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High Technology and Judeo-Christian Values **MIND, NOT MONEY, DRIVES THE ECONOMY**

By Warren T. Brookes

Editor's Preview: From Bible times, Western civilization has recognized that moral and spiritual values underlie the material wealth of individuals and societies. America in particular was founded on this Judeo-Christian principle, but the country has been seduced by more narrowly materialistic doctrines of political economy in recent years.

*Now, in the 1980s, technological change and ideological ferment are swinging the world economy back toward a metaphysics of unlimited possibilities, with exciting potential consequences for global prosperity, social justice, and moral renewal. This is the vision outlined for *Imprimis* by Warren Brookes, author of the nationally syndicated column, "The Economy in Mind."*

With computers leading the way, the U.S. is well along toward becoming more an "information society" than an industrial one, Brookes demonstrates. Intelligence, ideas, and character, not physical resources, account for the dynamic growth of states as disparate as Massachusetts and Japan. And this new "economy in mind," as he calls it, promises to reverse gloomy forecasts of resource exhaustion or worsening maldistribution of wealth.

Rambunctious market forces have made the revival of classical free-market economics (fashionably renamed "supply-side") virtually unavoidable. Finally, predicts the author, the "high" of high technology may be pushing us not only into magic realms of microprocessing but toward vast spiritual frontiers as well.

Christ was confronted, early in the second year of his teaching, by angry members of the

"establishment church," the Pharisees who wanted to know when and where "the kingdom of God should come," and what it might look like.

It was a natural question for an entrenched bureaucracy to ask. It came out of the increasingly material political perspective of a religious establishment that had long since lost sight of its spiritual mission, and was much more concerned with getting along with Caesar than with knowing God.

Jesus, always the spiritual radical, quickly rejected this political and material utopianism. "The kingdom of God cometh not with observation," he said (it is not a material state to be described for the eye). "Neither shall ye say lo here! or lo there! for, behold, the kingdom of God is within you."

Not only was this a profound statement of the mental and spiritual nature of reality, but it was an affirmation that, at its roots, salvation or utopia was not collective, it was *individual*; not the result of the equitable distribution of physical assets by a benevolent state or king, but the individual apprehension and application of infinite spiritual laws and principles.

This was also a presentation of ideal government as the *self-government* of each individual by his own understanding of the laws of good, which in some languages is another term for God.

And, lest the simple people who followed him might think this was too abstract to be

humanly practical, Christ had already laid out the applicable metaphysical principles of this ideal in the Sermon on the Mount where he promised that if we would seek first the spiritual laws of this wise and good God-consciousness, all of the material things we needed, food, clothing, shelter, comfort, would be added unto us.

Jesus was simply restating the underlying premise of Solomon's prayer to God, not for riches, but for "a wise and an understanding heart," which, in turn, would ensure his wealth and sovereignty. Or as the Proverb urges, "Wisdom is the principal thing; therefore get wisdom; and with all thy getting get understanding."

Like it or not, these basic principles have permeated and dominated Western culture and political and economic thought ever since. They have been especially important in America, where a De Tocqueville could quickly observe that the strength and greatness of America were in her "goodness," and that these flowed more out of her churches than from her undeniably vast material resources.

From our earliest settlers, most Americans have believed that wealth and prosperity were more a function of our spiritual values than our material good fortune—that mental attitudes and qualities (or lack of them) were the precursors of material progress, or the predictors of misfortune.

Principles Forsaken

It is really only in the last decade or so that these metaphysical principles have been scornfully lumped together as "middle-class morality" or the "Puritan ethic," and severely challenged by an increasingly materialistic and secular "new class." America became a society whose academic and technological sophistication was growing by geometric leaps while its spiritual leadership was in rank decay and full retreat before the aggressive hedonism of the "Me generation" and the righteousness of the radical left.

In this media-hype milieu of pseudo-intellectualism, it was not hard for a nation nourished on the oft-times harsh disciplines of Adam Smith's individual-centered micro-economics of the marketplace with its Spencerian emphasis on the survival of the economically fit, to reach out hungrily for the easy promises and seemingly compassionate claims of Keynesian macro-economics and the welfare state with its promise of collective economic comfort by centralized fine tuning.

Joseph Schumpeter's clear-eyed vision of the "creative destruction" process typical of a dynamically innovative democratic capitalism, where the production of wealth, not its redistribution, was paramount, was happily traded in for the more utopian visions of "demand management" and the pursuit of an ecologically "safe" environment. Dynamism and uncertainty were traded in for the vain pursuit of cycle-free equilibrium and social security (with small s's).

Keynes, the father of macro-economics, regarded technological advancement and innovation as largely "exogenous" shocks to be absorbed and dealt with by the macro-economic machine much in the way we might survive drought or natural disasters. This was compatible with the growing share of the intellectual and spiritual leadership of our country who had begun to regard technology itself through increasingly Luddite lenses. Though this new economic and political environmentalism is profoundly materialistic and humanistic in its precepts of "limits to growth" and "collective security," it unfortunately attracted important leaders within the American religious establishment (Council of Churches, Catholic bishops) who began to equate technology with rampant materialism.

Metaphysical Resources

Yet, as we shall see, nothing could be further from the truth. In fact, it is precisely

the extraordinary onslaught of what has come to be called "high technology" that seems to me to be moving us toward the ultimate realization of Judeo-Christian principles—namely that wealth is not physical, but metaphysical; that it is to be found not in matter, but in mind; and that being in mind, it is at once *individually* liberating and expansive, *universally* available and unifying.

John Naisbitt in *Megatrends* cites as his first and paramount trend the transformation of our industrial society into an information society. "It makes no sense," Naisbitt argues, "to reindustrialize an economy that is not based on industry, but on the production and distribution of information." In 1950, less than 17 percent of American workers were in "information jobs." Now more than 60 percent of us are, and by the year 2000 it is likely to be almost 80 percent of us.

We have already moved into what I call an economy in mind, and out of an economy premised solely on material or physical resources. We are going to have to reorient totally our thinking about the true nature of wealth. This floppy disc in my word processor is made up of about ten cents worth of plastic and paper. But the program it contains is worth over \$300 on the market, and the work it can do in terms of informational output displaces thousands of hours of manual clerical labor. Because it translates that physical energy into informational bits, it expands our wealth, while taking nothing from our resources.

In this sense, high technology is demonstrating what Buckminster Fuller describes as the virtually unlimited "metaphysical component of wealth" which is continually enabling us to do more with less, and which, in Fuller's words "over the last 80 years has enabled us to go from less than 1 percent of the world's people living in any reasonable level of comfort to more than half of them living at a standard virtually unimagined at the turn of the twentieth

century—and all this despite the apparent decline in so-called physical resources."

Increasingly, our wealth is coming not from stockpiles of material commodities, but from tape and floppy-disc files of information programs and knowledge. As David Birch of MIT has put it, "we are working our way out of the manufacturing business into the thinking business." Birch points out that almost 90 percent of the 21 million jobs that have been created in the U.S. since 1970 have come, not in goods producing industries, but in the broad, non-manufacturing service sector which comprises this "thinking business."

In the last dozen years of transition into this "economy in mind, the U.S. by itself has created over four times as many jobs as did all the rest of the Western democratic nations of the Common Market and Japan put together. And we did all this, *mirabile dictu*, without the industrial planning help of Robert Reich, Gary Hart, or Walter Mondale.

Bay State Miracle

As one who has watched the transformation of Massachusetts over the past decade from a stagnant industrial state to the flagship of the high technology armada, I am more convinced than ever that the "information society" is going to expand beyond our economic horizons far beyond our wildest imagination.

Not only is Massachusetts now employing nearly 64 percent of its adult population (the highest of any state or nation in the world), but its unemployment rate today is 5.8 percent—and in most of the so-called "high tech" beltway, the rate is between 2 and 4 percent, too tight for comfort. Our state's personal income after stagnating down to 47th slowest growing in the country in 1978 is now among the top 10. And significantly, our greatest economic and employment growth is not in industrial production, or even in the hardware side of the computer business, but in the software or information-service side.

What is important about the Massachusetts experience, of course, is that it is the result not of raw material or physical resources of which we have pathetically little, but wholly a function of our knowledge industry, our universities and research centers.

Massachusetts, like Japan, is demonstrating that the further we move into high technology and the information economy, the less physical limits there are on our wealth creation potential. Indeed, Japan, with 0.3 cent of the world's land mass, now produces nearly 10 percent of the world's GNP, a ratio of 32.7 to 1. Even the U.S. has a ratio of only 3.6 to 1. By contrast, Russia and China have negative ratios!

There is really nothing new about all of this. The Industrial Revolution itself was nothing more than the application of ideas and the energy of thought to replace human energy, material drudgery, and brute force. The effect of this transformation was, of course, to give vast new value to previously valueless resources.

No Limits to Growth

We are learning that all economic activity is, as Schumpeter correctly defined it, the practice of technology, the use of our unfolding knowledge and intelligence to convert seemingly useless matter into increasingly useful and valuable products, to generate wealth where none existed before. True economics, like true metaphysics, is anti-entropy, the constant imposition of the order, utility, and organization on an otherwise chaotic and seemingly depleting material world.

It is this development of the metaphysical or "know-how" component of our wealth, which has both mystified and escaped what I call the "entropicists," those who are constantly citing the Second Law of Thermodynamics as an excuse to impose "limits to growth," and to put dampers on both technology and the growth of wealth itself.

Their premise is a purely engineering and materialistic view of the world which attempts to inventory our physical resources and set a time frame within which we will "run out," using this as a pretext on the one hand for rationing our utilization of these "finite" resources, and on the other for redistributing them "fairly" around the world. Yet because they take no account of the unlimited metaphysical component of our wealth, these inventories have again and again been completely confounded by actual experience.

Julian Simon's brilliant book, *The Ultimate Resource*, documents with endless statistics the fact that our natural resources are not running out; and indeed, that the history of mankind shows, instead, a constantly expanding resource base. "Because we find new lodes, invent better production methods, and discover new substitutes," Simon writes, "the ultimate constraint upon our capacity to enjoy unlimited raw materials at acceptable prices is knowledge...and the source of knowledge is the human mind."

Jesus put it more simply, "It is the spirit that quickeneth; the flesh profiteth nothing." This was not merely a religious truth, but a practical statement of an infinite spiritual reality that we are only now beginning to understand, namely that it is in the ideas and concepts of mind that we find real wealth, not in depletable material resources.

More Wealth, More Fairly Distributed

Carrying it a step further, I would suggest that the Christ-message which Jesus brought was not that maudlin sentimentalization of poverty and false humility which is sometimes idealized by the church, but rather a message of the glories of spiritual (thus real) abundance in the realm of mind: "I am come that they might have life, and that they might have it more abundantly."

It must be clear that the very thing that concerns many churchly leaders and liberal politicians, namely the seeming injustice of the maldistribution of the world's goods, was the

direct result of our universal perception of the physical scarcity of those goods, a perception which led in turn to what Bucky Fuller has called "the pirate mentality" of both capitalism and socialism, the constant battle to control physical resources.

The solution to that cruel economics of scarcity may well be developing before our eyes, as we move from an economy of material limits to an economy of unlimited mind. Not only will this make wealth more infinitely available, it should make it more accessible to everyone. On the one hand, this new information economy will vastly extend the creative wealth potential of the individual human being. On the other, its universal availability will break down the corporate and nationalistic barriers and structures that now divide us.

It will both liberate us—and unify us.

Recently we were treated to the spectacle of some Milwaukee teenagers using their wits and their personal computers to access some of the nation's most sophisticated and secure computer data banks from New York to California.

While the press and the politicians focused on the need for new forms of security and defense against such easy access, the incident demonstrated a simple fact: Once we translate wealth from guardable physical assets to the total fungibility of mental and intellectual concepts, or information, we will have destroyed forever the notion that wealth can be monopolized, partitioned—or even redistributed, for that matter.

In the future, our individual and collective access to the world's expanding informational wealth will be more a function of our educational systems than of our relative position and power. Distribution of the world's wealth will inevitably be broadened and shared more equally in direct proportion to the availability of literacy, knowledge, and understanding.

Which is to say that we are rapidly moving back to the Judeo-Christian concept of individual as sovereign and of wealth as the result of mental and spiritual search. In a funny sort of way, the computer is showing us that the "kingdom" is within our individual consciousness, and that its horizons are limited only by the development of one's mental and spiritual capacity.

Market Dynamism Accelerating

Small wonder the pharisees and bureaucrats who now dominate our institutions, from government to church to multinational corporations, are so worried. In the economy of mind, we are now seeing what John Naisbitt describes, on the one hand, as the rapid shift from a national to a global market economy, united by satellites and the universal communications network, and on the other hand the trend within nations from centralization to decentralization.

The more cumbersome and gargantuan conglomerates are already starting to come apart at the seams. Decentralization and spin-offs are the new hallmark of our surprisingly entrepreneurial times. The "creative destruction" of Joseph Schumpeter's thesis is being accelerated by the information revolution, and it applies not only to products and industries, but to all institutional structures.

Is it really any wonder that in the last two years alone, this nation has witnessed the formation, in the middle of a deep recession, of more than 1.1 million new businesses, an all-time record? It may come as a shock that even though business failures reached a record high of 23,000 last year, the positive ratio of formations to failures in the last two years was a stunning 28 to one. With failures at 3.5 percent of total starts, 1981 and 1982 were our two strongest "new business years" in history.

In the economy of mind, everything is going micro not macro, individual, not collective, toward dynamism, not equilibrium. The revival of classical supply-side economics, with its

emphasis on the micro-incentives and rational responses of the individual in the marketplace, its drive for reduction of centralized bureaucratic interference in this marketplace, is thus a logical result of our times and our technology—not merely an economic fad of electoral politics.

Adam Smith is becoming more, not less relevant. The markets are becoming more efficient with each passing year and each new generation of informational technology—and infinitely more difficult either to manipulate or to regulate.

Over the last four years we have watched the Federal Reserve, for example, try valiantly to "fine tune" the growth of the money supply. Yet each day it becomes more difficult to know what that money supply looks like, or how it can be defined, let alone controlled. A deregulated financial system, coupled with an increasingly sophisticated communications network, has begun to impose its own discipline upon both the Federal Reserve and the federal government.

We have been forced, in a very curious kind of way, back on to a worldwide proxy gold and commodity standard, in which investors now freely move in and out of one paper currency or another, or back into metals, depending on their rational expectations of its future value, and our central banks have been forced to deal with these flows in much the same way the discipline of the gold or silver standards used to operate.

This, in turn, is imposing the discipline of the market upon both the profligacy of politicians, and the failures of corporate management. Through the universal democracy of the marketplace the individual investor (and there are now more than 40 million of them in America alone) has reasserted his political and economic sovereignty. His money market fund has become his political instrument, his vote of confidence-or-not, in the government system. While electoral politics may be suffering from apathy, the market is feverishly democratic!

Higher Integrity from High-Tech

And, most important of all, the informational economy in mind is inevitably enforcing a new level of integrity in the affairs of mankind—although I admit this is contrary to the current perceptions and appearances of moral degradation. "High technology" may be just that, the thrust of the human spirit into the infinite realm of pure intellect, where the premium for performance has always been integrity, honesty, discipline, logic, and excellence.

Just as Adam Smith's Invisible Hand (the capitalization, significantly, is Smith's own) makes the marketplace a cruel taskmaster for the greedy, the inefficient, the manipulative, and the cheat, so the new realm of the informational economy in mind will exact its toll on those who attempt to violate its systematic integrity or treat it with ignorance or venality.

This may be why so many young people are now taking to computers with such alacrity. They are discovering in them something that may have been missing in their homes and schools—the delight of order, of harmony, of logic, and the comforting security of discipline, along with an ability to open for them the infinite horizons of thought. Their parents may have given them uncertain guidance in right and wrong, but the ethical trumpet of the computer is never muffled or unclear.

All of which points to a fundamental fact: the only government really possible in this new world-wide free-wheeling, freely accessible information society is *individual* self-government, and such self-government will be imposed to a considerable degree by the technology itself. Increasingly, all other forms of government will remain viable only so far as they do not interfere with the unregulatable and illimitable systems of mind.

The only thing that interferes with this Invisible Hand of the self-disciplining marketplace is government's clumsy attempts to insulate us from it or to meddle in it. Black

markets and their ancillary forms exist only because government tries to regulate prices or supplies. Bribery and extortion are the direct result of regulation, taxes, and licensure. Most white-collar crime depends on government regulation to support it and/or tax policies to make it profitable. It is excessive government by men instead of by laws that breeds lawlessness and venality.

How Paternalism Cheats Minorities

Yet nothing in the area of individual crimes can begin to match the systematic degradation, dehumanization, and cultural genocide that have been wreaked on black Americans, who must now face the prospect of the emerging economy in mind with more apprehension than any other group in our society—because the government in recent decades, with the best of intentions, has seduced blacks out of the rigors of the marketplace and into the stifling womb of the welfare state.

In 1962 only one black family in 20 was on welfare. Only one black child in 6 was born to a fatherless home. Black youth employment was at an even higher rate than that of whites, and youth unemployment for that group was at 10-12 percent, roughly the same as whites.

Today, one black family in 5 is on welfare, and 55 percent of all black children were born to unwed mothers last year. Black youth unemployment is 40 percent, nearly triple that of whites, while black employment ratios have actually declined, even as white ratios have soared.

The Census Bureau freely admits that the greatest cause of rising poverty today, particularly among blacks, is the soaring incidence of female-headed households and the tragic destruction of the black American family, a tragedy which has no parallel among blacks in the rest of the world.

For more than half of all young black Americans, there is now the danger that the economy in mind with its new demands for literacy, education, and self-discipline will represent a far greater natural barrier to

economic survival than the most virulent forms of racial segregation and injustice.

The National Bureau of Economic Research in mid-1983 completed an enormous study of employment, education, and income potential of inner-city minority youths. The picture it painted was that of a whole ethnic culture destroyed by the government-imposed market disincentives to work, and by the impact of those disincentives on criminal behavior, family breakup, weak education, and poor job-experience.

Curiously enough, the NBER found that the only significant thing that changed the otherwise predictable career outcome of inner-city youth, the only clearly causative determinant of those who escape, was regular church-going, which the NBER study showed cut illegal activities by 20 percent, drug use by 23 percent, and increased income potential by a whopping 47 percent.

Main Street values still live, but they do so in spite of the modern pseudo-moralists of both church and state who have left vast numbers of American youth ill-equipped to deal with the evolving information society with its growing demands for self-discipline and integrity of thought and action, and who now tell them that their only salvation lies in still greater dependence on the "kingdom without."

Values Underlie Value

The tragedy of the black experience in the last two decades makes it abundantly clear that without the renewal of individual values, without standards and discipline, without the spiritual as well as moral education of the individual soul, indeed without a genuine revival of the search for the kingdom within, the nations of the West will no longer be able to lead. They could self-destruct. Wisdom and science are implacably ethical and demanding. In an information age, the quality of our thinking will directly affect the wealth of our nation, even more than it always has.

Jefferson warned that "if a nation expects to be ignorant and free, in a state of civilization, it expects what never was, and never will be." He understood better than most that even in the vast untapped material resources of the New World, true wealth was always more a function of what you know, than what you have.

Charles Steinmetz, the visionary electrical engineer, said in 1930, of all things:

I think the greatest discovery will be made along spiritual lines. Here is a force which history clearly teaches has been the greatest power in the development of men and history. Yet we have merely been playing with it and have never seriously studied it as we have the physical forces. Some day people will learn that material things do not bring happiness, and are of little use in making men and women creative and powerful. Then the

scientists of the world will turn their laboratories over to the study of God and prayer, and the spiritual forces that have hardly been scratched.

And Emerson hoped and prayed that someday

there will be a new church founded on moral science, at first cold and naked, a babe in the manger again, the algebra and mathematics of ethical law, the church of men to come, without shawms, or psaltery, or sackbut; but it will have heaven and earth for its beams and rafters; science for symbol and illustration; it will fast enough gather beauty, music, picture, poetry.

Will it also come equipped with a screen and a keyboard?