



A Presentation by

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A Wake-Up Call to America

An Address to the
Ann Arbor Chamber
of Commerce
October 15, 1991

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Introduction

In the past, when I have been invited to address this body, I have attempted to focus my remarks on issues concerning the community of Ann Arbor and its relationship to the University of Michigan. While this relationship—more correctly partnership—is terribly important, today I would like to paint on a somewhat broader canvas a series of issues facing our state and nation that provide a context in which communities like Ann Arbor and institutions like the University of Michigan must function.

I will warn you at the outset that the picture I will paint will not be pretty. Indeed, it will be somewhat dark and forboding, but I believe it's very important that we look at the real issues and the real challenges before us today so that we may develop a plan of action aimed at restoring a sense of optimism to America and providing for a prosperous and secure future for our descendants.

The Warning Signs

Economic Competitiveness

For most of our history, the political and geographical isolation of the United States, coupled with its abundance of resources and technological leadership, ensured our control of our own destiny while providing steady improvements in the quality of life. But today it is clear that a truly domestic U.S. economy has ceased to exist. It is no longer relevant to speak of the American economy or the Michigan economy for that matter. Our economy, our industry, and our companies are truly international in scope, spanning the globe and intensely interdependent upon other nations and other peoples.

As strong evidence of this, during the 1980s the United States' trade deficit has taken it from the world's largest creditor to its largest

debtor nation. While during the past decade our productivity increased somewhat, it did so at a slower rate than any of the other G-7 nations. In fact, the growth rate of productivity in the United States during this period was roughly 5 percent compared to a growth rate of 15 percent for Germany and France and 20 percent for Japan.

Compounding this is the fact that the United States ranks dead last among the industrialized nations in investment as a percentage of GNP over the past thirty years. For three decades the United States has been investing a smaller percentage of its GNP in private plant and equipment than any other major industrialized nation.

So too, we have seen a significant erosion in the technological competitiveness of our nation. During the past year, the top ten companies receiving U.S. patents were Hitachi, Toshiba, Cannon, Fuji, Philips, Siemens, Mitsubishi, IBM, GE, and Bayer. A rather alarming big ten ranking, I'd say.

Financial Concerns

Although it does not seem to be generally known, real weekly wage earnings and wages have been declining in this country since 1972. In fact, in 1990 the U.S. standard of living showed its first real decline in eight years. No other G-7 country suffered such a decline last year. In fact, over the past two decades the U.S. standard of living has risen more slowly than any other G-7 country, showing only a 33 percent increase in real terms during these two decades.

Part of the reason for this is due to the activities of both the business community and the federal government, who during the past decade combined in one of the most gigantic spending and speculative binges in our history. As Felix Roytan put it, by recklessly cutting taxes while dramatically increasing spending, we have bankrupted the richest country in the world. "The junk bond peddlers and the raiders, the specula-

tors and the S&L hustlers, with their legions of consultants, their lobbyists, and their friendly politicians turned this country into a vast casino and turned its value system into show business.”

The worst hangover is the savings and loan scandal. Although this hasn't caught fire yet in the public and political eye, it is building rapidly out there. (I note that Watergate started slowly too.) Of particular concern is that the State of Michigan is among the major losers in this largest corporate bailout in history. As the S&L scandal crests, it will sweep out a great many politicians and bring a sharp focus back to more traditional values and social concerns.

The Dilemma of the States

In the late 1970s Washington provided 25 percent of state and local revenues. Now it provides less than 17 percent. Unfortunately, that does not inhibit the federal government from transferring to the state major responsibilities in areas such as social welfare and health care. For example, while the federal government sets the general guidelines for Medicaid, it provides less than 56 percent of the costs to cover these commitments. The states must pay the rest. As a result, these costs are zooming upward with no end in sight. A second cost transfer is education, the largest item in the budget of every state. In 1980 the federal share of educational support was 9.2 percent. In 1990 it had fallen to 6.3 percent. Further, federal policies have had a major impact on forcing the states to make major commitments to the expansion of their corrections activity. Because of these cost transfers, the states have been unable to make adequate investments in areas of traditional responsibilities such as modernizing infrastructure, improving schools, and making public services more effective. Instead they have had to respond to the shift of costs and responsibilities from the federal government.

Education

It is now clear that our educational system is seriously malfunctioning. We are producing a generation of young people ill equipped to deal with the complicated and challenging future. More specifically, functional illiteracy in our nation now ranges from 20 percent to 30 percent. Twenty-five percent of students fail to complete high school. But even of those who complete high school, the vast majority are ill prepared for the international market place. In fact, it is now estimated that we are educating only 15 to 20 percent of high school graduates to an intellectual level capable of functioning well in the everyday world. In fact, only 5 percent of high school graduates who enter college today are ready for science and mathematics instruction.

Our students score at the bottom of all advanced nations in science and mathematics achievement. This is important because the coin of the realm in the age of knowledge will be science, mathematics, and technology. But most American students are simply not developing these skills. Indeed, they aren't even learning the basics: reading, writing, critical thinking, languages, history, literature, and the arts.

Special Interests in Myopia

Today we have a long line of special interest groups asking government to protect—to guarantee—their economic interests. Our society has been encumbered by innumerable bargaining blocks, each one of which, no matter how small, has learned to use our system to promote its own interests. Unfortunately, even as the changes in our society accelerate and become less predictable, the potential for conflict among these various special interest groups in our society increases. Our institutions are taxed in their capacity to reconcile competing interests and the unwillingness of special interest groups to accept any compromise.

What has emerged in place of a rational and effective public policy process is a fragmented social dictatorship driven by special interest groups. This tendency has been accentuated by the extraordinary proliferation of lawyers in our society which tends to intensify the conflicts among interests at great cost to our nation.

Global Change

For the first time in our history, it has become clear that human activities are changing our planet. With the world population at 5.3 billion, we are already consuming 40 percent of the world's photosynthetic production. With estimates placing the stable world population of ten to fifteen billion within forty to fifty years, it is clear that at our present rate we will eventually consume all of the plant's resources. It should be noted that history indicates that a doubling of the population triggers a three-fold increase in energy consumption and a four-fold increase in economic activity.

Yet at the same time, even today, 1.2 billion people live below the subsistence level and 500 million live below the minimum caloric intake level—that is, they are starving. Furthermore, it is now estimated that over the next two decades man's activities could well destroy over 25 percent of the earth's species.

And yet how do we respond? Well, to be sure, there is a growing concern over environmental issues in this country. Yet, our efforts are characterized by an adversarial approach relying on legislation and litigation rather than planning and cooperation. This cripples not only our own efforts but limits our ability to help the rest of the world. In fact, one might well characterize the U.S. effort as a highly self-indulgent movement, focusing on toxic waste dumps and ALAR and totally ignoring the fact that 25 percent of the world's population lives in poverty and 10 percent of the world's population today is slowly starving to death.

The Warning Signs in Michigan

Needless to say, this time of change has posed great challenges to our state. The America of the twentieth century that we have known was a nation characterized by a rather homogeneous, domestic, industrialized society. But that is already an America of the past. Our children will inherit a far different nation, a highly pluralistic knowledge-intensive world nation that will be America of the twenty-first century.

The impact of these changes are already painfully apparent to Michigan's workers and industries. In fact, it is here in Michigan, in the heart of the rust belt, that the impact of these extraordinary changes are most clearly seen. We all know that the past decade was a period of great difficulty for our state. Industries of great economic importance to our nation, such as steel and automobiles, fell victim to intense competition from abroad. The plants have closed. We still have many people chronically unemployed or underemployed.

For the past decade, Michigan has slipped badly in several of the key indicators of the quality of life:

- 30th in per capita income
- 37th in child well being
- 39th in housing affordability
- 41st in overall employment
- 48th in business climate
- 48th in high school graduation rates
- 50th in return of federal tax dollars

Oh, we still rank near the top in some things. For example, we rank:

- 14th in teenage unemployment rate
- 13th in incarceration rate (and rising rapidly)
- 13th in percentage of children in poverty
- 12th in property tax burden.

- 10th in infant mortality
- 4th in public aid recipients
- 1st in mortality from major disease.

The situation is particularly alarming for Michigan's children:

- One-third of Michigan's children now live in poverty.
- One-sixth live on public assistance.
- In Wayne County, one-third of all infants now live in foster care, casualties of the drug culture that has taken over our cities.

A bleak picture to be sure.

What is Going On, Anyway?

What is going on? Does this all have to do with those greedy Japanese? Or perhaps the numbing influence of television and media sound bites? Or an aging America? The absence of leadership? The deterioration of our basic values?

No, something far more profound is happening. Change is transforming our world. Indeed, one might regard change as the only true constant of our age.

Yet few of us realize the full implications of the ever-accelerating pace of change in our world, our nation, and—perhaps most of all—in our state. Who would have predicted several years ago that:

- Communism would be rejected around the world, swept away by the winds of freedom and democracy.
- The Berlin Wall would crumble, Germany would be reunified, and Eastern Europe would break away from the Soviet block to embrace democracy and unite with Western Europe.
- The Soviet Union and China, together

with most of the world's other nations, would act together to defeat the actions of an aggressive dictator in the Middle East.

- The Soviet Union would fly apart from the centrifugal forces of freedom and nationalism.
- The share of the domestic automobile market held by U.S. auto companies would drop below 50 percent.
- Or that Bo Schembechler would become president of the Detroit Tigers!

Yet, all of these things have happened, along with so many, many other events that have changed our state, our nation, and our world. Indeed, over the past decade the United States and other nations have faced and are continuing to face economic, political, and technological realignment of unforeseen proportions.

What can we expect in the years ahead? As Jacques Attali points out in his profound book, *Millennium*, Marx's *Das Kapital* or Adam Smith's *Wealth of Nations* may be less useful in futuring than Ridley Scott's *Blade Runner*. Indeed, all that can be reasonably said is that the world will change more in the next decade than in any other period of our history. Indeed, many believe that we are going through a period of change in our civilization just as profound as that which occurred in earlier times, such as during the Renaissance, the Age of Discovery, and the Enlightenment—except that these earlier transformations took centuries to occur; transformation characterizing our time will occur in a decade or less.

Yet the changes we have seen thus far are just the tip of the iceberg. Even more profound changes are underway. We are becoming more diverse, more pluralistic as a people. Indeed, almost 85 percent of the new entrants into our work force during the 1990s will be people of color, women, or immigrants. Unlike all other advanced nations with whom we compete economically, the

United States is becoming a truly pluralistic society. Indeed, some of our major urban centers have already become a combination of first and third-world populations. The pluralism that we see in America today is far more complex than it has been in the past because it is touched by race and the ravages of slavery and by a people deprived of education for more than a century. Further, the bonds that have held our society together in the past are shakier, and those disenfranchised among us are more alienated.

A second trend has to do with the fact that our population, economy, and commerce are becoming every day more interdependent with other nations as the United States becomes a world nation, a member of the global village. For example, the startling political transformation of Eastern Europe and the Soviet Union has already changed the entire context of international economic, political, and military relations for decades to come.

But perhaps most profound of all, we are rapidly evolving into a society in which the key strategic resources necessary for prosperity and social well being have become knowledge itself, that is, educated people and their ideas. In this age of knowledge, our society will not be so much post-industrial, in the sense that services will replace industry, but as Attali puts it, "hyperindustrial," in which services are actually transformed into mass-produced consumer goods. In this world knowledge will play the same role that in the past was played by natural resources or geographic location or labor pools.

Put in another way, while forces such as land, guns, and money drove the past, ideas will be the driving force of the twenty-first century.

We live in a time of breathtaking change. The pace continues to accelerate even as I speak. I used to portray the 1990s as the countdown toward a new millennium, as we found ourselves swept toward the precipice of a new century by these

incredible forces of change. But the events of the past year suggest that the twenty-first century is already upon us. The reality is that we entered the new millennium a decade early. But are we ready for it? Are we prepared to face a world whose economy, culture, polity is driven by the explosion of knowledge itself? Here, I think we must acknowledge and face several challenges before America.

Challenge 1: Quality and Competence

You would think the one lesson we should have learned during the 1980s—in Michigan of all places—is the importance of quality in everything we do, in everything we buy. Yet, at least when it comes to key investments such as education, we seem hellbent on insisting on bargain-basement prices, even when it means bargain-basement quality in the calibre of our institutions, and in the value of the opportunities we are willing to provide the future generations.

Challenge 2: Mesmerized by the Quick Fix

Competence demands that both people and their institutions be held responsible for their performance. Throughout the history of our nation, there has been a culture of competence—a set of attitudes, expectations, and demands that have characterized American lives. Yet, there are increasing signs that today we have lost much of our drive, our discipline, our willingness to work. Instead, we search in vain for the quick-fix—the simple solution to complex problems that will satisfy our needs and desires.

In the State of Michigan this spirit of seeking the quick-fix characterizes much of our approach to education. A good example here is the state lottery, which was originally sold to the Michigan citizen as a source of funding for education. However, we have learned in the years of operation of the lottery that in reality the funds generated by the lottery flow into the general fund

of the state to offset reductions in the amount of tax dollars to support education. Another example of a quick fix has been the Michigan Education Trust. Once again, the citizens were sold a political pyramid scheme which “guaranteed” them the cost of a college education, but at the expense of future generations who would eventually have to pay the bill.

Challenge 3: A Shift in the Professions

Although the great prosperity of twentieth-century America was created by manufacturing—that is, by making things and adding values—in the decades following the Second World War, we have become more fixated on ancillary activities, such as advertising, financing, and marketing. In fact, the principal focus of our society as measured by personal income has been in what one might call the manipulative (as opposed to creative) professions—professions such as law, business, accounting, and advertising—in which the premium is placed on rearranging existing wealth, rather than adding new wealth. At the same time, other societies such as Japan and Europe have instead focused on generating new wealth, on making things.

It is becoming increasingly clear that the key activities of the twenty-first century will involve creativity. The premium will be placed on professions that create, that turn dreams into reality: professions, such as engineering, architecture, art, and entertainment. The winners of the new century will be creators, and it is to them that power and wealth will flow. In fact, Attali points out that the need to shape, to invent, and to create will blur the borderline between production and consumption. Creation will not be a form of consumption but rather will become work, and the creator who can turn dreams into objects will receive prestige and society’s gratitude and remuneration.

Challenge 4: Investment

International Comparisons

As we noted earlier, there are serious clouds on the horizon concerning our nation's willingness to invest in the future. For example, although the decade of the 1980s evidenced an unusually long economic expansion, throughout it all we failed to maintain a commitment to the future by refusing to make adequate investments in either physical or human capital.

In fact, even as other nations have been increasing their public investments in people and infrastructure, the United States is a nation that has been cutting back. While France invests over \$100 billion in a national high-speed rail system, while it has cooperated with England in investing in the tunnel under the channel, while Japanese banks are replenishing their capital, and while all of these nations in Europe and Asia are backing up these national industrial investment policies with strong public education systems at the primary and secondary level, the United States has slipped to dead last among industrialized nations in investment in its percent of GNP. Our spending on infrastructure has fallen from 2.3 percent in 1960 to less than 1 percent today.

In the past three years the United States has invested less in plant and equipment as a share of real GNP than any other G-7 economy. In fact during the past year, Japan in *absolute* terms invested more in new manufacturing capacity than did the United States. Our nation's gross real investment in manufacturing declined throughout the 1980s; during that time the most increased investment was seen in other areas such as finance, insurance, and commercial real estate. Indeed, it is already clear that our investment in manufacturing has sunk far too low to sustain our competitiveness. The average age of U.S. manufacturing plants and equipment has been increasing and now exceeds eleven years. Furthermore,

U.S. gross fixed capital formation's share of GNP is now at 70 percent—down with the United Kingdom—as compared with Japan at 26 percent and Germany at 22 percent.

Another aspect of this has to do with the cost of capital in the United State, which is roughly three times the cost of capital in Japan and Germany. This is important since the key impact of lower cost capital is that it allows a far longer time horizon.

R&D Investment

While the United States' total R&D as a percentage of the GNP at 2.8 percent is comparable to that of Germany and Japan—when the defense component of this is subtracted out—the United States lags badly at 1.7 percent compared to 2.8 percent for these other nations. More specifically, Japan and Germany spend about 50 percent more on non-defense R&D than the United States as a percentage of GNP. This is beginning to have a major impact on those technologies critical to economic competitiveness such as electronics, advanced materials such as superconductors, computer technology; and, of course, manufacturing technology.

Savings vs. Consumption

Net savings as a share of GNP has been dropping at a fast rate in this country since 1980. For example, savings has dropped from 9 percent in 1970 to 3 percent today. At the same time, personal consumption as a share of GNP has risen steadily throughout the past two decades.

As we pointed out earlier, the 1980s was perhaps the greatest decade of speculation and financial irresponsibility since the 1920s. Financial deregulation, easy credit, and regulatory neglect combined with the degradation of our value system. Felix Roytan portrays the savings and loan tragedy as part of this extraordinary American performance in which substantial segments of

the business community and the federal government were simply unwilling to demand the discipline, long-term commitment, and sustained creativity to cope with foreign competition and instead looked about for other ways to make easy profits—such as junk bonds.

As a result, throughout the 1980s we spent our children's future to pay for greedy consumption and quick fixes. Instead of investing in infrastructures such as schools, we squandered our money on junk bonds and leveraged buy-outs on pay-outs and write-offs to people who already had enough or more than enough. As Robert Reich puts it, what started in the early 1950s as a sense of possibilities gradually became expectation and then finally entitlement. As a result, we have a current generation which believes that living in the present and paying in the future is the norm.

The Fortunate Few

There is considerable evidence that the decade of the 1980s witnessed an almost unprecedented accumulation of wealth among the richest people in the country. The net worth of the Fortune 500, for example, tripled during the past decade. Unfortunately, the investments of this wealthier America ceased to trickle down to the rest of the American population and instead trickled out across the globe to wherever the best returns could be had. Again, to quote Reich, American capital, associated with the wealthy, rapidly left the United States in the form of factories, equipment, and laboratory space in foreign lands financed by American-owned companies. While wealthy Americans reaped high returns from world-wide investments, the rest of American society enjoyed few of the beneficial consequences.

Beyond that, it was clear that America's high earners increasingly felt justified in paying only what was necessary to ensure that their own particular needs were satisfied. There continues to be a debate about whether this group is paying its

fair share, a concern that this "fortunate fifth" is quietly seceding from the rest of the nation. In many cities the wealthy have already withdrawn their dollars from the support of public places and institutions shared by all and dedicated the savings to their own private services. The philanthropy of the rich increasingly flows to the places and institutions that entertain, inspire, cure, and educate wealthy Americans. Corporate philanthropy follows the same pattern. Business donations to education and charitable causes tapered off markedly during the 1980s. In fact, most of the corporate contributions have been far smaller than the amounts corporations receive from states and communities in forms of subsidies or tax abatements.

Challenge 5: Education

In the age of knowledge it has become the skills of the nation's work force and the quality of its infrastructure which give it the capacity to compete in the new world economy. The most ominous dark cloud on the horizon is the increasing evidence that we as a people have not yet recognized either the importance of education or the magnitude of the investments we must make to achieve prosperity in the age of knowledge. We have already noted the challenges faced by K-12 education. It is clear that both at the state and the national level major structural changes are needed in public education, both in classroom quality and in the adequacy and fairness with which the system is financed. Yet, we continue to be paralyzed in our efforts to come to grips with either school finance reform or the major overhaul of primary and secondary education necessary to achieve quality.

The situation is somewhat different, yet no less acute, for higher education, particularly in the State of Michigan. While the quality of our colleges and universities is still high, the long-term prognosis is poor, particularly if we continue as we have been in recent years.

The State of Michigan provides an excellent example of the challenge before us. Over the past two decades, we have seen our state drop from a position of the national leader, ranked sixth in 1965 in its public support of higher education, to among the lowest in the nation. More specifically, Michigan currently ranks:

- 38th in appropriations per student
- 37th in appropriations as percent of personal income
- 26th in appropriations per capita

Further, we not only fall significantly below the national average in our support, but it is clear that we are slipping even further behind with each passing year. In fact, the change in state appropriations to higher education experienced in our state during the 1980s ranks Michigan 45th, nearly dead last, among the states. This past year, despite the effort by the governor and the legislature to place a priority on the support of education, we were cut yet another 2.5 percent in the base budget; and from our state appropriation for the final quarter—July, August, and September—\$100 million was eliminated entirely.

Hence, no matter how you slice it, Michigan now ranks among the lowest in the nation in support of higher education. As a highly industrialized state, undergoing a dramatic change to a knowledge-intensive economy, Michigan is critically dependent upon quality higher education for well-educated citizens and creative ideas. Yet Michigan has now fallen into the bottom ranks of industrialized states in its support of these critical resources. We are being out-spent by 30 to 40 percent of state support per student, not simply by prosperous states like California, but by neighbors such as Indiana or Ohio. They understand what Michigan has yet to grasp. The world is changing rapidly, and we have to prepare ourselves for tough competition.

But it isn't enough that the state should withdraw its financial support. Now many public leaders are attacking the autonomy of our institutions. Until now our universities have been able to sustain the quality of public higher education in the state in the face of a catastrophic loss of state support because of our traditional autonomy, so wisely granted almost 150 years ago by the authors of our state constitution. This autonomy allowed Michigan's universities to take strong internal actions reallocating resources, redefining priorities, and increasing tuition levels to partially compensate for reduced public support. But in recent years even this autonomy has been threatened through efforts from Lansing:

1. to constrain tuition to artificially low levels even if state appropriations erode still further
2. to dictate who we must admit
3. even to dictate what we must teach

Whether measured in terms of state appropriation per student or fraction of tax dollars directed toward higher education, it is clear that in comparison with other states our present level of public support is simply inadequate to maintain in the long run a system of higher education that is competitive on a national basis.

At the national level, per student public expenditures have now dropped below those of eight other nations, including Sweden, Norway, Japan, Denmark, Austria, Germany, Canada, and Switzerland. The same is true of colleges—both federal and state governments have backed away from higher education which has seen the lowest increases in thirty years. At a time when other nations in Europe and Asia are investing heavily in education, we seem to be pulling back, becoming consumers rather than investors in our future.

Challenge 6: Preserving the Future

As Attali notes, the essence of both democracy and the free market system is choice: to buy or not, to re-elect or vote out of power, to hire or fire, to change management or shift investment—the capacity to change or reverse or alter policies, people, and products. We have come to believe that nothing is or should be forever. Such a principle, while undergirding a consumer economy, cannot anchor a civilization, since it undermines the chief imperative of enduring.

As mankind approaches the limits of this planet, it is clear that this culture of choice of free market and democracy will have to be constrained to some degree. We must replace the conservative values which would call for total freedom in the function of the market place by *conserving* values that preserve the future. For example, the culture of choice must not be allowed to embrace processes that would irreversibly alter DNA genes or destroy the rain forests or ultimately strip the planet of its biodiversity. Again to quote Attali, “The great paradox of a global consumer democracy is that the right to pleasure and happiness, the right to choice in the present, may well be a toxic elixir we are forcing our children to drink.”

Challenge 7: The Absence of Political Leadership

There is increasing evidence that our present political system, the way we select our leaders and develop public policy, has become obsolete, unable to even sense—much less to understand or control—the extraordinary changes occurring in our world today. For the past several decades there have been many signs that our nation was headed down the wrong track, that we were allowing our political expectations to diverge from the economic realities. The inability of our government to come to grips with the energy crisis in the 1970s or to tax its people honestly during the 1980s were signs of this.

More fundamentally though, it has been clear from our national elections that the American political process simply is incapable or unwilling to identify the critical nature of the transition through which our nation is now passing. Instead, Reich characterizes the two major political parties as continuing to battle over the past, debating over whether the marginal dollar should go to the public or private sector, whether we should seek lower taxes or greater equity in American society. Yet, it is now clear that the current debate between Republicans and Democrats over economic growth and fairness obscures the real issue: how much are we willing to invest in the future of our country. Perhaps the great change in American politics during the 1990s will see a shift from an economic to a political issue as politicians are asked to explain why they spent our future.

Perhaps then one of the most serious questions we have before us today is whether, as a nation, we have lost the capacity to govern ourselves, to respond to the challenges of the future. Has government lost the capacity for long-term commitments and strategies? It is ironic that the federal budget, which, of course, is one of the key policy documents that determines our future, continues to focus on "entitlements" rather than "investments." In areas such as welfare, health care, and defense we are paying staggering interest costs on the federal debt, rather than investing in education and rebuilding our infrastructure for the future.

A Summary of the Challenges

The challenges before us as a nation and as a state are best summarized in a poignant letter sent from a University of California student to his parents:

"Sometimes I wonder what it would have been like to have been twenty back in the 1960s, back when you could grow up, count on a career and maybe think about

buying a house. When one person could expect to be a wage earner for a household. Aside from the wealthy, none of you ever told your children, 'someday all of this will be yours,' and you are the first middle class to fail that way. Did you think we wouldn't care?

"We are the stupidist generation in American history, we twenty-year-olds. We really do get lower SAT scores. Our knowledge of geography is pathetic, as is our ability with foreign languages and even basic math. We love fads. Ask our college professors and they'll tell you they don't get intelligent responses like they used to when you were in school. We're perfectly mush-headed.

"You did this to us. You prized your youth so much that you made sure ours would be carefree. It's not that you didn't love us; but you loved us so much you pushed us to follow your ideas of what you were—or would like to have been—rather than teaching us to be responsible. After legitimizing youthful rebellion, you never let us have our own innocence.

"You will differ from your parents in that you will have missed your chance to change the world and robbed us of the skills and the money to do it ourselves. If there is any part of you left that still loves us enough to help us, we really could use it, and it's not just your last chance. It's our only one."

What has happened to us as a nation? Today's generation seems different. The failure of our generation to invest in the next has broken a continuous chain of responsibility and stewardship from one generation to the next. We seem determined to eat our dessert first, to meet our needs and desires, even though it may mean that we are consuming the quality of the future that we

leave our dependents.

Perhaps it is just the inevitable product of three generations of affluence, which in turn created a culture of high expectations and a politics premised on high consumption in which expectations became entitlement. Or perhaps it is due to a changing America willing to place highest priorities on the needs of a retired generation, while leaving little for the young. Perhaps, as the student points out in his letter, it is the “me” generation of the 1960s now grown up into comfortable yuppiehood, a generation that has vigorously defended its rights, but all too frequently failed to step up to its responsibilities. Perhaps we now simply prefer dreams and illusions to the rigors of reality.

Whatever the reason, it is clear that we may well become the first generation in the history of America that will go down as unable—or unwilling—to provide a better future for the next generation.

What Must We Do?

It seems increasingly clear that we as a nation still don't get the point. Again and again, we look for excuses. We blame the Japanese for their success. We seek to put pressure on them to change their ways. Yet it has also become increasingly clear that the Japanese will not shift from a strategy of managed trade to free trade. They will continue to set the rules of the game, and they are taking very long-term strategic actions in making the necessary investments to be certain that they will never lose this advantage.

More seriously, it is clear that the world is moving faster than ever. Change driven by technology has a speed all its own. Not to stay abreast is to fall behind. Work demands ever higher levels of education and competency. But we don't seem to be responding to it.

As a result, the ills that beset American society today are likely to grow in severity if we do not take action, making it difficult for us to compete in the world marketplace without embracing the path of wholesale economic destruction. In fact, Attali suggests that in the next century Japan and Europe may supplant the United States as the chief super powers competing for global economic supremacy. He believes that only a radical transformation of American society can forestall this development and its political consequences.

While not so pessimistic, I strongly believe that we must be not only attentive to the challenges before us, but we must be determined to take the actions necessary to deal with those challenges. Let me suggest several such steps.

Returning to "Conserving" Values

For the last two decades it is clear that the forces that have allowed America to presume a position of economic and military supremacy during the twentieth century were running out of steam. In our more competitive world, America as a nation and as a people simply has to become more disciplined. We have to develop a capacity to make harder choices, to make sacrifices, to make investments. We need to "conserve" in the classic sense of the word. That is, we need to regard ourselves as skeptics who save for the future, spend within our means, and above all attempt to make things better in the future.

Our generation must embrace once again the important values of our forebears. Key among these is a responsibility to ourselves, to each other, and to the future.

"I" vs. "We"

Etzioni talks about the need to shift our focus from an "I" to a "we" society. And there are some indications that perhaps we are beginning to lean that way. Those of the Yuppie generation

have now reached middle age and are beginning to worry about their children. It is though as a people we are waking up after a bad party with a hangover, and we need to make some resolutions about going on the wagon.

Investment

It is clear that we must be willing to make a lasting shift. More specifically, we must reallocate resources to better assist state and local government. We must cease the continued federal assignment of responsibility without adequate federal support, which would force states to raise the most regressive taxes—sales tax and property tax. Further, we need to offset the dramatic regional transfers of wealth associated with the S&L bail out, which is injecting tens of billions of dollars into the southwest and west at the expense of the northern part of the country. And, of course, we need to invest the extraordinary centralization of wealth that is occurring among the “fortunate fifth” at the expense of the rest of American society.

Where will the resources come from? Well, at the risk of raising the “T” word, it is clear that the United States, compared to other developed democracies, is not over-taxed. For example, as Reich notes, if we were forced to, we could easily impose a temporary five percent surcharge on personal and corporate income to pay off the S&L losses over a few years, instead of borrowing \$500 billion over thirty years. As oil prices come down, we could tax ourselves by fifty cents a gallon to raise \$50 billion per annum to invest in our own country instead of investing in the Persian Gulf. We could raise another \$1 trillion through a more progressive income tax. We could limit entitlements to those who really need them, generating another \$600 billion. Cuts in defense could yield another \$450 billion.

The point is that we are still a wealthy nation and have adequate resources to invest in our future, to make a down payment on the future

productivity, prosperity, and security of all Americans—if we are willing to do it.

Industrial Policy

There is a good deal of argument today about whether our nation should take a far more strategic approach to competitiveness and join the ranks of Japan and Europe in developing “an industrial policy.” The elements of such a policy would include:

- removing regulatory constraints
- channeling federal support to key areas such as research on pre-competitive generic technology
- revising the tax code to lower the cost of capital
- negotiating a comprehensive trade policy
- reducing the federal deficit and beginning to reinvest once again

While many oppose such strategic actions, arguing that the government should not pick “winners” and “losers,” it is nevertheless the case that we stand essentially alone as a nation; and we are dependent entirely upon the free market system to determine our competitive stance.

The Acceptance of Limits

As we noted earlier, one of the great conflicts before us today is the culture of choice demanded by democracy and a free market economy, and the need for constraint and conservation demanded by a world with limits. The dream of endless choice could well end in the nightmare of no choice at all. A world of abundance would flounder in an age of scarcity. Again to quote Attali, “The next millennium will be terrible and magnificent, depending upon our ability to limit our dreams. Not everything is possible, or should be.”

Recognizing Global Implications

Most of the pressing problems of our future will be, for the first time, global in nature. This globality will characterize all of the great issues of our times: wealth and poverty, immigration and development, drugs, disarmament, and the environment. Yet, the United States continues to be affected by an insularity, indeed, an arrogance in its thinking that it can act alone. Among all nations, the United States probably has the most to lose—and the most to gain—from addressing global change. But beyond that, as a nation we have a moral responsibility and a great opportunity to protect the planet and respond to one of the greatest challenges the human race has ever faced.

Changing our Political System

It is clear that our political system, whether at the federal, the state, or the local level, has fallen sadly behind both the changes in our world and the people it must serve. It seems incapable of either understanding or implementing the actions necessary to achieve competitiveness, that is, participating in a worldmarket place in a way that would build a higher standard of living.

As Shapiro points out, the strategy for competitiveness is in reality quite simple. It involves two steps: 1) generating adequate savings, and 2) investing these savings wisely. From this perspective, it is clear that the most important thing that could be done to build savings in our nation today is to reduce the federal deficit. Indeed, this is a necessary condition without which other actions would be ineffective.

Next, once such savings have been achieved, their wise investment will be the goal. Once again, this should be a simple task, since if people believe there is something in it for them, then they will invest.

These considerations yield a remarkably

simple political agenda. The problem today is that our political system is unable to step forward to deal with such issues, since they will cause pain and will require long-term commitments—something the present American political system seems determined to avoid. Further, today people no longer believe their investments will pay off.

It seems clear that as we demand more of ourselves and our society, we must also demand more of our leaders. We cannot continue to allow public office to go to the highest bidder—with single-interest politics—or policy-making based on polls. In a very real sense, we have been getting what we deserve in politics.

Strategic Thinking

One of the great difficulties we have as a nation, as a state, as a people is focusing excessively on the short term at the expense of the longer-term view. Whether it is the quarter-by-quarter focus of American business as dictated by the marketplace and the accountants, or the year-by-year focus of public leaders as forced by the election process, it is clear that we suffer enormously from what might be called “small-think,” the inability to see the forest for the trees. Perhaps this is one reason why we allow ourselves to be so distracted by special interests, since they are easy to focus on and generally of a very short-term nature.

Yet it seems clear that the great challenges that face us today as a society and as a people require “big-think,” long-term strategic vision, that will lead us to take the necessary actions and make the necessary investments for the future.

The Importance of the University

We have entered an era in which educated people and the ideas they produce have truly become the wealth of nations. As one of the prime producers of such wealth, universities are

becoming more deeply engaged in our society, becoming a more critical factor affecting our economy, our culture, and our well-being than ever before.

To illustrate its growing importance to the University let me give you two quotes. The first comes from Derek Bok, former president of Harvard: "In all advanced societies our future depends to an ever increasing extent on new discoveries, expert knowledge, and highly trained people. Like it or not, universities are our principal source of all three ingredients."

The second quote is provided by Erich Bloch, former director of the National Science Foundation who notes, "The solution of virtually all of the problems with which government is concerned: health, education, environment, energy, urban development, international relationships, space, economic competitiveness, and defense and national security, all depend upon creating new knowledge—and hence upon the health of America's research universities."

In particular, it is clear that the public research university, an institution for which the University of Michigan is not only the prototype but perhaps also the flagship, touches the lives of a great many people in a great many different ways. Since World War II our society has assigned to the research university an increasing number of roles, broadening its mission far beyond that of producing the educated people needed by our society through education, research, and service, through health care, economic development, and yes, even through a sense of pride in athletic accomplishments.

Yet as important as these institutions are today in our everyday lives, it is my belief that in the future they will play an even more critical role as they become the key player in providing the knowledge resources—knowledge itself and the educated citizens capable of applying it wisely—necessary for our prosperity, security, and social

well-being. To make this clear, let me draw on two examples from the University of Michigan.

Example One: Genetic Medicine

For those of you who are old enough, let me take you back some forty years to the early 1950s when the great fear of most parents was the dreaded disease, polio. At that time, the University of Michigan was conducting the clinical trials on a new vaccine developed by a Michigan faculty member, Jonas Salk, that was destined to eliminate the threat of this disease from our society. Well, today, the University is engaged in an even more important quest: to change the entire nature of health care itself.

Teams of medical scientists in the University of Michigan Medical School are developing applications of molecular genetics to medicine. The first major discovery, announced two years ago, was the identification and the cloning of the gene responsible for cystic fibrosis. They are now moving ahead learning how to inject normal genetic material into the cystic fibrosis gene in order to cure it. In more recent months they have discovered as well the genes responsible for neurofibromatosis (some times referred to as the Elephant Man's disease) and other diseases such as diabetes and the body's inability to handle cholesterol; and now they are closing in on the genes responsible for certain forms of breast cancer.

Since most diseases plaguing our society today are genetic in nature—cancer, heart disease, high blood pressure—the implications of this work are extraordinary indeed. But this is only part of the story. The University is one of four sites in the United States engaged in the Human Genome Project, whose aim is to map the entire human genetic code. The implications of this effort are extraordinary since it will allow one to immediately identify an individual's susceptibility to various diseases. In effect, it would shift medicine from therapy to prevention, since such

advanced knowledge would allow one to adopt a life style to avoid such genetic disease.

Example Two: Linking the World

On the University's North Campus is a large glass building, filled with computers, that in many ways may be the future of our state. This is the command center of the National Research and Education Network, a massive network operated by the University in collaboration with IBM and MCI that links together the computers on university campuses, industry, and government laboratories throughout the world. In fact, today the network already links together over four million users world wide and is doubling in size and scope every six months or so. In a very real sense, the University is playing a lead role in building an interstate highway system of information flow—except in this case the system is world wide.

The implications of this effort are extraordinary. We can envision a world in which literally hundreds of millions of computers are plugged together into a global information infrastructure. Sound improbable? Well, last year there were already personal computers in thirty percent of homes in America, and fifty percent of American workers use computers in their everyday jobs. Indeed, over seventy percent of homes with children between the ages of eight to twelve have Nintendo games—which are nothing more than small personal computers!

But there is an even more interesting perspective here. If you think about it for a moment, you realize that the key activity which determined the course of our civilization during the twentieth century was *transportation*—cars, trains, planes, oil, space. Transportation was the enterprise that determined prosperity, national security, even the nature of our culture, with the growth of the suburbs, international commerce, and so on. A century ago the State of Michigan was well positioned to take a leadership role in this new range of industries. And through the

automobile industry, it became one of the most prosperous and powerful regions on earth.

Many believe that the driving theme of the twenty-first century will be *communication*, enabled by the profound advances we are now seeing in computer technology, networks, satellites, cellular phones, fiber optics, high-definition television, and so on. The core of the new technologies is the networked computer. Computers and computer networks may well be remembered not as the technology used primarily to compute but as the technology to allow coordination. These astonishing new technologies will unleash formidable leaps in productivity and will generate vigorous economic growth for decades to come.

To some degree we have already felt the impact of this shift from transportation to communication as Michigan's industry has become less competitive—and unfortunately, less important in the new world order. However, through leadership efforts such as the National Research and Education Network, Michigan is once again well positioned for a key role in this new arena: to build a new industrial base in information technology that will provide the infrastructure for the communications industries that will dominate the twenty-first century.

A Fork in the Road

It is clear that both our nation and our state are in the midst of a profound transition, from an industrial economy based upon the abundance of natural resources, unskilled labor, and to some degree constrained, slowly moving domestic markets, to a knowledge-based economy, characterized by intensely competitive world markets, rapid change, and—most important of all—educated people and their ideas. This has not been, and will not be, an easy transition to make. Further, the truth is that the outcome is still very much in doubt: whether we will emerge from this transition as a world economic leader

once again, with a strong, prosperous, albeit new, economy—producing jobs and improving the quality of life—or whether we will fail to heed the warnings to make the necessary investments and sacrifices today necessary for strength and prosperity tomorrow and become an economic backwater in the century ahead. It is clear that we face a fork in the road ahead.

My central theme is that education, broadly defined, will be the pivotal issue in determining which of these two alternative futures will be Michigan's—and America's. Indeed, I am absolutely convinced that the dominant issue of the 1990s will be the development of our human resources. The actions that we must take today and the investments we must make will clearly determine our capacity to respond to this future.

Conclusion

The choices before us as a state, as a nation, as a people are not easy. We are presented with trade-offs: growth or fairness, private investment or public spending, tax cuts for the rich or entitlements for everyone else. It is clear that we must address pressing social issues of employment, health, and social welfare. We must meet the important needs of our citizens today. But we also must balance these immediate needs with an investment in our future. Indeed, if we don't invest in our cures, our symptoms will in time become fatal.

It is clear that we must all, both personally and as institutions, go through a period of sacrifice, of pulling back, of generating savings and making wise investments. The answers to the challenges before us are simple, but the question is whether as a nation and as a people we have the capacity to mobilize ourselves. In the past, America has always been mobilized by dramatic events—Pearl Harbor, Sputnik. But today, while change is far more profound and rapid, it is far less visible. Indeed, many of us don't even sense it

yet, and many others are distracted by special interests to the degree that they miss the forest for the trees. Perhaps we are like the frog in the pan, not able to sense the slowly rising heat even as it is being cooked.

But we are at a crossroads. If we persist in our traditional attitudes and approaches, if we are unwilling to modify our institutions, our economic position in the global marketplace will only erode further. However, if we can recognize the changes that surround us, take advantage of our unique strengths, question established wisdom and create new collaborations and alignments, the future can be bright.

For generations our ancestors sacrificed so that their children could have a better life. They had faith in education. Now it is our generation's turn. We must rekindle that faith in that commitment to the future today. We must care for our children's future as much as we care about meeting our own present needs and desires. We, as a people, a state, and a nation have to become more disciplined. We have to learn how to make the hard decisions, how to make sacrifices as we pass from one era to the next.

There is every reason for confidence if we get down to business, make sacrifices, look for a bold new vision, and cast off old grievances and old agendas. Indeed, never before have people held as much power to shape the future as they do today, but then never before have there been so many urgent decisions to be taken by a single generation in order for the world to realize its tremendous potential for prosperity, while still remaining livable.