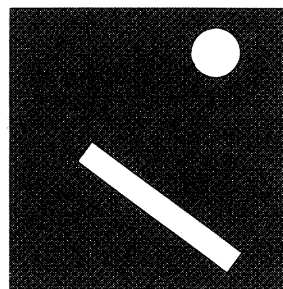
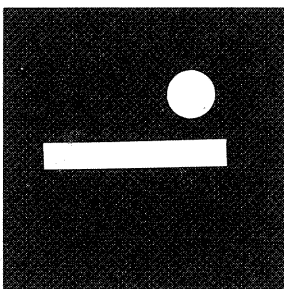
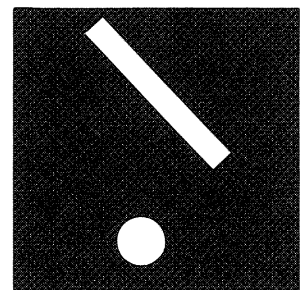
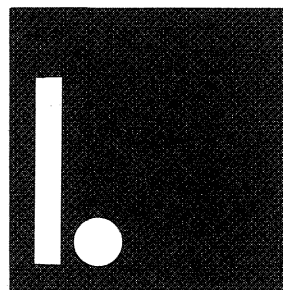
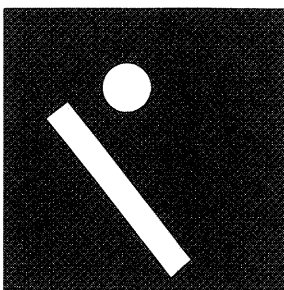
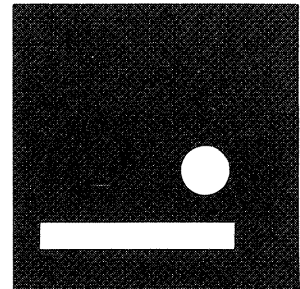
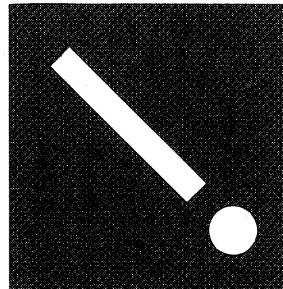
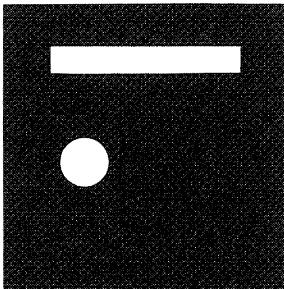
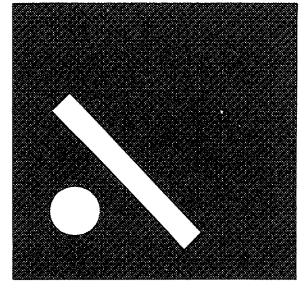
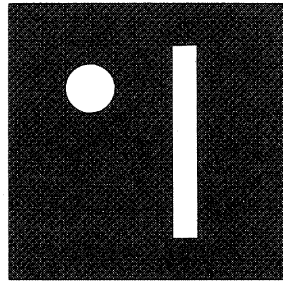
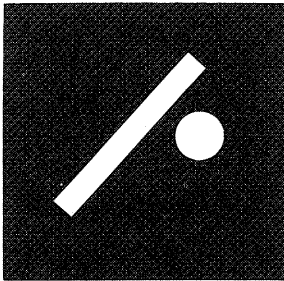


Dividend

The Magazine of the Graduate School of Business Administration • University of Michigan



Special
Issue:
CHANGE

Wilbur Mills to Speak at Third Annual Business Conference

A record attendance is expected at the third annual business conference to be sponsored by the Graduate School of Business Administration November 29 at the Rackham Center, 100 Farnsworth in Detroit.

Congressman Wilbur Mills (D. Ark.), Chairman of the powerful House Ways and Means Committee, will speak.

As has been the custom, the program this year will begin in mid-afternoon and be followed by a reception and dinner. The conference will adjourn at 9 P.M. Charge for the conference is \$20 per person. It is anticipated that many companies will take entire tables, as they have in past years.

Dividend

The Magazine of the Graduate School of Business Administration

Volume III, No. 1

Fall, 1971

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A marketing professor looks at the business world as it may be sixteen years hence, and comes up with some surprising possibilities.

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Four faculty members with long experience compare students of today with students they have known in the past to answer the question.

What Happened to the Parking Lot? by J. B. Ritchie 10

What happens to individuals when change is so sudden and drastic that they cannot adapt? *Future Shock* deals with this question and is here reviewed by an assistant professor of industrial relations.

**Ann Arbor and the Business School in the Twenties 12
by D. Maynard Phelps and Merwin H. Waterman**

Two graduates of the MBA class of 1926 tell about student days when the Business School was in Tappan Hall, and canoeing on the Huron River was a favorite student pastime. Both authors have been on the faculty of the Business School since 1926. Dr. Phelps, who received his Ph.D. in 1931, is Professor Emeritus of Marketing and Dr. Waterman, who received his Ph.D. in 1932, is Professor of Finance.

10 Years Out — 20 Years Out — Have You Changed? 14

Questionnaires to the MBA graduates of 1951 and 1961 produced some interesting answers to questions such as "Has your definition of success changed over the years?" and "How have your views of the business world changed since you were a student?"

Like a Thief in the Night 19

Two different kinds of statistics on population changes give an idea of what kind of future may await us, not only because of numbers, but also because of age grouping in the population.

Among Ourselves 21

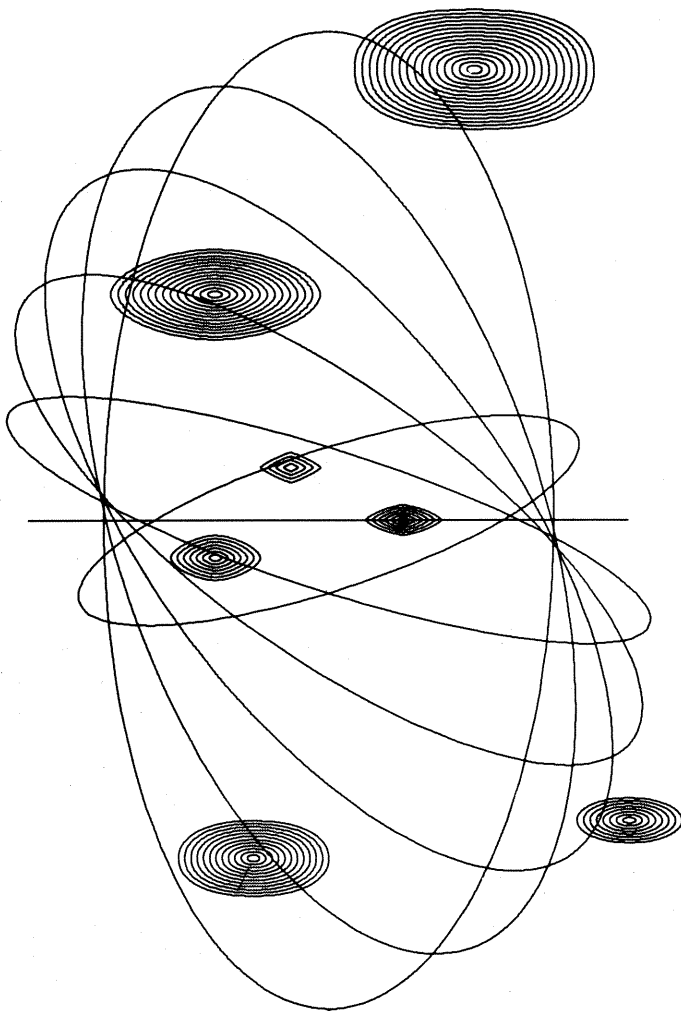
Professor Allen L. Mayerson dies, two faculty members win distinguished faculty awards, F. Lee Bailey gives McNally lecture, groundbreaking for the new Assembly Hall.

*Photographs on pages 12, 13, 23, 26 and 27 by Stuart Abbey.
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Denver, Rocky Mountain
226-131-46982-Q6
July 8, 1987

Letter from the Future

by C. Merle Crawford, Professor of Marketing



Dear Uncle Jim:

I'm terribly sorry to have been so long getting to your recent letter inquiring about changes in the Company since your retirement in 1971. Since you followed the firm's progress closely for several years but lost contact when you moved to the islands, I'll concentrate on the changes that might be of particular news to you, considering your interests as of that time.

First of all, you will perhaps notice that my letter comes to you from Denver, Rocky Mountain. We moved the executive offices out here in 1981 to take advantage of the new Department of Commerce Communications Center near by, which I won't try to explain in this letter except to say that we have instant contact with every phase of the Company's worldwide operations. Figures may be no more accurate than they were in your time, Uncle Jim, but we certainly find no end to their supply, and with the inter-continental satellite locators data have no particular geographical character anyway. They are picked up from any point in the world and stored in the locator; access is also worldwide, instantaneously.

The move to Denver has had its drawbacks, hopefully temporary. Rocky Mountain (the new region that Denver was assigned to at the time of the 1979 reorganization) met our needs very well for several years, but the Communication Center has attracted so many firms to this area that our taxes to pay for the increased rate of social and economic activity have grown completely out of hand. Since the Excess Earnings Act permits the regional legislatures to set maximums beyond which all corporate earnings are taxed away (retroactively for one year!) those of us who have headquarters here in the Rocky Mountain region have been faced with what is virtually a ceiling on incomes for the past two years. The Earnings Act stipulates that the ceilings be expressed as rates of return

***Sixteen years from now the world of business
may have changed in some startling ways.***

*Artwork copyright 1968 by Berkeley
Enterprises Inc. See note on Page 3.*

on investment, similar to the practice of the Public Service Commission. If the economy of the country continues to grow we should begin to see relief before long.

You specifically inquired about your former executive associates . . . how are they, what are they now doing, etc. On this score I have drawn a blank, since anyone you would have known reasonably well sixteen years ago is now gone. You must be aware of the gradual reduction in retirement age permitted under our various annuity programs (retirement is now mandatory in this company at age fifty-five, for instance) but you may not realize the extent to which executive retirees proceed immediately to one of the many technical or managerial schools located in various parts of the world with the result that managerial and technical talent has probably become our country's biggest single export. I will ask the Retirement Training Center office to compile a list of retirees who have moved into teaching, along with their assignments, so that you can contact them directly.

Speaking of the Retirement Training Center, you probably could not visualize the training center concept we are currently operating under; it must be the most dramatic change that has taken place in this corporation since your retirement. The essence is simple . . . every single employee of this company is considered to be performing a temporary assignment, and thus he should always be in training for a different assignment (a change, not necessarily a promotion). Even as president, and with seven years to go before my retirement, it was mandatory that I select my next assignment and begin training for it at the time I was appointed. Since I must relinquish the presidency after five years in office, I have been preparing myself for assignment to our Washington Corps. While on the Washington assignment, I will be coordinated through the Retirement Training Center, studying whatever languages or skills it appears I will need for the retirement program I lay out at that time. Incidentally, you would appreciate the fact that we sell parts of this training service to smaller firms in the area, and the

“Every single employee of this company is considered to be performing a temporary assignment, and thus he should always be in training for a different assignment.”

income almost covers the entire cost of the program to us.

We feel equally gratified about our Day Care Centers. We now have such centers operating at every corporate facility where more than ten people work, and you should be highly pleased since you led us into this particular program back in the late '60s. You probably would not have guessed that we also now operate such centers (at a profit) for some eighty-three other firms around the country. Most of these are at their own locations, although some firms with contiguous plant locations can share facilities with us.

We also have the half-time employee option plan which permits a person to sign on with the Company for only sixteen hours of work a week instead of our usual thirty-two. Since the option applies within the firm as well, we get some surprising results; for instance, take the partnership between the two men who drive my car—they rotate each half day between the car assignment and a position in the shipping department. Both get more variety that way, find that they can perform equally well in both areas, and claim to be far happier and more productive.

Before leaving the subject of training and employee job enrichment, I want to tell you that the television experiments being conducted near the end of your stint here have gradually evolved to the point where an

employee can receive up to one hour per day of free (with pay) television training in any skill he chooses so long as the Training Center approves of it. This is cassette training, of course, tied to the library interconnects, so there is virtually an unlimited choice, at any plant location. All we need is the library interconnect facility and the screen, and we're ready to go. Personally, I have been participating in this program by studying the legislative process, anticipating the Washington move next year.

You may perhaps be coming to the conclusion that management over the past sixteen years has been quite courageous and innovative to develop all of these approaches for enhanced employee motivation. I wish I could agree. In fact, the main thrust on most of these fronts has come over our objection, and was the direct result of the Employee Council we were forced into back in the mid-1970s. About the time you retired, I can recall your remarking on the drive and initiative of our younger management members—their convictions on some social issues, their willingness to speak out, their demands for a work situation where they could participate more fully in determining its character, etc. You wondered where this combination of vigor and new point of view might lead us.

Well, as you may have heard at the time, these pressures increased until we had no choice but to develop some arrangement whereby the thinking of all employees could be more effectively integrated into major decisions. Over some union opposition (they couldn't really stay out of it as long as the office workers were participating) we instituted the Employee Council whereby each employee group (usually a department) selects a representative to a forty-two man Council whose role is to react to management proposals and in other ways to guarantee that

About the author: Dr. Crawford received his Ph.D. from the University of Illinois, and was Director of Product Management at Mead Johnson & Company before coming to the U-M in 1965. His research interests include the future environment for marketing. In 1968 he was program chairman for the World Congress on Marketing.

the feelings and attitudes of employees receive full consideration. Myron was President at that time and he was no dictator (he fully agreed there was a proper employee input) but none of us realized that the Council would come to its current state of power. No major corporate decision is ever made without at least the Council Executive Committee reviewing and commenting upon it, and most new thrusts these past five years in the area of employee policy have actually come from Council. I still make the final decisions, and the employee point of view is by no means overriding, but it is surprising how close to the democratic concept of management we have come.

In 1978 the Council came up with a new statement of Company goals which have become quite important to us. I'll not send you this statement, because unless I had an opportunity to thoroughly explain these goals to you, your reaction could hardly be anything but shock. As I recall it, you never did go for such phrases as "enhance the quality of life for all mankind" principally because they were too general and begged the question of the direct immediate purpose of an industrial organization.

You'll just have to take my word for it that we have managed to define these ideas in more concrete terms, and now find them of great value in our decision making, even though you might disagree with the methods by which we apply them. Generally speaking, once we came to agreement that the firm exists solely for long-term gain and that profit was only one of four major goals, decisions in this area came much more easily. Even this, however, we couldn't have done during your presidency because we lacked the system of social accounting that has gradually evolved. How could we have figured the true cost of the Southeast Refinery, for instance, unless we had acceptable techniques for estimating Area Destruction Costs, Remedial Action Costs and Resource Relocation Costs? As you probably heard, we tentatively shelved the project. Even though short-term cash revenues looked highly satisfactory, a preliminary Social Action Statement

of the type that has to be submitted when requisitioning approval for such construction painted a picture that was simply not acceptable. Even considering the fact that the Corporation is held for only 50% of the Social Action Costs, the project still failed to meet criteria on a ten-year pay-out basis.

It took us approximately four years to make the necessary technological adjustments in refinery technique to swing the proposition, and I'm sure there was temporary inconvenience to many people, but the residents of the area should be well ahead for having been required to wait.

"We could not have figured the true cost of the refinery unless we had techniques for estimating Area Destruction Costs, Remedial Action Costs and Resource Relocation Costs."

Speaking of accounting, you will recall the discussions which took place the last few years of your administration concerning the matter of human assets and human asset accounting. We lacked the proper techniques in this area too (and I would suppose the motivation as well) to effect the type of statement you envisioned at that time, but we now publish such figures annually, and the dollar values are audited by branches of public accounting firms specializing in human appraisals. We wouldn't think of undertaking an acquisition negotiation, for example, without a reliable human asset figure for the firm under consideration. I might add that it is also a key item in the annual appraisal of Division accomplishment from this office. No longer can a Division Manager enhance his showing by letting supply of personnel dwindle through improper replacement policies or inadequate training standards. But you saw this coming, and I just thought you might appreciate hearing its conclusion.

You might be surprised to learn that the majority (yes, actually some 57%) of our revenues, and an even

higher percentage of our pre-tax profits, comes from services not products. We committed to this approach early, as you well know, but as success appeared we intensified the effort. Right now, for instance, our most rapidly growing division is that of Municipal Services. The Municipal Services Division has had a compound annual rate of sales growth exceeding 27% for the past seven years and the untapped market remains huge. Their services consist simply of the management of operations that cities formerly managed themselves.

It's strange but we got into the municipal market entirely uninten-

tionally, when we acquired an insurance company that was unsuccessfully trying to tell mayors and city managers how much money they could save by making some management changes in their fire departments. We were challenged one day in 1978 to put up or shut up when a deficit-facing mayor asked us how much we would charge to run his city's fire department; when we came up with a figure some 12 percent less than they had been spending we were on our way. We now have contracts to manage police departments, sheriffs departments, garbage services, water works, purchasing departments, and so on. There literally is no significant city service that we do not manage, for a fee, somewhere in this nation. Interesting, isn't it, how the basic thrust of a business is so often determined by forces entirely outside the company's planning horizon?

Our success in municipal management led to the Municipal Services Division, and shortly thereafter to similar divisions pointed toward other fields—the Educational Services Division, and the Religious

continued on page 20

Have Students Changed?

Four Faculty Viewpoints



Meyer S. Ryder

Meyer S. Ryder, professor of industrial relations, has taught at the Business School since 1953. He is widely known as an arbitrator of labor-management disputes. He is currently a member of the University-wide Committee on Communications, a joint student-faculty-administration committee set up to facilitate communication between these groups.

The question "Have students changed?" does not embrace factors having impact on student change such as: has our faculty changed? has our school changed? what changes in students have these wrought? Disregarding these factors, what do I note of change in our students over the past eighteen years during which I have been a member of the faculty?

Academically, the graduate student seeking an MBA or a Ph.D. now comes to us, and leaves us, more seeking in basic knowledge of business practices and more creatively probing into the fundamental reasons, theoretical and otherwise, for these practices. He or she (and we have quite a few more shes) want more than the varnish of a degree. In this connection the change is clear. The student seems to work harder, read more, face up more to the teacher in asking "why"—and then appears to scrutinize and test the answers more before accepting their validity; a classroom process less prevalent in the past. Pat answers, pat clichés, pat generalizations no longer hold and quiet the classroom dialogue. The student still "bucks" for grades but appears to put in more of self to get them. Accordingly the student is now more engaged in expressedly testing the teacher and the teaching he or she receives. The passive student who accepts what he is told by faculty seems to be gone with the changing times. And this provides teaching leads for those faculty members who are sensitive to student needs and their demonstrable higher standards of scholarship.

I do not speak in this short paper of the undergraduate student with whom I have had little connection in the past decade. I suspect that the demonstrable academic change would be much less. Seeking a graduate degree appears to make a difference.

Turning to manifestation of change in social consciousness, the change is also notable, though quantitatively spanning less of the graduate student body. Now we have some students—a few—who feel honest outrage at the continuation of the Vietnam war, the ecological plight of the country, the world, the status of womanhood, past lack of educational opportunity for the minority black man and woman and what now may be done to correct the imbalance, and the social importance of the role of the business enterprise in the process of change.

We have many more students, not so outraged, but nonetheless seriously concerned about all or some of these matters who speak up less often or even are expressedly silent but feel these concerns and in privacy express them to fellow students and faculty who take time to listen.

These sectors of the student body comprise challenging groups whose later role in the business area will undoubtedly be creative and give vigor and strength to the enterprise.



Joseph W. Newman

Joseph Newman has observed students on several different campuses across the country. He taught at Harvard University from 1951 to 1959 and then moved to Stanford University, where he taught from 1959 to 1965. He joined the faculty of the U-M business school in 1965 as professor of business administration.

The most striking observation of students I can make from my experience (about 20 years at three different graduate schools of business administration) is one of constancy rather than change. I refer to the students' strong motivation to learn, seriousness of purpose, desire to be stretched and their responsiveness to rewarding learning experiences they recognize as being relevant to their objective which, in most cases, is that of becoming an effective manager.

Another important observation, however, is one of change. Each year our graduate students enter with stronger backgrounds than did their predecessors. They have better foundations in both quantitative methods and the behavioral sciences. Increasingly, they have been taught to think for themselves rather than follow the "memorize-and-feed-back" recipe which has plagued education for so many years.

Each year, then, we receive new students who are highly motivated and who have a greater potential for learning. While this is satisfying, it also leads to a continuing problem. Changes in curriculums, course content and teaching methods tend to lag behind the improving student capacities. As a result, the student

demand for challenge frequently is not fully met. The failure to satisfy this demand constitutes one of the most serious problems facing higher education.

As I started to think about the subject of change, I was tempted to say that today's students are more interested than those of yesterday in public issues and international business. In looking back, however, I find that I would have been justified in making such a statement in each year of my experience. That is, in every year of my teaching, students have seemed a bit more interested in public issues than the students of the year before. So that the present high interest in these issues is, I believe, the result of a gradual increase rather than a sudden shift of interest.



Mary Bromage

Mary Bromage, associate professor of written communication, has taught at the Business School since 1956. She has also known students as Assistant Dean of Women at the University of Michigan (1944-48) and as Associate Dean of Women (1948-50). She is currently faculty sponsor for the Business Women's Association at the School, and is a member of the Board of Directors of Phi Beta Kappa.

In the past five years, University students seem to have changed more rapidly than in all the twenty-five years

that I have been associated with them, either as administrator or faculty member.

Here in the School of Business Administration, scores on verbal and quantitative aptitudes are actually higher. The grade curve appears to have risen over the past few years. Other measurements, as well, such as self-awareness, make them seem generally more advanced. They are more informed as a result of growing up with television, working with computers, following space missions, owning automobiles, and traveling in general. Among the graduate students, Vietnam veterans are numerous, and many are married.

They are patently more critical. Old solutions are not acceptable to them either in the classroom, in the community, or in the nation. They see the problems themselves, quite apart from the solutions, as being unprecedented. Gone is the automatic respect of the neophyte for his mentor. In fact, it is a question whether there are any neophytes. War, including the nuclear bomb, racial discrimination and environmental pollution, are regarded by students as the sins of the fathers which they do not want visited upon them. And this critical approach is not confined to the so-called "hippies" or "leftists."

As a final "sequitur" in the present level of mental acumen, information, and criticism, today's students are more concerned—concerned with the whole future of man. Their concern is manifest in some productive and some counter-productive ways.

The long-haired life style, for instance, is only a token, no longer a matter of significance in itself, merely the trappings of the desire to be different. The drug culture (to the degree that it may affect campus populations) is an escape, not an instrument of concern or change—a *modus moribundi*, not a *modus vivendi*.

Militancy of the few, with disruption and destruction of university life and facilities, is increasingly rejected by the majority, including some who once believed in such means themselves.

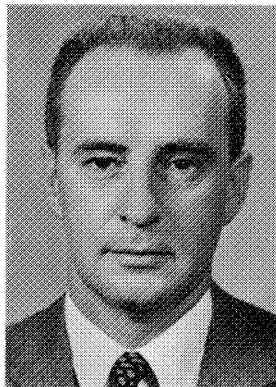
The effective ways of expressing

student concern range from challenges in the classroom to membership on committees once restricted to the faculty and administration. The claims of minority groups (of Blacks and women, for example) are supported by other students, as well. "Student government" is becoming a verbal anachronism as student representation expands to areas of campus-wide jurisdiction.

Apart from the means students are now pursuing, their ends are themselves different from those born before World War II (the dividing line laid down by anthropologist Margaret Mead). Goals have shifted from ones predominantly personal, professional and economic to aims that are more decidedly social and political. The "system" itself once appeared as a way to success but no longer. It's not that students disbelieve in power; quite the contrary. They want power themselves. But they do not approve of the present mechanisms of power. The system is now viewed by many with cynicism.

Competition, pressure and hard work are no longer regarded as universal virtues. Though students may be less sure when they come to the University of what they want "to be," they are quite sure of what they want "to do:" that is, to work with congenial companions, have a secure home life, and pursue careers where their ideas and ideals as well as their technical competence will be wanted.

It's the times that have changed, really, and changed us all at the University. Students are not alone in feeling that space and time have been foreshortened. Who knows whether for better or for worse? The young may be the most conspicuous agents of change because they are free of commitment to historical solutions. They had no stake in the twice-told tales of The Great Depression and World War II. The only wars in their lifetimes have been the non-wars of Korea and Vietnam, whose heroes seem like anti-heroes. Yet history does not die, even if it fades away. A recognition of the past, though it will not mean to all a reconciliation with it, is one debt any faculty owes its student body.



Lee
Danielson

Lee Danielson, professor of industrial relations, has known students for 20 years, having taught at the University of Michigan since 1952 and at the Business School since 1954. He has his Ph.D. in industrial psychology from the University of Michigan.

It is difficult to generalize about our students, but my impression is that the students of today are different from past students. Two of the major influences are (1) their total education prior to entry into our School, and (2) the new M.B.A. program; the two are interrelated. The students who are attracted to our new MBA program have broader, more diverse backgrounds than previous classes. More black students and women are in evidence; more students with non-business undergraduate degrees are entering. More students are entering with goals of working in organizations other than the traditional "big" in manufacturing, accounting and the like. Government, academic institutional and personal businesses are considered viable alternatives. Many are less acceptant of traditional business values. They want to know the way it "really is," but they question if this is the way "it should be." More and more want to play the role of change agent, and they see problems that they feel need immediate solution. This raises a problem in

itself. The students are relatively naive, or unsophisticated, in seeing the many repercussions of the solution to a limited problem. One solution may create many new problems. For example, requiring the foundries to install pollution control devices may force a number of small foundries out of business. This in turn leads to unemployment in certain locations and leads to the bigs getting bigger. Neither of these consequences are what the students desire. As professors, we cannot give the students readymade solutions to yesterday's problems. We may have to rely much more on theories and "best guesses" about the future.

Two other aspects are worth mentioning. First, many more students are aspiring to middle levels of management rather than the highest levels. The students do want to contribute to organizations, but they do not see giving their all for the organization. They feel there should be a limit to organizational demands and that there are other interests to be developed. They may become caught up in the organization rat race, but organizations are changing too, and perhaps will become more realistic in the time demands made on employees.

Second, the students are questioning the quality of the education they receive. They are more open in both their criticism and support of professors' techniques and course content. They want to be challenged and extended rather than entertained or routinized. Their diversity suggests multiple approaches in teaching. Their voices are raised and they want to have some impact on the decisions that influence their education. It may be that students like the ones I have described have always been within our School; their numbers may have been smaller and/or they may not have been so verbal. There is some evidence to believe this has been true. We can anticipate more and more of the "new breed." All in all, they represent a very interesting and challenging group that either keeps us young or ages us rapidly.

WHAT HAPPENED TO THE PARKING LOT?

A Review of Alvin Toffler's *Future Shock*

By J. B. Ritchie, *Assistant Professor
of Industrial Relations*

Over the past few years it has been a normal occurrence for me to pull into the parking lot behind the Graduate School of Business and find all of the parking spaces gone. However, on Thursday, June 17, as I turned the corner at Hill and Tappan—the *parking lot* was gone!* I had only been away one day, but instead of the familiar parking spaces I saw a hole in the ground. The manner in which I respond (psychologically and perhaps physically) to the abrupt disappearance of my favorite parking lot (or any other part of my stable and ordered universe) is analyzed in the penetrating inquiry developed in *Future Shock*.

Of course, if I am prepared for the pace of change which Toffler describes I should be no more unnerved to find the whole Business School missing one day as I come to teach a class. On the other hand, if I am not so equipped to cope with the ubiquity of change, in Toffler's terms, I become part of an "environment so ephemeral, unfamiliar and complex as to threaten millions with adaptive breakdown. This

* *Gone to make way for the new Assembly Hall of the Graduate School of Business Administration. For pictures of the groundbreaking ceremonies, see page 26.—Ed.*

breakdown is *future shock*." Future shock is what happens to individuals when the substance and pace of change overpower the individual, "when he is forced to operate above his adaptive range."

The need for a book such as this one (or the many others that deal with current trends and future conditions) is questioned by some; don't we already know about the content and rate of change in our social, technological, and economic worlds—are we not bombarded with evidence every day? The question itself suggests one of the significant purposes of the book. We may be very *aware* of the existence of change, but do we *understand* it? Toffler argues that the majority of people do *not* understand what is going on. They are confused, afraid and perhaps hostile as they feel victimized by forces beyond their control. This may be more than just discomforting—it could be disastrous.

About the author: Dr. Ritchie received his Ph.D. from the University of California at Berkeley and joined the U-M faculty in 1967. He is a 1971 recipient of a Faculty Distinguished Service Award (see page 23 for story on the awards).

Toffler feels that "... There is nothing inherent in the evolutionary process to guarantee man's own survival." Therefore, in an attempt to "save" society, the author claims that he is embarking on a project to *change people*. He attempts to achieve this purpose by 1) making people more *aware* of the reality, variety and pace of change 2) by helping them to *comprehend* the process 3) by enabling individuals to be more *adaptive* in their uncertain world and 4) by equipping people to *control* the direction and pace of change. It might be mentioned that after considering Toffler's comments about how we will be procreating, traveling, working, playing, educating, etc. in the *near* future, you will very likely have future shock if you didn't have it before.

As Toffler sets out to convince his audience, he carefully develops a few themes which describe our current condition. In great and sometimes redundant detail he suggests we are living in a world of transience, novelty and diversity. Our norms have now become a *temporary* house, car, neighborhood, friendship, organiza-

tion, project or wedding dress. The section heading "How to Lose Friends" is difficult to fit into the old Dale Carnegie logic. Things move so fast that all of our possessions, relationships and attitudes just become part of a "throw-away" society. We demand so much in so many areas that there is not time for a long term stability to develop. Toffler suggests that a scientifically advanced society can not help but develop and demand such a great variety of products and services that they are bound to become obsolete before they are even generally known. Here we see the impact of change, *per se*, rather than the particular substance of change. And it is the pace, not the direction, which is causing future shock.

In developing his interesting and well documented discussion of where we are and where we are going, Toffler establishes the need for a more rational and enlightened response by individuals. I think at this level the book is essential reading for "thinking people." As one of my students stated in a review of Toffler: "If he only forces us to question our assumptions of a stable and predictable world, and think beyond next week end, the work will have proven its value." For that reason, I strongly recommend the book.

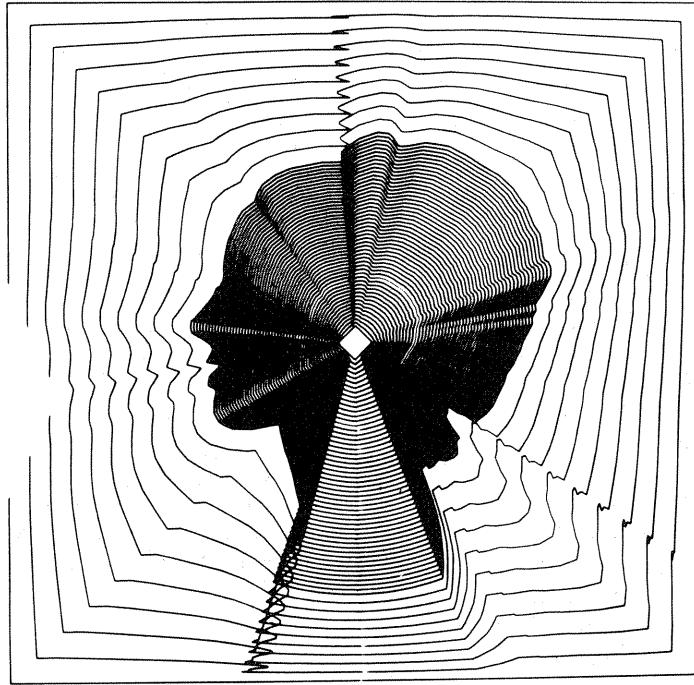
However, as Toffler moves on to his other purposes—*how* we adapt to and control change, I think he becomes a victim of his own disease. His normative prescriptions seem to me to fall short of his descriptive observations. It appears to me that he is proposing yesterday's solutions for the problems of tomorrow. Toffler would deny this, and in fact argues that the old approach is not adequate; but "saying it" is not enough. Coming through the many suggestions is a faith in the experts' plans—an organizational mechanism to determine what is good for "the people." Toffler feels that individuals have a limited capacity for adaptability and therefore must develop a social mechanism to chart the path. He says that "the horrifying truth is that, so far as much technology is concerned, no one is in charge." My question is: Who will be in charge? How will such individuals be chosen? And, what criteria will they use to plan for change? These

questions Toffler does not answer.

The author states that we need a democratic revolution which will allow "the people themselves" to determine what kind of a world they want in the future. But how is such an activity performed? How do "the people" decide? Toffler thinks that "we can invent a form of planning more humane, more far-sighted, and more democratic than any so far in use." This idea, of course, can be traced back through history and I think we can see room for improvement in planning for the impact of change. But the degree of social control necessary to achieve the author's objective of *controlled change* could negate its very purpose. Toffler's "Councils of the Future" scare me much more than they reassure me.

Although critical of his specific solutions, I am encouraged by Toffler's optimistic view of the future. He sees greater freedom and choice, more opportunities, a decline of bureaucracy and, on balance, a great deal of hope. One of my concerns is that this hope

not be placed in the wrong object. It seems to me that the pace of change which Toffler describes as the cause of the problem has become the norm for a sizeable sector of our society. The current generation may not be subject to Toffler's brand of future shock—their shock is when change does *not* happen fast enough. They are geared up to the "temporary society" and do not know what to do when things slow down. By adopting Toffler's solutions we might be creating a greater shock for those who are products of the world Toffler has described. At that point, the causes and solution of the problems become the same thing. Where then do we go? I think Toffler's emphasis on adaptation—creating a tolerance for change—is the appropriate route. We need a great deal more study before we decide how to control the change. In the meantime, I hope we do not come up with too determinate a solution—that would be worse than having future shock!



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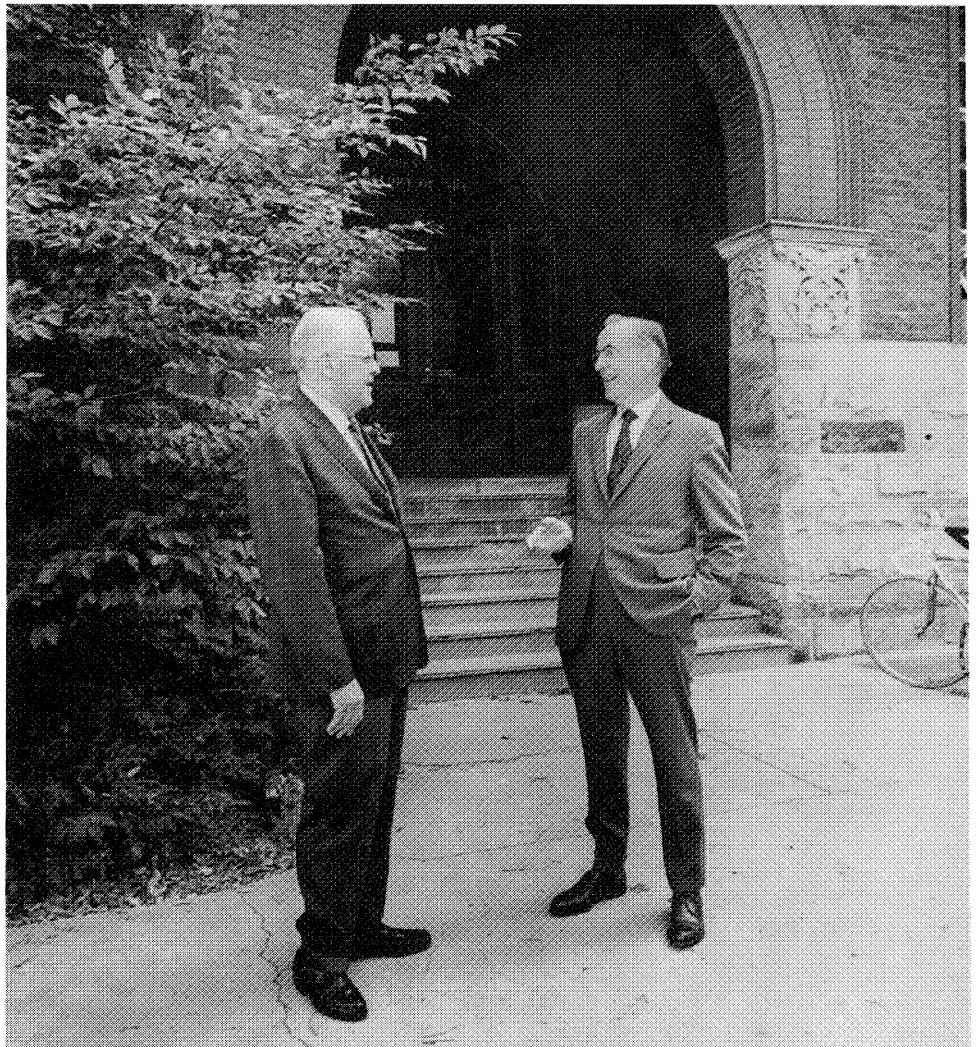
Ann Arbor and the Business School in the Twenties

By M. H. Waterman, MBA '26 and D. M. Phelps, MBA '26

Ann Arbor in the twenties was a really delightful place to work and play. The total university enrollment was only about 10,000 so there were no traffic jams or parking problems. Transportation to and from campus was mainly on foot, although quite a few students had old wrecks of cars which would run only now and then. Ann Arbor had street cars and the interurban made regular daily trips to Detroit and other close by cities. The greatest hazard of the "diag" was the scourge of roller skaters. Students lived in fraternities and sororities, in league houses, and in rooms rented in Ann Arbor homes. There were few apartment houses and these were reconstructed old homes. No hi-rise apartments decorated (?) the landscape.

When we entered the new School of Business Administration in the fall of 1924 there were 22 hopeful students and 14 faculty members. When we graduated in 1926 we were two of 12 who received the MBA degree. This faculty student ratio of 1 to 2 obviously meant small classes. Teachers and students came to know each other extremely well. Undoubtedly, we were the "guinea pigs" for much experimentation but we survived and even enjoyed the experience.

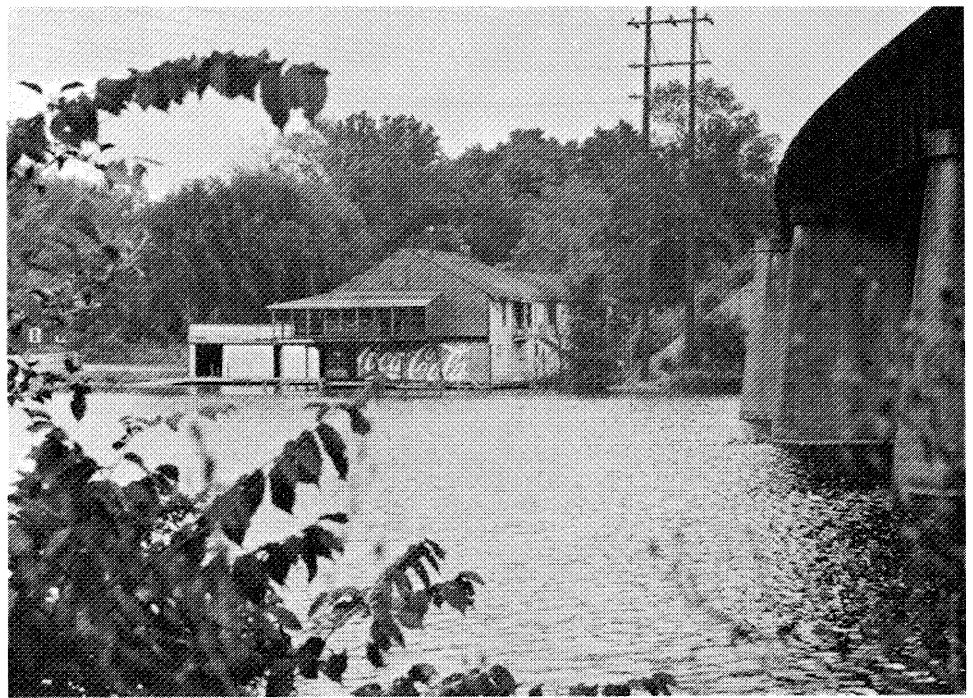
The early students came from academic backgrounds in L.S.&A. and Engineering. They had varying degrees of business experience. The ethnic makeup of the first class to graduate



Professors Waterman and Phelps outside of Tappan Hall, which was the Business Administration Building in 1924. It now houses the History of Art Department.

in 1926 had unique features. There were two Chinese; two Blacks, one of whom later received a Ph.D. from Harvard; one Pole; one Greek and six miscellaneous Americans of Dutch, Swedish and English ancestry. Of the total, 4 went on to earn their Ph.D.s and 5 devoted all or part of their careers to university teaching. As to fields of activity, one went into banking, two into finance, three into general management, two into government jobs, and two into marketing. (The two orientals returned to China and have never been heard from since.) Of the Americans only one is deceased. They have kept in very close touch and have held over eighty-semi-annual reunions in the 45 years since graduation. This is undoubtedly a record for the University. Parenthetically, these gatherings have not been devoted entirely to scholarly discussions of economic and social problems.

The original faculty was a judicious blending of Michigan and Harvard with some help from Carnegie Tech. Edmund E. Day of Harvard was appointed dean of the new school in 1924. As would be expected he brought with him a group of able young people from Harvard: Olin W. Blackett in statistics, Margaret Tracy Elliot in personnel management, Robert L. Masson in finance, John P. Mitchell in business policy, and Carl L. Schmalz in retailing. Clarence S. Yoakum came to us from Carnegie Tech as professor of personnel management. The Michigan contingent included people who all our graduates knew and revered—Professors William A. (Bill) Paton, Clare E. Griffin, and Robert G. (Bob) Rodkey. Assistant professors and instructors were Earl S. Wolaver in business law, Arthur Van Duren in finance, Francis E. Ross in accounting, Charles B. Gordy in production management, and Seward Horner in accounting. We (the authors) were taken on as instructors in marketing and finance in the fall of 1926 thereby lowering somewhat the average age of the group. Professors Mitchell, Masson, and Schmalz soon returned to Harvard, but most of the others stayed at Michigan during their professional lifetimes.



The old canoe livery on the Huron River was a busy place in the spring.

The objectives of the School were much as today but the curriculum has been considerably expanded particularly in human relations and in the application of quantitative methods to business problems (fortunately for some of us emphasis in the early days was not placed so much as it is now on mathematical formulae to simplify (?) business problems and arrive at sound conclusions). Emphasis was placed, however, on the analysis of business problems, management techniques, and research methods to get the necessary information for decision-making; then even as now. Business policy was a required course as it is today, after a long interlude without the requirement. When we were students in the School all graduates had to write a master's thesis which tried our souls, although it was excellent training for a later doctoral dissertation for some of us. Business cases were just coming into their own in the twenties and business operations were being explored in seminars. It was an interesting period and experimentation was rife. Sometimes we suspected that the young instructors did not know much more about their subjects than we did but this was a healthy situation and we all learned together. Student-faculty relations were not a problem.

The Union and the League were really the bases of both student organizations and recreation. Students in the twenties danced, and danced, and danced. This was the thing to do on both Friday and Saturday nights. The main problem was to get the girls back to their sororities or league houses by midnight. And in the spring, the canoe livery on the river was a busy place; for a small rental fee the enterprising male student could have his girl "all to himself" for a few hours.

While the Union was a frequent rendezvous for many, Tappan Hall was really home base for business administration students. There were the classrooms and faculty offices often shared with people from the School of Education. On the second floor was the nucleus of a fine business school library and we spent much time there. We worked, and played, but whether we were any more dedicated to getting an education than most present day students is surely open to question. Today, as we see the "new" Business School building (circa 1948) being expanded by a new Assembly Hall, more class rooms, an auditorium, and additional office space, we are thinking that the educational foundations put down by the original faculty and built upon by the students must have been pretty good.

10 Years Out - 20 Years Out

Have You Changed?

A Sampling of Opinion from the MBA Classes of 1951 and 1961

How do members of the MBA classes of 1961 and 1951 see the business world today? When you've been out of school for 10 or 20 years, have your ideas changed about "decision making?" How do you feel about the social responsibility of business? The quality of life? Success? Are people out of business school 10 or 20 years more optimistic than they were when they graduated? Or less?

We asked these and other questions of members of the MBA classes of 1951 (198 people) and 1961 (184 people). Twenty seven members of the class of 1951 and twenty six of the class of 1961 answered, for a total of 53 responses—a return of about 13%. On these pages we present what they said individually as well as several comments from the MBA class of '71. But first, a summary.

Thirty five of the 53 people answering our questionnaire said they made over \$20,000 per year. Of these, 17 were from the class of 1951 and 18 from the class of 1961. Twelve, six from each class, made between \$15,000 and \$20,000; one made between \$15,000 and \$10,000 and the rest did not report their incomes. About half the respondents said they did not mind being quoted by name. About one third said they were more optimistic when they graduated than they are now and about one sixth said they were less

optimistic as students than they are now. The rest reported no change. Proportions were almost exactly the same in both classes.

Certain impressions arise from reading the questionnaires. Generally, the businessmen seemed to feel that dealing with people is much more important in business than they had realized when they were students. More than half said their definition of success had changed since their student days, when money was the primary success criteria. Now, said those who reported a change, a sense of "having done something," a personally satisfying life, good family relationships, are the mark of a successful man. Some of these people pointed out, however, that their definition of success did not shift until after they had reached a basically comfortable standard of living.

Interviews with members of the MBA classes of 1971 and 1972 indicate that they feel people are more important than things, success is not necessarily measured in money, and that business needs to consider social costs as part of its long run profit structure. In fact, many of the members of the classes of '51 and '61 seemed to be thinking along the same lines, indicating that in this highly unscientific survey at least, the "generation gap" may not be as wide as is sometimes assumed.

"As a student, I did not perceive the complexities of the internal operation of business nor had I thought a great deal about its relationship to society. As a student I did not comprehend the constraint problems and lack of information upon which to base solutions. I was very concerned with learning the technology of business as a primary tool for achieving success."

MBA '61

"I have come to the slow recognition that Horatio Alger is *not* alive and well. One man's capability to effect changes in his own life is tough—and it's tougher yet to effect changes in society at large or in the business world."

MBA '61

"I see more cracks, strains and pressures now than in 1961. I see business making strong attempts, for the most part, to become a non-destructive part of society which wasn't in question then except for the emergence of human relations as a need for management to consider seriously."

MBA '61

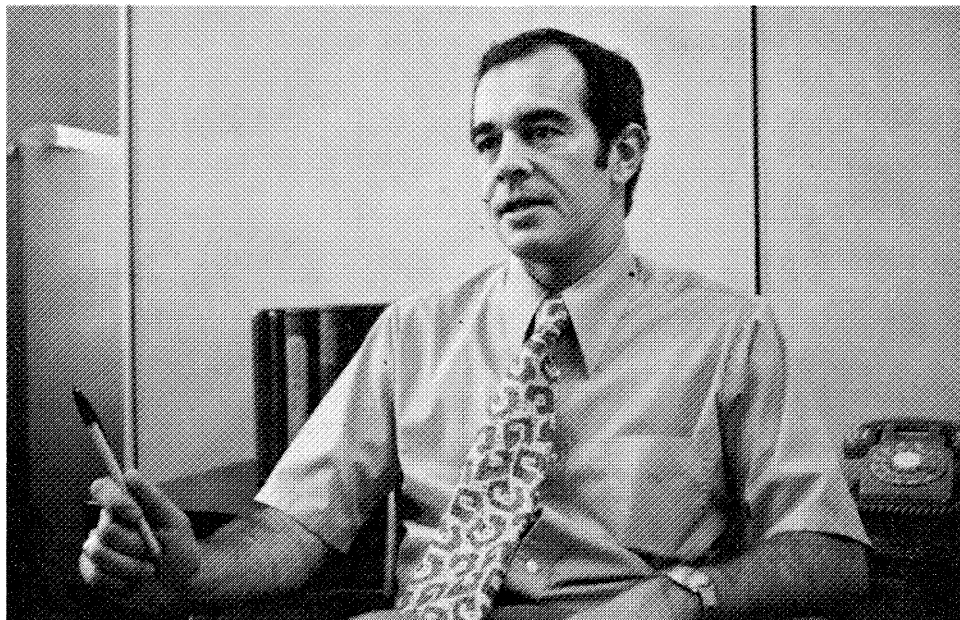
"I am still a laissez faire advocate but feel that government and some regulation have a broader and more responsible role to play in the affairs of business, labor and management-stockholder relationships."

*Spencer H. LeMenager, '61
Second Vice-President
Northern Trust Co., Chicago*

"My views on the business world have not changed, but the struggle for survival, with more government controls, taxation, etc., demands businessmen with more ability. Perhaps the viewpoint of social obligation has changed—we must consider as part of our profit structure our obligation to our community."

*Ted de Vries, '51, President
Equipment Rental Company*

Is of the business world changed since you were a student?



James A. Knister, '61, Manager, Long Range Planning, Donnelly Mirrors, Inc.

"While in school, I thought business would be highly complex and sophisticated and that decision making would be highly rational. I have found that the application of only fundamentals will probably assure success and that decision making, even in very large and successful corporations, is frequently based on emotion and partial information. I have also found that dealing with people is a great deal more important than my academic training indicated."

*James A. Knister, '61
Mgr., Long Range Planning
Donnelly Mirrors, Inc.*

"I recognize now that few business decisions are based on analysis and logic even in major corporations."

Corporate Planner, '51

"I now believe that the ability to understand, motivate and direct people in a business is a more important characteristic of a business leader than the ability to execute daily the mechanics of doing business."

Management Consultant, '51

"The business world is less attractive than 20 years ago. There are great opportunities, as then, but the rewards in relation to the effort required are much less. This is true of both satisfaction from accomplishment and real monetary return."

*John F. McCarthy, '51
Account Representative*

"My views have changed very little, except as relates to the cold, impersonal aspects of larger companies. I've come to realize that current generation thoughts which put people first need more emphasis. I'm still a flag waver for our free enterprise system and the profit motive, but it got out of hand."

Controller, '51

"The business world is more competitive than previously. Vast changes daily. Must read and study continually to keep up with changes. Investments must be made faster as no time to wait."

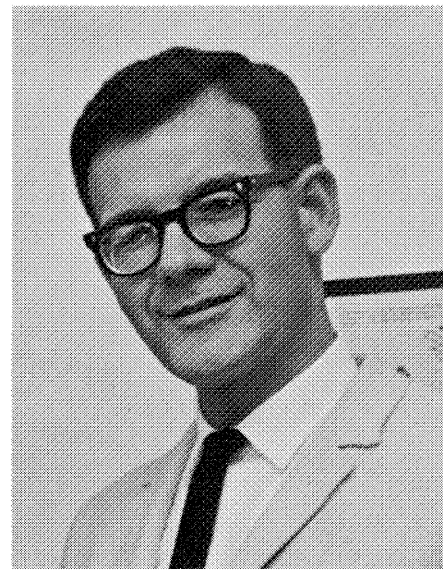
*Forrest W. Tippen, '51
Senior Vice-President, Controller
Abilene Savings Association, Texas*

"The real world of business (as a student in 1961) appeared to be exciting and fast moving and to offer a real challenge. Like most of my classmates, I was anxious to graduate and try my hand at the game. Little did I know what a rough and tumble game is played, or that I was not properly geared to play. I view the business world as a freshman might after his first year at Michigan; thankful that I could adjust to the system without any noticeable scars and optimistic about greater success in the future. As an aid to potential junior executives, I suggest that a course in personal strategy and gamesmanship be included in the business school curriculum."

MBA, '61

"It's more competitive and heartless than I once believed. The working conditions are rough on mind and body. I once thought business was a science, but now I think it is an art, and with ever changing styles."

*Nistor Potcova Jr. '51, President,
Ace Paper Products Co.*



Nistor Potcova Jr. '51

Has your definition of success changed over the years?

"Right now I'm more *unsure* as to what success really means to me. I formerly thought it was position and money. Now I'm not so sure if the individual and family sacrifices justify this definition of success."

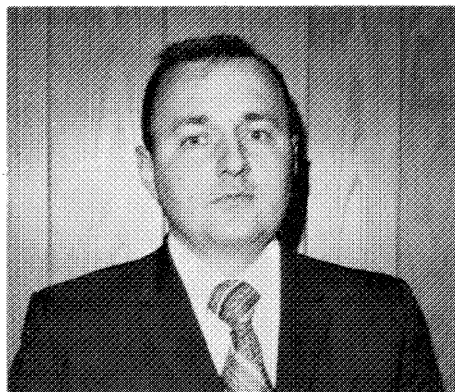
MBA '61

"Success at first, was a title and some money to go along with it. Today, success is more than a big house, a couple of cars, two color TV's, a country club and the like. It is making progress in business while preserving a stable atmosphere in the home. This is a gigantic challenge to us all. The thought has often been proffered but never accepted by me—'Show me a really successful businessman and I will show you a failing family situation.' Change, competition and job demands can and have ruined many a man's sanity and surroundings. This, I have taken as a personal challenge in my life."

Corporation Vice-President, Class of '61

"Yes. Success today is not climbing the mountain to the 'top.' The mountain is nothing but a pile of debris. Success today is being an individual in spite of all known social pressures that subordinate individuality."

Richard A. Saputo, '61, Supervisor
L-1011 Interior Trim, Lockheed



Robert L. Janda, '61

"Early in a business career, I thought success could be measured largely by increases in personal compensation, and the material benefits made possible by money. Today, the opportunity for personal accomplishment and self-expression is of overriding importance. The transition in this definition of success probably began 4-5 years after leaving the business school, and at a point where a basically comfortable personal standard of living had been attained. (over \$20,000)"

Corporate Vice-President '51

"I always thought that if I did a good job (and got my personal satisfactions from so doing) that I would be a 'success' in my own eyes, and that coincidentally I would be a 'success' in the eyes of others by my advance up the status and monetary scales—now I see that the latter doesn't follow, and I gradually care less . . ."

MBA '51

"I'm not sure what my attitude toward money and success is. I have to decide for me what makes my life valuable. I don't think it's money but I don't know because I've not starved. My father grew up on a farm in the depression and his father wanted him to quit school in the sixth grade. I can well understand how the older generation puts emphasis on money. Because of the depression. I might change very quickly if I were in that situation."

MBA '71

"Yes, Success is doing a job that provides an individual with personal satisfaction that he is contributing to the growth of society and the people who work in his business. At graduation I looked at power per se and money as success criteria."

Robert L. Janda, '61, Plant Manager
Charmin Paper Products

"Plain old fashioned hard work does not get you ahead. Nice guys do finish last most of the time. The key to climbing the corporate ladder is to be concerned with ole #1 (myself) and be damned everyone else. You have got to play the game."

MBA '61

"Today, material possessions mean less and a sense of 'having done something' means much more. However, I do believe this is influenced by the fact that I've already acquired the material comforts. I am sure that my awareness of the needs of society today are much greater and as a result cause me to be much more interested in contributing to the general welfare than I felt 11 years ago."

Credit Manager '61

"I used to correlate success entirely with salary level. As a banker I see many individuals enjoying a high salary whom I do not really consider as being successful. This is particularly true in many 'family' controlled companies."

Banker '61

"Mere 'success' in the nature of advancement in a company isn't true success if it means marrying the job and leaving your wife and children."

Accountant '61

"The successful man is one who can recognize his limitations and adjust emotionally to be content with the life he can achieve within those limitations. The individual can spend a most unhappy and unsatisfied life seeking that amount of wealth or respect which he is not capable of achieving. The successful person is one who can roll with the punches, that is continually re-evaluating conditions, be happy with what he knows he can realize within the changing conditions in which we live."

MBA '51

Henry Ford said recently: "Never before has American business been under such great pressure to change." Would you comment?

"Although I still strongly support the free enterprise and profit concepts, I feel there to be a need for business to give more weight to the social factors when making decisions. More consideration must be given to workers' needs."

Frank G. Rizzard, '51, Sr. Personnel Analyst, Office of the Chancellor, California State Colleges

"There appears to be an increasing awareness on the part of business regarding its quote unquote "social obligations." This is particularly true in my industry as a bank is totally dependent on its community. The community is its reason for being."

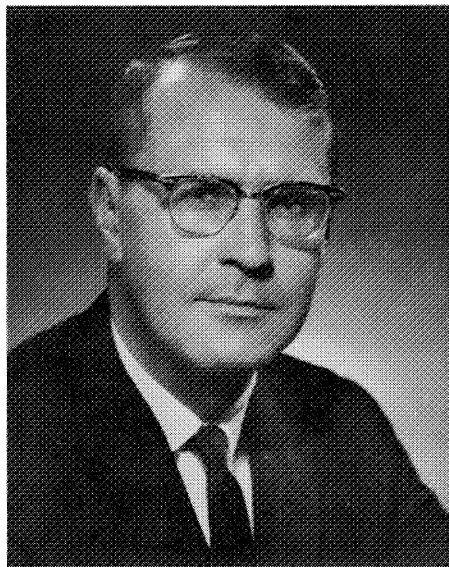
John F. Eman, '61 Marketing and Personnel Officer, Huron Valley National Bank, Ann Arbor

"If we look back, we will find almost none of the articles produced today on the market 10-15 years ago. The changes in all fields take place with increasing speed. This speed is the pressure of our time, and it will be an increasing pressure. So far the changes have taken place so fast and uncontrolled that great damage has been done to our environment. More than ever it is necessary to control these destroying effects to make the earth a living place for our descendants.

Hilmar G. Bastholm, '51, Manager of Dry Goods Retail Store, Haugesund, Norway

"I define things in terms of profits; but I see other aspects of the profit decision than strictly money—that is people, moral issues, social issues. These things are difficult to quantify. But you have to look at the long run profit. For instance, if you're in international business and you don't consider the long run you're likely to be nationalized."

MBA '71



Paul S. Brentlinger, '51

"At the time of graduation, I was probably more pessimistic about the ability of individuals and small groups to effect change in society than is the case today. On the other hand, I have become more pessimistic each year about the ability of political leaders in the U.S. to accomplish desirable objectives. I have also become somewhat pessimistic about the outlook for U.S. manufacturers to compete effectively in the face of lower labor costs and improved productivity in Europe and Japan. Acceleration of this trend could further complicate the political, social and economic problems of this country."

Paul S. Brentlinger, '51 Vice-President, Corporate Development, Harris-Inter-type Corporation, Cleveland, Ohio

"I think business could well be the leader of change but I don't think it'll happen. Because I think that business is set up on the straight line method. The man at the top has authority going all the way down the line, and it takes too long for the man at the bottom to get to the top. By the time he gets there he's far removed from the new ideas of the next generation, and he is not responding to the needs that the younger people are seeing."

MBA '71

"Our free enterprise system does not exist because of a divine right, but because it serves the needs of our society. During the last decade it has become apparent that much business "success" has been at the expense of the general public. This is evidenced by the increase in governmental regulation of business, pollution laws, consumer action groups, and increasing alienation between labor and management. Most businessmen I have discussed these issues with take outside pressure as an encroachment on their 'rights.' There seems to be little recognition that business exists because it serves society's needs. I believe a major change in attitude will be required before significant corrective action will be taken."

Corporation Planning Manager, '61

"I believe companies must be restructured such that management can place more emphasis on understanding the future. The major resource of any company, I believe, is its people. Business must direct attention toward enriching jobs such as those of assembly line workers and encouraging ideas from all employees. In order to achieve such changes, I believe new organizational and communication techniques must be developed within business."

MBA '61

What do you think has happened to the quality of life since you graduated?

"If the quality of life is measured by crime rates, pollution measures, over population, increasing permissiveness, etc., it has degenerated. However, if it is the opportunity to have greater control over one's goals in life, it has improved. Our wealth has given us greater freedom from providing the necessities of life than ever before."

Frank H. Tranzow, '61, Director of Management Services Operations, Touche Ross and Co., Kansas City

"I think the quality of life has improved greatly. Not all change represents improvement, but on balance improvement does occur."

Charles R. Jones, '61, Corporate Controller and Assistant Vice-President (Finance), General Development Corporation, Miami, Florida

"We are beginning to realize that human dignity, and relationships among people cannot be built of the stuff which we have used to fashion great industry and urban sprawl. More important to the human being than a secure job and a good salary is that he have real meaning in his life—that he have meaning to someone else as a person."

Samuel S. Corl III, Ph.D. (MBA '61) Assistant Professor of Education Michigan State University

"People to people responsibility has not kept pace with the growth in material things development."

MBA '51

"Non monetary rewards seem less useful in motivating people."

Robert L. Thornton, '51 Assoc. Prof. of Marketing Florida State University

"From a standard of living standpoint, I feel it has improved. From the standpoint of the environment, pollution and values, I feel it has become poorer."

Corporation Sales Manager '61

"We have more time to relax and spend less time relaxing."

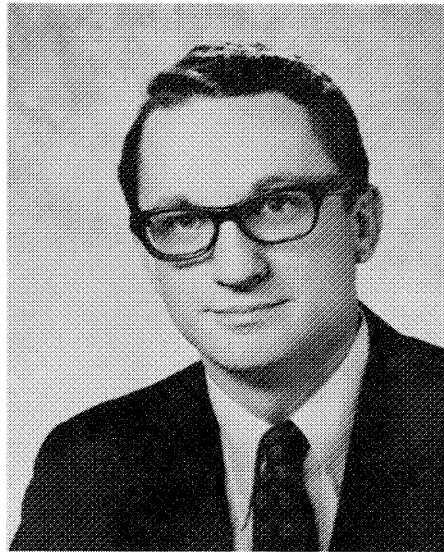
Charles Sass, '51 Manufacturing Manager

"I am disturbed by the seeming lack of direction of our government and widespread disagreement among our people. More attention is being paid to face saving than to problem solving."

Corporation Vice-President, '51

"Materially much improved. The range of 'affordable' products and services today over 10 years ago is very significant. Better performance automobiles, color TV, machines, etc. The list is endless."

Bank Official, '61



James P. Coates, '61

"The quality of life has changed considerably and it is my feeling that it has been for the better. I find greater sensitivity, more feelings and emotions and an attitude of getting involved, "doing your own thing" and more commitment to beliefs on the part of our younger people coming up."

James P. Coates, '61, Vice-President Marketing, Rubbermaid Corporation Winchester, Virginia

"It seems to have deteriorated from the aspect that there is little time for me to enjoy it (59 hour week) even though I can afford more material goods."

Engineering Supervisor, '61

"Life for me 20 years ago was quite simple—no racial crisis, no pollution as we know it today, no drug problem on a national basis, and no inflation. I suppose one could say, therefore, it has gone to hell in the last 20 years."

Robert B. Vokac, '51, Director of Placement, University of Michigan at Dearborn

"I am deeply concerned about the future of America. While I frequently tell myself that we will rise to the occasion and the quality of our way of life will improve, I harbor considerable doubts that I did not have when I graduated. I am convinced that the quality of our way of life has peaked out as a result of technical or business achievements based on ambition for material gains and will not improve unless or until basic drives shift toward desires for achievement in social problems areas."

MBA '51

"Everyone is so damned busy trying to make a buck that they ("we") have lost sight of what life is all about."

MBA '61

"At the time of graduation, I felt that everything was a threat to the welfare of civilization and the well being of the people. I have since learned that we survive in spite of ourselves."

MBA '51

LIKE A THIEF IN THE NIGHT

Sometimes powerful forces transform our lives and shape our futures and we do not even notice. Population change is such a potent, stealthy force.

In a recent issue of Harper's Magazine, Peter Drucker cites changes in population to support his view that the issues of the seventies are likely to be surprisingly different from those of the sixties. Today's "youth culture," he says, is probably *not* the wave of the future. Why? Among the facts Drucker cites:

Item: "In 1960 the center of population gravity in this country was in the 35 to 40 year old age group—older than it had ever been before. Suddenly, within five years, the center shifted all the way down to age 17—*younger* than it had been in our history since the early nineteenth century."

Item: "In 1964, 17 year olds became the largest single age group in the country. For the next seven years, that is, until 1971, the 17 year old age group has been larger every year than it was the year before. Throughout that period, then, age 17 has been the center of population gravity in this country . . . Seventeen has for centuries been the age of youth rebellion."

Item: "This is the last year, for as long as we can see ahead, in which teen agers—that is, 17 and 18 year olds—will form the center of gravity

of our population. Consequently, tomorrow's population dynamics are sure to be radically different from those of the past ten years, the decade of the Youth Revolution."

Item: "From now on, the center of population gravity will shift steadily upward, and by 1975 the dominant age year will be 21 or 22. From 1977 to 1985, the total number of 17 year olds in the population will drop sharply."

Item: "The four years that separate age 17 from age 21 are the true generation gap . . . The shift between the economic reality they knew when they dominated our population as 17 year olds, and the economic reality they will experience when, still dominant in terms of population, they become young marrieds, is going to be unusually jarring . . . The shock the individual college graduate will feel on entering the job market may be severe. The shock to the job market itself may be even stronger. During each year of the next decade, we will have to find jobs for 40 per cent more people than in each of the past 10 years."

In an article on population growth, the *Kaiser Aluminum News* says, "What a large increase in numbers of people *does*, as a force for change, is to make us consider new ways of doing things because the old ones will not work any more. The Commission that

was established in Tokyo a few years ago to plan for the needs of a Tokyo of more than 20 million citizens in 1981, quickly found that nothing in human experience, no technique adopted in the past, is applicable to the kind of new problems that arise when one considers the population densities of the future." This chart will give you a quick idea of the population densities that await us in the future:

IT TOOK FROM	FOR EARTH'S POPULATION TO REACH
the beginning of man to the Neolithic age	7,990,000 years to reach 10 million
Neolithic to the Birth of Christ	10,000 years to reach 300 million
Birth of Christ to the days of Columbus	1,500 years to reach 500 million
Columbus to 1850 A.D.	350 years to reach 1 BILLION
1850 to 1925 A.D.	75 years to reach 2 BILLION
1925 to 1962 A.D.	37 years to reach 3 BILLION
and will take to 1975	13 years to reach 4 BILLION
and from there to 1982	7 years to reach 5 BILLION

Boyce Rensburger, in a science column in the *Detroit Free Press*, discusses population growth in the United States. He writes:

"If the United States could somehow prevent every couple from having more than two children starting tomorrow, our population would

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Letter from the Future

continued from page 6

Services Division. As you might guess, these operations provide for their respective markets the same services as Municipal. Currently we are under contract to manage seventy-three schools, mostly colleges that were not quite large enough to attract good management themselves, and eighteen religious institutions, mostly association offices. Our biggest account, and one you probably read about at the time the controversial contract was signed, is the Northern Unity Church; this arrangement brought us into the direct day-to-day management of a large central office, thirteen division offices and approximately twenty-four hundred individual churches. Needless to say, Religious has its problems, but you'd be surprised and gratified at the progress we have made. Unfortunately, we lost out on our bid to manage the new electronic stock exchange here in Denver; what with occasional fifty-million share days, this would have been quite a coup for us.

As you might surmise, we continue to have problems working effectively with various governmental units, though not as much as you did according to a recent review we made of all correspondence with government personnel from 1965 to 1975.

We have far fewer governmental units for one thing, and this has helped immeasurably in reducing the frequency of contact and conflicts. Coming down from fifty states to seven regions was the biggest step, particularly since establishing the seven new constitutions and legal structures offered an opportunity for standardization of laws and regulations. Except on rather minor matters here and there, all regions have substantially the same law. Add to that the rapid pace at which metropolitan governments are replacing cities, counties, and townships, and you can see why our task in many ways has become much easier.

This is not to suggest for a moment that governmental employees and

bureaucrats evidence a thought pattern any closer to the practical realities of the market place than they did previously. Take advertising for example. Instead of moving to correct specific abuses that used to occur (and still break out occasionally) the FTC finally succeeded in getting Congress to pass the Honesty-in-Advertising Act (I can't recall, did lawmakers use such euphemisms in your day?). The result is that we still have advertising, some say too much of it, but costs are drastically increased by the review and approval procedures; moreover, the effectiveness of the advertising has declined substantially due to the elimination of all non-provable product claims. I saw a report just the other day which indicated that total expenditures on media (excluding all creative, preparation, and agency costs) are somewhat more than in 1970, but as a percentage of Gross National Product they have fallen considerably. This is apparently typical of all marketing costs, including personal selling.

Some of the other changes brought about by government may have escaped your attention. For instance, we have to estimate the waste disposal costs associated with every product

“There literally is no significant city service that we do not manage, for a fee, somewhere in the nation. Municipal Services is our most rapidly growing division.”

that we sell through to the retail market, then get concurrence on these estimates from the Environmental Protection Agency branch office here in Denver, include such amounts in the respective prices for the products, and then establish holding accounts with our public accounting firms for the monies as they come in. One can argue that consumers might well wish to spend their money on additional clothing (or whatever) rather than on waste disposal, but in the meantime, money is now available for complete waste disposal systems that have effectively removed the problems you

faced some twenty years ago. It's tough, however, to have to pay for reclaimed metals which we regularly buy from the EPA Waste Recovery Corporation, when we had to provide the money to pay for the recovery of the metal in the first place.

You can easily understand the existence of new controls like this, and they differ from those of your day only by type, varying as they do with the country's problems at the moment. You did not, fortunately, have to deal with the Corporation Limitations Act, which set a maximum of two billion dollars of sales or two billion dollars of assets for any one corporation. Under the thrust of success in our Municipal Services Division, we hit this problem of maximum sales in 1985. (Inflation has been partly responsible for the ten-fold increase in sales since you retired, averaging 7.3% a year compounded.) But we sold off the entire African operation, and have completed arrangements to dispose of the tractor business, so we needn't worry about the Act for some five years.

You also did not have to adjust to a reduced patent life of only five years, a Public Statement Disclosures Act which permits federal auditors to

review our public accounting firm's files at any time, and a Business Locations Act. This last one, typical of the many new regulations we face, eliminates our freedom to locate factories, field offices, and warehouses wherever we wish. Granted, it applies only to those urban areas which have been designated as Critical Problem Localities, but these areas include perhaps 80% of our domestic operations and we have to put up with needlessly increased costs in those instances where efficiency

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Among Ourselves

An informal collection of items, including news of the faculty, of alumni, and of the school, and assorted other information, opinion or comment that we think will interest you.

20,000 Days of Executive Development

In the past year, managers and executives from major corporations and firms across the country spent more than 20,000 days attending programs sponsored by the Business School. Here is a rundown of the programs offered.

Management Briefing Seminars, under the joint sponsorship of the Business School and the Institute of Science and Technology were held in Traverse City, Michigan, in August. Seminars on the week long schedule covered a wide range of subjects, including the vacation home market, controlling air pollution, controlling water pollution, planning technological innovations, the marketing of new products and new product investment planning. The seminars were held in cooperation with the University Extension Service.

The Executive Development Program, designed to provide a general knowledge of the functional areas of business and of new developments in general management, was held at the Graduate School of Business Administration on the U-M campus. Executives representing 23 companies in 17 states and three foreign countries attended the four week program.

The Public Utility Executive Program, similar to the Executive Development Program, but especially designed for executives in

the regulated industries, was also held on the Ann Arbor campus in two sessions during the summer. Almost four score executives from 47 companies located in 21 states and two foreign countries attended. Since the inception of this program in 1951 almost 2100 executives have participated.

The Michigan School of Banking, sponsored by the Michigan Bankers Association in cooperation with the Graduate School of Business Administration, was attended this year by 100 Michigan bankers. Courses included financial analysis, bank management, business law, business economics, personnel management, marketing and computer applications.

More than 200 management seminars, with a total attendance of several thousand managers and executives, were presented by the School's Bureau of Industrial Relations on the Ann Arbor campus this year. The seminars ranged from two to five days in length and included such subjects as management of managers; planning, programming, budgeting systems, management by objectives; management of office and technical employees; new frontiers of management; how to prepare and win more arbitration cases; and numerous others. Also during the year some 600 participants attended one day seminars on subjects of current interest to management in Muskegon, Grand Rapids, Niles, Battle Creek, Holland, Lansing, Saginaw, Warren, Port Huron, Wyandotte and Jackson.

IIC to Hold Seminars on International Business Topics

The Institute for International Commerce of the Graduate School of Business Administration holds seminars throughout the year on various topics relevant to international business. In these seminars, business executives as well as academic personalities lead the discussion on a problem-solving basis. Groups are limited in number to permit full discussion by participants.

Workshops to be held include "Mergers, Acquisitions and Joint Ventures — Ways to International Expansion," scheduled for November 18 and 19 at the Campus Inn, Ann Arbor; "How to do Business in Eastern Europe," scheduled for December 14 and 15, and "Promoting Your Exports through Agents and Distributors," scheduled for January 25 and 26, 1972.

Two highly successful seminars were held in September and October. The September seminar covered trade prospects in the People's Republic of China and the October seminar was entitled, "How to Benefit from the Fastest Growing Market: Japan."

Further information and registration information for upcoming seminars can be obtained by writing the Institute for International Commerce, Graduate School of Business Administration, University of Michigan, Ann Arbor, Michigan 48104.

Paul McCracken's Leave Extended

In early summer, the Regents extended the leave of Paul W. McCracken, Chairman of President Nixon's Council of Economic Advisers. Dr. McCracken, who has served the past four presidents of the United States as an economic adviser, is Edmund Ezra Day University Professor of Business Administration.

Sidney Jones, professor of finance, has returned to the Graduate School of Business Administration after a year's leave of absence during which he served as special assistant to the chairman of President Nixon's Council of Economic Advisers.

Comings and Goings:—

George A. Elgass, MBA '48, former chief economist of Chrysler Corporation, has been named investment officer of the University of Michigan, succeeding R. Gordon Griffith, who is retiring. Dr. Elgass, who holds his Ph.D. from the University of Michigan Business School, was a U-M faculty member from 1948 to 1964. He taught business economics and marketing management before going to Chrysler as chief economist.

James F. Brinkerhoff, MBA '48 has been named a vice-president at the University of Minnesota, where he will be chief financial officer of an annual budget of about \$275 million. Mr. Brinkerhoff has been associate vice-president and director of business operations at the U-M since 1970. Before joining the University of Michigan staff as director of plant extension in 1962, Brinkerhoff was vice-president for operations at the Argus Camera division of Sylvania Electric Products.

Lynnwood Aris, MBA '60, has accepted the position of Director of Program Planning at the Educational Testing Service in Princeton, New Jersey. He will be working there with the executive officers in the development of long range plans for the organization. Aris was formerly assistant dean at the Business School.



F. Lee Bailey Gives Speech on "The Defense Never Rests"

"The Defense Never Rests" was the title of the address given by F. Lee Bailey, world-famous defense attorney, October 15 at the Rackham Lecture Hall on the U-M Campus. His speech was the sixth annual McInally Memorial Lecture. Allen F. Smith, vice-president for academic affairs, introduced the speaker. Dean Bond presided. A question and answer period followed the lecture.

Mr. Bailey, who received his LL.B. from Boston University, has been the defending attorney in numerous famous cases, including the trial of Dr. Sam Shepard, the Boston Strangler, and the great Plymouth Mail Robbery. His most recent case was the successful defense of Capt. Ernest Medina.

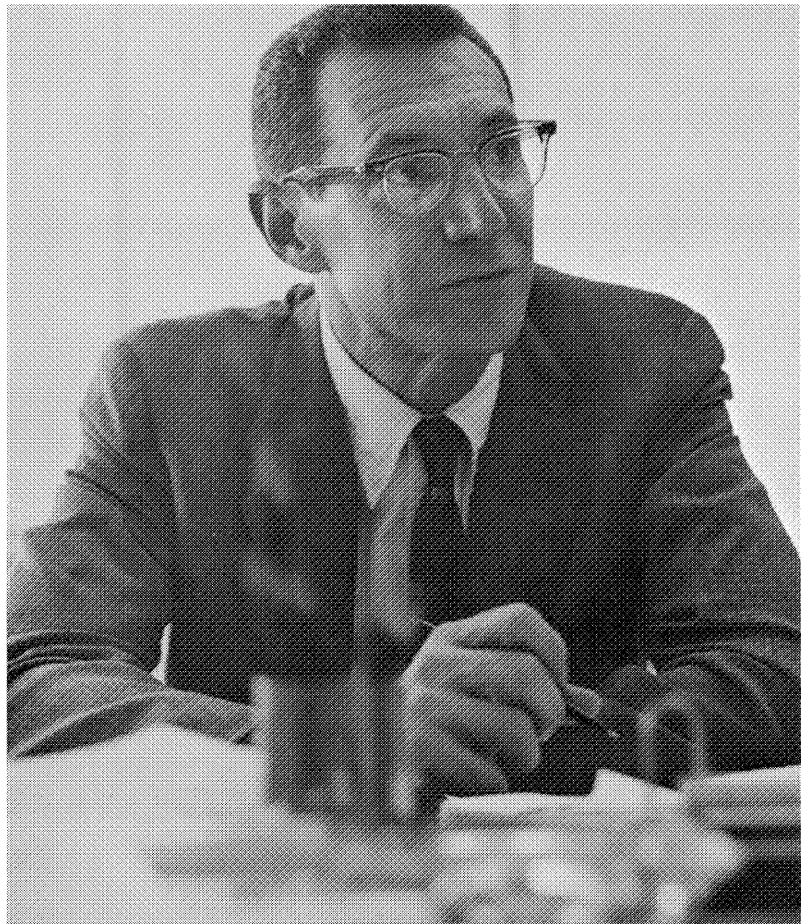
The McInally Lectures honor the memory of Regent William K. McInally and are supported by an endowment fund established by his friends to perpetuate his name. The lectures are sponsored by the Graduate School of Business Administration. Dean Floyd A. Bond is chairman of the university-wide committee which consists of Mrs. William N. Atkinson; Arthur W. Bromage, professor of political science; Hansford W. Farris, professor of electrical engineering; Dick A. Leabo, professor of statistics; and Allan F. Smith, vice-president for academic affairs.

BBR Publishes Several New Books

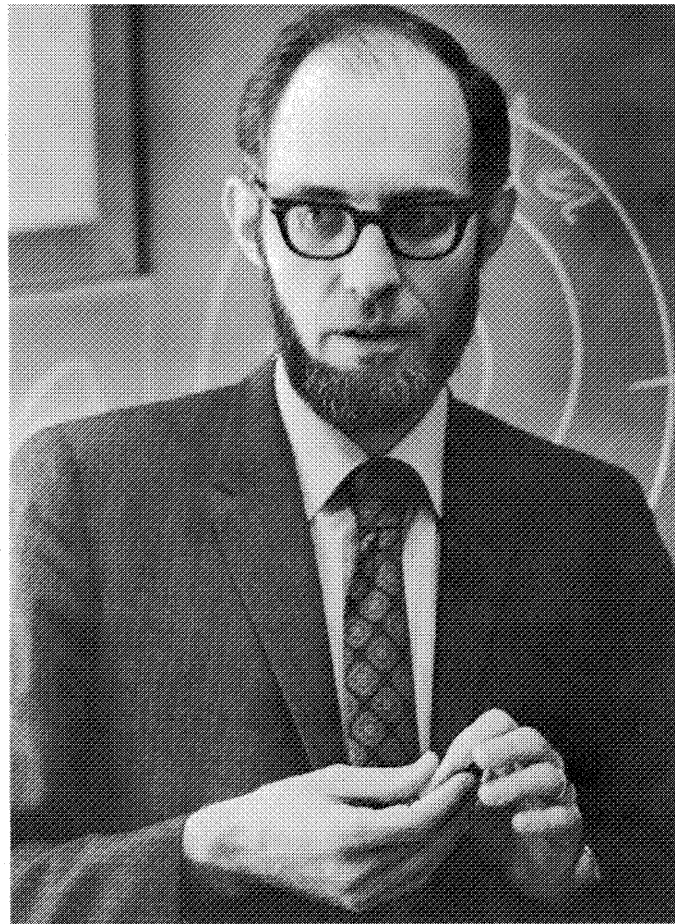
Publication at the Bureau of Business Research has been steady throughout the summer months. A major research study by Professor Douglas A. Hayes was published, entitled *Bank Lending Policies: Domestic and International*. This is a complete revision of his earlier work, *Bank Lending Policies: Issues and Practices*. The study evaluates in considerable detail the loan and credit policies of several large mid-western banks, as well as their overseas affiliates. A number of banks have indicated interest in using the book in their loan officer training programs, and it is also intended for use as a reference work in graduate courses in bank management.

Another new publication, *Institutional Holdings of Common Stock, 1900-2000: History, Projection, Interpretation*, by Robert M. Soldofsky, Professor of Finance at the University of Iowa, traces and analyzes the development and regulation of some of the financial intermediaries — investment and insurance companies, pension funds, and the trust departments of commercial banks. Looking ahead to the year 2000, the author projects the total market value of common stock and the concentration of stock ownership in individual corporations by the different intermediaries. The study deals specifically with the tensions that these concentrations of financial power will produce in our society.

Additional books brought out since June include: a *Directory of Black Business in Michigan*, compiled by Patricia L. Braden and Esau Jackson (published by the Bureau jointly with the Industrial Development Division of IST); *Proceedings of the 1970 Michigan Fall Accounting Conference*, edited by Andrew McCosh; and a reprint of *Cases in Written Communication*, by Associate Professor Mary Bromage and Bruce A. Nelson.



Professor W. Allen Spivey



Assistant Professor J. B. Ritchie

University Honors Two Business School Faculty Members

Two faculty members of the Graduate School of Business Administration were among the eleven honored by the University Sept. 27 at the annual Faculty-Staff Convocation at Rackham Lecture Hall.

W. Allen Spivey, professor of statistics, was one of five faculty members throughout the University to receive the Distinguished Faculty Achievement Award, presented to senior faculty members for outstanding teaching and research. The award includes a cash prize of \$1,000. Funds for these awards are provided by the Michigan Annual Giving Fund of the U-M Development Office.

J. Bonner Ritchie, assistant professor of industrial relations, was one of six recipients of the Distinguished Service Award for Instructors and Assistant Professors given by the University for excellence in teaching and University community service. Funds for these awards, which carry a cash prize of \$750 each, are provided by the U-M Club of Chicago.

Dr. Spivey received his Ph.D. from the University of North Carolina in 1956 and joined the University of Michigan faculty in 1957. His award citation read in part, "Professor Allen Spivey has a special gift for elucidating economic issues through statistical analysis. He can attune his teaching as adeptly to the novice taking his first steps in statistics as to the doctoral candidates who come here in increasing numbers to learn his advanced techniques. And in important administrative and deliberative offices for his school and the University, he has manifested a superior grasp of practical detail and a comprehensive vision of the corporate well-being. The University ratifies the flattering consensus of his students, his faculty colleagues and his peers throughout the nation and abroad in conferring on him a Distinguished Faculty Achievement Award."

Dr. Ritchie received his Ph.D. from the University of California at

Berkeley and joined the University of Michigan faculty in 1967. His award citation read in part: "Professor Ritchie's interests lie in the theory and practice of human organization as well as in industrial organizations specifically. His teaching has opened up a lively awareness of first principles on the one hand, and an alert sense of practical possibilities on the other. Dr. Ritchie has also taught courses in Black Capitalism and has facilitated the entrance of black farmers into the competitive market through producers' cooperatives. The University honors this faculty member with a Distinguished Service Award."

The awards were presented by U-M President Robben Fleming, who also gave his annual State-of-the-University address at the convocation which was attended by more than 600 people. President and Mrs. Fleming and members of the faculty's Senate Advisory Committee on University Affairs were hosts at the meeting and the reception which followed.

Professor Allen L. Mayerson Dies

Prof. Allen L. Mayerson, professor of insurance at the Graduate School of Business Administration and professor of math in the U-M Literary College died Sept. 11 after a long illness. He was 46.

Professor Mayerson was a widely-known expert in the field of insurance, and served as Michigan Commissioner of Insurance from 1963 until 1965. He was author of the textbook, "Introduction to Insurance," and of many articles and papers in the field.

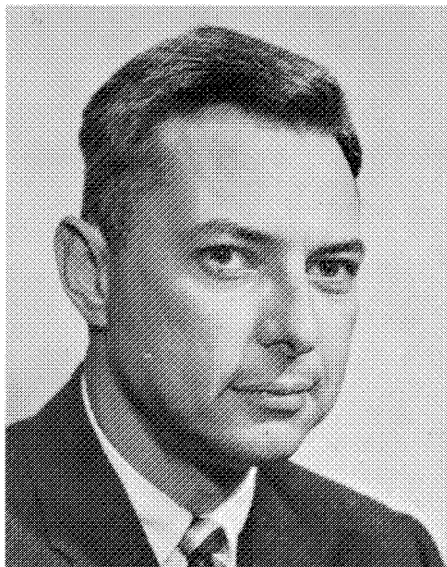
"Prof. Mayerson's distinguished service to the University, the State of Michigan, and the insurance profession will long be remembered," said Allan Smith, U-M vice-president for academic affairs. "He was outstanding in all three areas."

"Allen Mayerson lived life to the fullest," said Dean Floyd Bond of the U-M Business School. "He worked hard and he played hard. He approached each activity with imagination and enthusiasm. His scholarship, breadth of experience, and warm personality made his teaching unforgettable to his students. We have lost a real friend."

After graduating from the U-M in 1944, Mayerson went into the Navy and was discharged as a lieutenant in 1946. He returned to Michigan for graduate study in actuarial science. He served in an actuarial capacity with the Institute of Life Insurance from 1947 to 1949, the National Surety Corporation from 1949 to 1951, and the New York Insurance Department from 1951 to 1956, having the title of Principal Life Actuary.

During the year 1954-55, he studied at the University of Paris as a Fulbright Scholar.

In 1956, he returned to Michigan as an assistant professor of insurance and of mathematics. He was promoted to the rank of associate professor in 1959, and full professor in 1963. He was appointed Commissioner of Insurance in October 1963 by Gov. George Romney and served until January 1966 when he resigned to return to full-time teaching at the U-M.



Professor Mayerson

Under AID auspices he served as consultant to local cooperative insurance companies in Peru and Chile, and was a visiting professor at the Hebrew University of Jerusalem. His services as a consultant were in demand in many places in the insurance industry both in this country and in Switzerland.

Contributions to the University of Michigan Mayerson Fund may be sent to The University of Michigan Gift Receiving Office, Michigan Union, Ann Arbor, Michigan 48104 for a permanent memorial in the form of an endowment or loan fund for actuarial students.

Noon Hours Are Busy at Bus. Ad.

During lunch hour you can usually find something interesting and educational going on at the Business Administration Building. This fall, several series are being offered:

Monday Business Movies, held every Monday at 12:10, include movies entitled "Anatomy of an Inflation;" "The Self-Motivated Achiever;" "Who Killed Lake Erie?" and "The Management of Human Assets." In all, 12 movies will be presented during the fall season.

The Voice of Business is the title of another lunch hour series being held on Fridays. These are taped discussions on various important economic topics. Some examples of the

programs are "The Executive Voice" taped remarks of some of the most influential men in business speaking candidly about management ideas and problems. These tapes are produced monthly by Fortune Magazine. Another tape is a Business Week Conference on public disclosure and how it relates to the corporation. Noted educators, lawyers and businessmen discuss corporate responsibility and liability relating to full disclosure.

Another series of lunch hour events is entitled *Sandwich Seminars* and is sponsored by the Student Council. Among the speakers are Robert Harris, mayor of Ann Arbor, speaking on the city government; Robben Fleming, President of the U-M, speaking on "The Future of the University" and Dean Bond giving a State-of-the-School address.

Are Street Lighting and Crime Related?

The Graduate School of Business Administration has recently received an \$80,305 grant from the Law Enforcement Assistance Administration's National Institute of Law Enforcement and Criminal Justice to carry out the first phase of a seventeen-month study to determine the impact of street lighting on night street crime. The School is working with the Kansas City, Missouri, Public Works and Police Departments, and the University's Institute for Social Research. The study will draw on offense, arrest, patrol, and lighting data provided by the city, together with socioeconomic data from the 1970 Census and commercial sources.

Using both cross sectional comparisons and analysis of the city's lighting improvement program, the research team expects to identify the types and dimensions of crime that are affected, the temporal pattern of the effect, the effect on adjoining neighborhoods, and the influence of neighborhood characteristics on the effectiveness of lighting. The study is headed up by Roger Wright, assistant professor of statistics, and Duane Thomas, director of the ISR's computer services facility at the Institute for Social Research.

Faculty News—

Christopher M. Korth joined the U-M business school faculty July 1 as Director of Research for the Institute for International Commerce. He is co-author of *International Business: the World of the Multinational Firm*, which will be published by Prentice-Hall this autumn. He is also author of an article entitled "Survival Despite Devaluation" in the April, 1971 issue of *Business Horizons*.

W. A. Spivey, professor of statistics, is co-author of a monograph, *Optimization Programs at the University of Michigan*, published by the Bureau of Business Research. He is also coauthor of two papers, "Models for Cash Flow Estimation in Capital Budgeting," published in the spring, 1971 issue of *The Engineering Economist* and "Forecasting the Local Area Demand for Telephones," published in the *Proceedings of the American Statistical Association* for 1970.

Raymond R. Reilly, assistant professor of finance, presented a paper entitled "On the Defects of the Weighted Average Cost of Capital" with co-author W. Wecker at the annual meeting of the Appalachian Finance Association in Montreal, Canada.

H. F. Taggart, professor emeritus of accounting, was present at the launch of Apollo 15 on July 26. He was there in company with about 100 other U-M related people. Professor Taggart will be teaching again this year at the Business School after four years of retirement.

Rex Brown, associate professor of business administration, is co-author with Cameron R. Peterson of an introductory textbook on decision analysis entitled *Decision Making for the Executive* to be published by Holt, Rinehart and Winston in 1972. His book *Research and the Credibility of Estimates* is to be re-issued in paperback form by Richard Irwin this fall.

Arthur F. Southwick, professor of business law, lectured on "The Hospital's Vicarious Liability" at the Law Institute on Hospitals and Medicine held at the Medical College of Virginia, Richmond, Va.

Karl G. Pearson, professor of business administration, has a chapter on the housing market of the 1970s in the book, *Manufactured Housing in the 1970s* published by the Institute of Science and Technology of the University of Michigan. Dr. Pearson has also been speaking around the country on the market for vacation homes.

Mary C. Bromage, associate professor of written communication, has received an award of merit in recognition of her "outstanding efforts in training governmental auditors for the interagency auditor training center" of the U.S. Dept. of Commerce. During the summer Mrs. Bromage conducted seminars on functional communications for industrial and governmental managers in Toronto, Honolulu, Denver, Dallas, San Francisco and Washington, D.C.

Gunter Dufey, assistant professor of international business, spent several weeks as a visiting scholar at the business school of the University of Washington where he worked on a section of a forthcoming research paper, "Reporting to International Investors."

Joseph W. Newman, professor of business administration, is co-author (with Richard Staelin) of an article "Multivariate Analysis of Differences in Buyer Decision Time" in the May, 1971 issue of the *Journal of Marketing Research*.

Douglas A. Hayes, professor of finance, has written a book entitled "Bank Lending Policies: International and Domestic" which was published by the Bureau of Business Research in September.

Dennis F. Reinmuth, associate professor of insurance, and David L. Lewis, professor of business history, won a cash prize offered by the American Risk and Insurance Association for the best article published in the *Journal of Risk and Insurance* in 1970. The co-signed article, entitled "The Case of the Missing Insurance Entrepreneur," was published in the June, 1970 issue of the magazine.

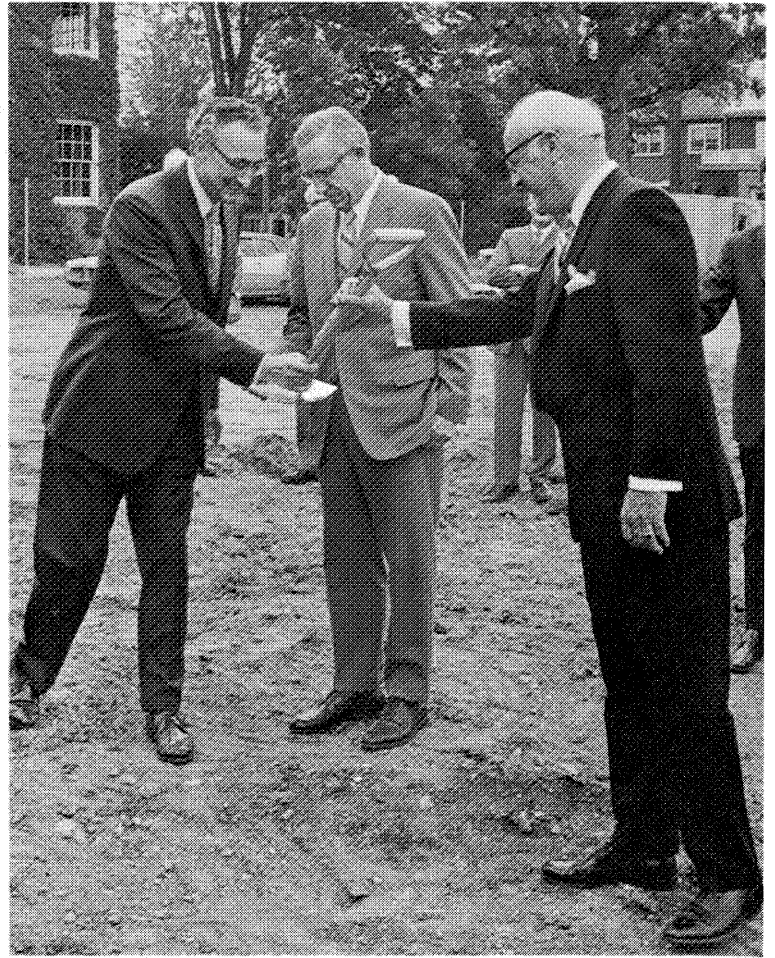
William K. Hall, assistant professor of statistics, gave a paper entitled "Explanatory Modeling in Corporate Strategic Planning" at the national meeting of the Institute of Management Science in Detroit in October. He also gave a paper at the Canadian Operations Research Society meeting on banking entitled "Developmental Considerations in Bank Planning Models."

J. Philip Wernette, professor of business administration, has written an article entitled "The Significance of the Full Employment Budget," which appeared in the May issue of the *Michigan Business Review*. Another, entitled, "Holmes and Watson Were Wrong," appeared in the spring issue of the *Michigan Quarterly Review*, and a third, "Modest Improvement in Business Activity Underway," was published in the August issue of *Tempo*, the house organ of the Ohio Citizens Trust Company of Toledo, of which Professor Wernette is a director and economic adviser.

School Well Represented at Marketing Conference

Three faculty members were on the program of the annual conference of the American Marketing Association's Education Division in Minneapolis, August 30-September 1. The participants and titles of their papers were: Joseph W. Newman, professor of business administration, "Doctoral Instruction in Learning and Teaching;" H. Paul Root, assistant professor of marketing and director of the bureau of business research, "Product Planning: The Relationship Between Organization Structure and Quantitative Approaches;" Professor Root and Jay E. Klompmaker, doctoral student, "A Microanalytic Sales Forecasting Model for New Industrial Products;" and James R. Taylor, associate professor of marketing, and Thomas C. Kinnear, doctoral student, "Empirical Comparison of Alternative Methods for Collecting Proximity Judgments." Also attending the conference were James D. Scott, Sebastian S. Kresge Professor of Marketing, and D. Maynard Phelps, professor emeritus of marketing.

Right, Dean Bond hands the shovel to Clayton G. Hale while Vice President Pierpont looks on.



Groundbreaking!



Groundbreaking for the new two-story Assembly Hall of the Graduate School of Business Administration was held this summer. The Assembly Hall, scheduled to be completed in one year, will offer year-round facilities for conference and teaching activities, particularly the many management and executive training programs offered by the School. "We will have one of the most intensively used buildings on campus," predicted Dean Floyd A. Bond.

A 500 seat auditorium incorporated in the new building will be named the Clayton G. Hale Auditorium, in honor of Clayton Hale, a former member of the Business School faculty who presently serves on the Visiting Committee of the School. Mr. Hale, chairman of a Cleveland insurance underwriting firm, participated in the

groundbreaking ceremonies along with Dean Bond and Vice-President Wilbur K. Pierpont, U-M chief financial officer. Mr. Hale's gift of \$325,000 was instrumental in launching the \$1.5 million project. Funds for the building are being provided entirely by private gifts.

Designed by the Birmingham (Mich.) architectural firm of O'Dell, Hewlett and Luchenbach, the building will feature special lighting to allow the auditorium to be used for case method and closed circuit television instruction. First floor facilities also will include case discussion rooms and quarters for the executive-in-residence program. Second floor features will include conference rooms and offices, plus a walkway to the existing Business School building.



Letter from the Future

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demands that we move a facility but some bureaucrat says we cannot. We do get some relief against federal taxes for such situations, but not nearly enough.

We have, however, made great strides in changing several institutions where change seemed essential. I have already described some of the changes

that have occurred in the structure and management of a corporation, but similar dramatic changes have occurred in education (the fact that we now manage so many schools would indicate this), local governmental structure, and in those thousands of institutions created to solve specialized problems (e.g., transportation authorities).

I think you would enjoy a "return to the harness" under the conditions of today, but I am also quite certain

that you would need a stint in our Management Retraining Division to prepare you for it. (Last year, its sales were up 14%, earnings were up 19%, and we got a return on investment before taxes of some 32%.) We don't sell many TV sets anymore, but then you weren't selling many curling irons either.

Your loving niece,
Elaine
President

Thief in the Night

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continue to grow for the next 70 years. Not until the year 2040 would it stop growing, at which time it would stabilize at 280 million.

"That continued growth would be the result of allowing the vast number of people already born to duplicate themselves. The 'replacement people' would co-exist with the 'replaced people' until the parents began to die off.

"Because we, as a nation, are nowhere near achieving a replacement rate of reproduction, it is absolutely

certain that the U.S. must eventually support more than 280 million people—barring a nuclear war or other disaster.

"The fact is that the Census Bureau's lowest growth rate projection is that there will be 414 million Americans living by 2040—a year when half of today's newborns will be alive.

"According to the Census Bureau, however, it is possible that our population will grow faster and that by 2040, there will be 744 million Americans trying to find happiness in a land that many believe is crowded at 205 million.

"All we need to do to have 744 million Americans is for American

couples to have an average of 3.35 children."

The *Kaiser Aluminum News* quotes Arnold Toynbee as getting to the heart of the meaning of the population explosion when he says, "The issue is, indeed, a religious one in the sense that it raises the question, 'What is the true end of Man? Is it to populate the Earth with the maximum number of human beings . . . or is it to enable human beings to lead the best kind of life that the spiritual limitations of human nature allow?'"

How we answer that question will have a great deal to do with the nature of change on this planet in the future.
— P.S.