocide, murder, and war can never bring peace on earth, for no man is safe when it is permissible to kill any man.

The trend can be reversed only if humane ways can be applied at once to put the human species in ecological balance with nature. If we could achieve that goal, then we might overcome the seeming autonomy of technology, the inability of individuals to make effective decisions for whose additive results they are willing to admit responsibility, and the apparent need for totalitarian control of the mass. There is some hope that if population were of such size that the basic needs of everyone could be satisfied without depriving anyone, then we could have a humane society. But so long as our world is overpopulated there will be seeming sanction for dog eat dog.

Articles like this traditionally end on an optimistic note, but I cannot strike it. All I can do is describe a utopia I would like to live in. Societies would not be exploitative, as are modern capitalism and communism, for there can be no humane society so long as some human beings live by buying, selling, and controlling for profit and power the wherewithal to satisfy the basic needs of other human beings. Only when needs are truly taken as the motivation of all basic human activity and are completely set over profits and exploitation, can we have a humane society.

This utopia would be a place where there is not a lot of duplication. There would be no proliferation of duplicate lives to decrease human dignity and to promote disdain for human life. There would be a great variety of different people of different races with different interests and ways of life. They would not be in a hurry to do everything there is to do and to use up all the world’s resources, now.

Ideal communities from farms to cities have been designed in which individuals can know one another and can participate in the direction of their own lives. Building on the ecological model, these communities will probably use a simple technology. A simpler life with simpler needs than we now have could be more satisfying for most people than is their present existence. We should have to use less power, work with hand tools, learn the use of skills to replace brute force, and work to satisfy the basic needs of everyone before building wealth and power for the satisfaction of the inflated desires of anyone. I think that this would enhance the cultural values of civilization. There could still be fast transportation, instant communication, books and music, sports and leisure. We are not out to destroy technology; we want only to alter it, to be proud, to be responsible for what it does, to give the human species a chance to survive. But it may be that such a utopia would work only if populated by a species different from man as we know him now.

There has been no effective challenge to mankind’s dominance of the earth since plants and animals were domesticated ten thousand years ago. But now the earth slows us down. We must change the direction of our technology and reduce the size of our population. We must gain control and bring mankind humanely into balance with nature. If we do not, unfeeling nature will.
Alumna Elizabeth Gentry Sayad returned recently from a sentimental journey with her husband, Homer, to his native Iran. In this article, she describes their search for her husband's father's grave in remote Azerbaijan, Iran's northwest province on the Turkish and Russian frontiers. Mrs. Sayad, a frequent contributor on the arts to many newspapers and magazines, was an admissions counselor at the University from 1959 to 1962, and is vice president of the Arts and Sciences Century Club.

The Homer Sayads at his father's tombstone in Rezaieh, Azerbaijan. The script is in Syriac, the ancient language of the Nestorian Church.
"We're very sorry, sir, but heavy snows and ice in the Zagros Mountains make it impossible for our plane to land in Rezaieh today. We may get as far as Tabriz, inshâlah (Allah willing)." My husband, Homer, has waited thirty-seven years for this opportunity to return to his birthplace in Azerbaijan, Iran's northwest province on the Turkish and Russian frontiers, and he is greatly disappointed.

We must decide in moments whether to risk a perilous motorcade over the mountains from Tabriz, if even this will be possible, or to return to America with our most meaningful personal mission unaccomplished. The chief of protocol and the interpreter assigned to us by the Iranian Ministry of Economy are noticeably apprehensive of the journey, but equally eager to arrange the impossible on behalf of our absent host, Minister of Economy and former U.S. Ambassador Hushang Ansary, who is down in the Persian Gulf leading a trade mission to Abu Dhabi.

But the homing instinct wings aside all notions of anxiety about our children waiting half-way around the world in St. Louis. Dashing through the Tehran airport, we board the jet liner that is to carry us like a magic carpet of old on an exotic adventure that is still more fantasy than reality.

Local government and Air Iran officials greet us in Tabriz only forty-five minutes later. They cautiously describe the risks in attempting the 300-kilometer drive over the mountains to Rezaieh. "One good blizzard can seal off the passes until spring," warns Jalal Farnoudi, chief of our reception party. As mountains are too high for helicopters and there are no rail connections, it could be a longer homecoming than we had bargained for.

While awaiting weather reports they propose an official "progress" tour of factories, an industrial park, and a colossal new train station which is as lonely as our Union Station simply because the "terrible Turks" haven't completed their share of a new inter-European line from Paris to Tehran.

Interested as we are in the economic development of the country, we find it hard to wait until dawn to proceed with our search for the past. The cries of early morning roosters alert us to clear skies, and I stock my hand luggage with emergency rations of pistachio nuts, pomegranates, and vodka long before our cars arrive at eight. Leaning out of the windows to assist our driver in the first foggy pass, we soon lose sight of the second car and linger in the town of Marand, where angry policemen rush to stop us from taking pictures of the markets. Women in the long checked chadors, which they hold over one side of the face so only noses and curious eyes peek out, vanish as we stroll down the street. Dried clusters of grapes hang outside the shops, where rows of melons that have been buried in straw since summer are now lightly sprinkled with fresh snow.

As soon as the second driver rolls into town, we begin to cross the great Azerbaijani plains, with their distant ring of 15,000 foot peaks, which resemble parts of New Mexico and Colorado. Camels, water buffalo, and herds of fat-tailed sheep graze in the broad brown valleys. The nomadic villages will be empty until spring, but we pass a covey of Kurdish women in their brilliant gold-threaded skirts and chains of coin jewelry, who are doing the family wash in an icy mountain stream.

The paved road ends abruptly as we approach the final and highest pass west of Lake Urmia, the enormous salt lake where Homer learned to swim as a boy. As we wind around the unguarded hair-pin turns at ten miles an hour, Homer inches forward to the edge of his seat, eager for that first glimpse of the lake and his homeland.

The fields on the other side of the pass are at once more fertile with rippling groves of sendjid trees. Peculiar to Azerbaijan, the sendjid, which is related to the olive, lends a graceful whispiness to the landscape. The adobe villages also look more prosperous, with enormous haystacks against the walled-in houses. White plastered summer houses with second-story towers verify Azerbaijan's reputation as a veritable Garden of Eden in summer.
Fifteen kilometers out of Rezaieh, the local Ministry of Economy chief, Yadollah Totunchi, jumps from the jeep from which he has been checking our progress with gendarmerie stations for the past six hours, and we follow him into town. Homer finds the spreading city strange without the ancient walls and gates that protected its inhabitants from the once marauding Kurdish tribesmen. Pahlavi Avenue, where his father had built a new home just before his death, is unrecognizable to Homer. His sister in Tehran had told us that the spacious home is now a new cinerama-style theatre.

The staff of the handsome, new, 45-room Rezaieh Inn install us in a corner suite with flowers, fruit, and a bar stocked with everything from vodka to the lovely local wine. Since we are a day behind the schedule of Ministry "progress" visits here, Totunchi is eager to lead us to the charming new museum of local history and artifacts that is our first stop. With only minutes of light left before dusk, I beg my female interpreter, Hurri Moslehli, to ask if we may try to find Homer's father's grave before dark. Since we have been warned of the possibility of having to return to Tabriz the next day because of storm warnings, this becomes an urgent mission.

Although Hurri has some difficulty getting the men in charge of the party to listen to her, we find ourselves skidding on the icy streets towards the Christian village of Charbaksh just outside town, and we are soon climbing on foot the snowy hill toward the cemetery. The winding line of dark figures against the bleak winter horizon is like a Fellini film. Stumbling into drifts while trying to read the tombstone inscriptions in Persian, Armenian, and Syriac, we quickly see the futility of our search under these conditions and determine to try again.

IT IS A SAD trip back to the inn where Governor Novvatolla Arbabi is holding a banquet in our honor. The power lines collapse under the heavy snow just as we arrive, so it's possible only to make a quick change by the light of one candle before the guests arrive. We sit with our hosts in the middle of a huge U-shaped table for the very formal dinner of ten national dishes (abghousht). Although the Governor commands "The Butterflies," a Persian rock-style band, to switch to classical Azerbaijani music, and spreads the word that anyone may dance, no one does. One of the few wives present explains that most husbands prefer that the women dance only at female parties at home.

Halfway through dinner, Totunchi's scouts bring in a Christian who is the son of the contractor who had built the Sayad home. He knows the exact location of Dr. Sayad's grave, and promises to return early in the morning as our guide. Others continue to search for an old family retainer whom Homer hoped most to see. He was the servant who had groomed the horses and who had sung the wailing, microtonal, epic Persian poems to comfort the children on various flights from the Turks or Russians.

O UR EXPECTATIONS are as high as the bright morning sun when the inn's maitre d' brings breakfast trays of toasted wheat bread (sangag), white sheep's-milk cheese, and Nescafe. Everyone is waiting in the lobby and we are soon off to the cemetery once more. A spirited cheer from the advance guard announces the spotting of the large marble stone whose bold inscription is in Syriac, the ancient language of the Nestorian Church which split from Rome in the fourth century. Stemming from Aramaic, the language of Christ, it is still the mother tongue of Christians from the Caucasas to Iraq, whose rugged mountain habitats protected them from the Arab invasion of 642 A.D., which converted the rest of Iran to Islam.

Although they claim to be "Assyrians," descendants of a lost empire, members of this one per cent minority today are largely Presbyterian, as nineteenth-century American missionaries found it easier to convert the Nestorians than the Moslems.

Homer's father, Dr. Elisha Sayad, American-trained at the University of Michigan, class of '98, was a man of both worlds, but he always considered himself a Persian first. He was so popular with neighboring Moslems that when he was once imprisoned by the present Shah's father after the overthrow of the old Qajar Dynasty in the early twenties, the Moslems requested his release by exercising an annual privilege granted during the holy pageant of Muharram.

By the same token, the Rezaieh schools closed on the day of his death, in remembrance of the humanitarian and medical services he performed for rich and poor alike, as well as his leadership of the exodus of 100,000 Christians from Rezaieh in 1918, when the Turks pushed them on a 300-mile march to the south.

Dr. Sayad died in his prime, leaving a strong legacy of responsibility to his elder son, Homer, who became the head of the Sayad clan at 16. The deaths of Homer's mother and a younger sister followed within two years. When he left for the university in England, after sending two very young siblings to a married sister in Hamadan, only the deserted buildings and vineyards remained.

It was Homer's partnership in an international ac-
counting firm that eventually renewed the ties with his native country thirty-seven years later and sent him on this mission to open a Tehran office. The return is also a happy acknowledgement of the social and political changes in Iran which are as fortuitous as the dramatic turn of events in his own life.

As we stand now on this lonely, frozen hillside, chill winds from the Zagros Mountains remind us that just beyond these peaks looms Mount Ararat in Russian Armenia, where Noah’s Ark reputedly came to rest when the Flood subsided. Despite the restless migrations of peoples, the dispersal of families, and the battles won and lost over the 2500-year spread of the Persian empire, there is an indomitably proud Persian spirit that returns and unites.

Totunchi discreetly changes our pace at this point by suggesting a trip to the bazaar. From the twinkle in his eye, we can guess there are surprises in store. No sooner do we enter the unpaved alleys under a high vaulted roof with the inviting smells of roasting beets and chestnuts, than Totunchi’s henchmen produce a slight, elderly man who fondly embraces Homer—an old fishing buddy from childhood. Another turn toward the camel bag shops and we meet a woman from Abajaloo, the village of the Sayad summer home where, we soon learn, Homer’s old servant still lives in good health. Unfortunately the 23-kilometer trail to Abajaloo is impassable.

A visit to the lovely campus of the old American college restores one vivid boyhood memory. Homer has often talked of the grand avenue of chinars, a type of sycamore, which lines the grounds of the school his grandfather attended nearly a hundred years ago. Taller than ever, they grace what today is a state agricultural college.

Back at the inn, an Irish veterinarian, on a United Nations mission to Azerbaijan, tells us how he is organizing a convoy of Land Rovers for a dawn departure ahead of the blizzard predicted for tomorrow. So conversation at the Governor’s farewell dinner in his home is all about how to get out safely. Shortly before supper, our host eloquently recites two poems, one of which is his own, about the city: “Where else can a Christian church and a mosque stand side by side, each casting its light upon the other?” Various guests begin to recite snatches of verse, a popular Persian pastime, and even Homer surprises himself by dredging up several stanzas of Hafiz, one of the classic romantic writers.

After the buffet of regional specialties, our host turns down the lights and very formally invites each lady to a rather sedate fox-trot. This charmingly Victorian period concludes with a somewhat stiff but oft-rehearsed passe double with his wife. Now it is our turn to do something “Western” and we choose a Viennese waltz.

With a fresh plate always before us for the never-ending rounds of dried fruits, nuts, and candies, the evening turns now to the local Azerbaijani music with its fast, driving, irregular rhythms. One by one the male guests take turns doing their favorite spirited dances, while the others crack their second and third fingers together percussively in time—a uniquely Persian skill. A few wives, giggling nervously in native costumes provided by the hostess, dance a figure or two before modestly retreating to their side of the room. The hostess handsomely tops everyone in her Kurdish bridal dress, complete with twelve layers of multi-colored petticoats worn in winter months for warmth. It is a hearty, warmedhearted evening.

With Land Rovers, chains, and brandy, we leave Rezaiuh in separate cars amidst a flurry of fond farewells and good wishes for our trip back.

The landscape is such a fairyland in the new deep snow that its beauty disguises the dangers ahead. I wonder what it would be like to spend the long months until Easter in a remote village without electricity, sitting and sleeping around a charcoal brazier in the middle of an adobe room. En route, I am impressed by the peasant hospitality. Homer has always said Iran is the most courteous and hospitable country in the world to strangers. When Hurri and I stop in one tiny hamlet, a simple village bows and invites us into his home for warmth, offering bread, yogurt, and water. Because the men fear we’ll miss the plane that is waiting in Tabriz, we press on.

After nine very tense hours we prepare to leave for Tehran, and make our sad goodbyes to our wonderful companions.

Our interpreter, Hurri, a petro-chemical expert for the Ministry of Economy who studied for six years at the University of Tokyo, expressed well the attitudes of today’s young Iranians when she said of herself, “I know I have a great duty to my country which I will fulfill. At the same time I want the newest kind of life possible.” This wonderful mixture of traditional values with an adventurous, progressive spirit gives modern Iran its new vitality.
Comment / On the Student Union and Performing Arts Center

At the time this issue went to press, final plans were being made for the cornerstone ceremony for the $4.3 million Student Union and Performing Arts Center, now under construction.

The new SUPAC structure, to be integrated with Karl D. Umrath Hall to form a central outdoor plaza, will be built of reinforced concrete with a facade of precast, red granite, textured panels to blend into the general campus architectural style. It was designed by Smith and Entzeroth and Robert Vickery, associated architects.

One of the striking features of the complex will be a three-story, glass-walled pedestrian gallery, which will front on the south edge of the plaza and will serve as the focal point of the entire Center. It will also function as a lobby, complete with information and ticket booths.

One of the most sorely needed facilities the Center will provide will be a new and greatly expanded bookstore. Plans call for allocation of 14,000 square feet for the bookstore—nearly double that of the present facilities in Brooking's basement. Beneath the outdoor plaza, which should turn out to be a favorite gathering-place for students, faculty, and visitors, will be a large recreation room. The Center will also include two dining areas, an informal snack bar, a formal dining room, and quarters for various student organizations.

The new theatre will fill another very pressing and long-felt need. It is intended to be an important teaching tool and has been designed to be adaptable for many uses. The main theatre will seat 750, with provision for conversion when appropriate to a 550-seat proscenium configuration or to 650 seats and a 60-foot open stage. The Center will also include two small studio theatres and provision for rehearsal space, dressing rooms, scenery, costumes, and an audio-visual area.

Completion of SUPAC will pull together all the widely scattered facilities that have functioned in recent years as a sort of decentralized student center. It will combine many of the functions formerly carried on in Wohl Center, Umrath Hall, the Mary Brooks Holmes Lounge, Brown Hall, Steinberg Auditorium, and various other locations throughout the campus. In the words of Chancellor Danforth, "The University has long needed a spacious and comfortable place where students, faculty, and staff can gather informally. The new center should become the hub of campus activities."

It would be hard to over-emphasize the importance the new theatre and its auxiliary facilities. Washington University has long had a vigorous, exciting performing arts program. All it really lacked in the past was adequate facilities. Operating on an ad hoc, ad lib basis with no adequate theatre or permanent home, music, drama, film, opera, and the dance have flourished at Washington University. It will be interesting to see how they will do in the proper setting.

In a period when many private universities are suffering alarming drops in enrollment, Washington University can report an increase. Rising tuition rates, the growth of community colleges and state university extension divisions, and the reported tendency of some parents to want to keep their kids closer to home in these unsettled times have all combined to cut into enrollments at private colleges and universities.

This fall, total enrollment in full-time, daytime divisions at Washington University reached 7911— an increase of 446 students over last year. Total University enrollment, including the evening classes offered by the School of Continuing Education, is 11,174.

The breakdown of enrollment among the various schools and departments of this University seems to reflect national trends. Here, as at most institutions throughout the country, engineering and business school enrollment is down slightly, while there has been a remarkable increase in the number of law students. On this campus, the School of Social Work showed a large gain, and both Architecture and Fine Arts reported substantial increases. Within the College of Arts and Sciences, biology has suddenly become a most popular field, with swollen enrollments in most courses in the biological sciences.

What all this may reflect is a greater concern among many students about the urban scene, the ecological crisis, and social welfare. Many more students seem to be wanting to get into fields where they can work directly on society's problems and deal with people rather than things. Only time will tell whether this is really a fundamental change or just a passing trend, but there does seem to be a strong urge on the part of many of today's students to seek careers where they can work directly on pressing social problems.

The Washington University Women's Society International Committee's annual party for new foreign students and faculty members was an especially happy one this year. Brand-new members of the campus community from throughout the world enjoyed a guided tour of the exotic Mississippi River port of St. Louis, thanks to the St. Louis Symphony Society bus tour which was the highlight of the day. Mrs. Whitney Harris, chairman of the International Committee, was in charge of the event, which was a cooperative venture involving the Bear Necessities campus shop, the Uncommon Market, and other volunteer campus organizations. Biggest hit of the tour for the newcomers to this country was the Gateway Arch on the riverfront, which has rapidly become an international landmark rivaling the Eiffel Tower (the Arch is shorter but newer) and the Leaning Tower of Pisa (the Arch is taller but it doesn't lean).

—FO'B
When University photographer Herb Weitman made the annual team picture of the Battling Bears this year, he was so taken by some of the hair and beard styles so evident on college (and pro) gridirons these days, that he posed this bit of nostalgia. With the help of a few old varsity jerseys unearthed from the mothballs, this group of players from the 1971 Battling Bears evoke the spirit of their illustrious predecessors during the eighty-one year span of intercollegiate football at Washington University. The photograph made newspaper sports pages throughout the country.

Defensive end Kent Newcome