

## **DRAFT 3**

Remarks at the Global Independence Center

October 9, 2018

There exists currently a growing sense in many quarters that the United States is losing its competitiveness on the world stage. There are a number of lines of evidence supporting this contention; I will use only one such line, hoping that it will be sufficient for our purposes today.

Recently the U.S. Council on Competitiveness in partnership with Gallup, Inc. collected and reported data which demonstrates a downward trend in American productivity measured as real GDP per capita. This trend has been ongoing for fifty years, essentially since the close of World War II, a synchrony not without significance.

The American Dream and American Competitiveness are inextricably interwoven. The narrative of infinite progress, of the sky being the limit, both elements integral to the American Dream, are consistent with, indeed derivative of, the presupposition of American Competitiveness and inconsistent with a stultified culture.

Nevertheless, there is growing evidence that American competitiveness is stalled. Moreover, there appears to be a small but growing segment of our society which sees this pause in competitiveness as salutatory, and that American competitiveness is not only unwarranted but also reprehensible.

It would be a mistake and an injustice to lay America's loss of competitiveness entirely at the feet of the Higher Education establishment. Nevertheless, the examination of our ways in

Higher Education is warranted and urgent. In order to establish a baseline, it will be helpful to reflect upon the writing of Alexis de Tocqueville, that most perspicacious French visitor to the then fledgling democracy. He wrote:

“Education has taught them the utility of instruction...”

And again:

“It cannot be doubted that in the United States the instruction of the people powerfully contributes...”

I believe it is fair to say that the higher education establishment of the United States has failed in its promise to promote American competitiveness.

It is necessary to hasten to add that Higher Education in America is not a monolith, that the allegation above applies in some sectors not others, and applies to some classifications of universities and not others. It is not within the scope of this

paper to parse these distinctions; my father used to say “if the shoe fits, put it on.”

After de Tocqueville the major milestone in the development of the culture of the United States, indeed the culture of the Western World, was World War II. We are still, seventy years later, living in the cultural shadow of that war.

My fundamental thesis may now be evident. Any failures of the Higher Education establishment go deeper than recent history and deeper than can be expected to be changed by mere structural or budgeting or organizational changes. Still, I will assert in just a moment that Higher Education has a responsibility in these matters, which responsibility it has shirked.

World War II and its aftermath have indelibly marked Higher Education in the United States in at least three areas:

- 1) The G.I. Bill affected the capacity of this most important societal function.
- 2) The exchange between then President Roosevelt and Vannevar Bush has had an impact on University research for seven decades.
- 3) After World War II a philosophy of despair (which went by various over used names), seized the West. This philosophy diminished our ethical foundations, as well as our faith in the American Dream.

The Veterans Readjustment Act of 1944 produced a major ramping up of the capacity of the Higher Education function in the United States. It followed the pattern of ramping up which allowed the United States to prevail in that World War. The tank plant in Warren, Michigan, the bomber plant in Ypsilanti, Michigan demonstrated the industrial might and the depth of

the commitment of the American people. After the war the G.I. bill similarly showed might and commitment in the education arena.

The G.I. Bill created the middle class in the United States, and constitutes one of the great chapters of our history.

The dilemma occurred when, later, the bomber plant and the tank plant were successful in throttling down their production to fit contemporary need; Higher Education could not, due to a number of self-inflicted wounds, could not throttle down. Instead it sought other customer groups: America's farmers, its mechanics and welders as well as new immigrants. Even today nearly every university is competing for students.

This failure to throttle down has caused the University of today to be overbuilt with excessive capacity. The Higher

Education establishment has become complicit in the development of a dismissive attitude toward the worker in manufacture, contributing to a marked trend for industry to move offshore, and a serious mismatch of jobs and workers available to fill them. It has become, somehow, less honorable to work outside, with one's hands. This dismissive attitude has lessened America's competitiveness.

Shortly after World War II ended, there occurred a remarkable exchange of letters between President Franklin D. Roosevelt and Vannevar Bush, then Director of the Office of Scientific Research and Development. Roosevelt writes as a utilitarian and Bush, while appropriately differential, answers as a theoretician. This famous and often quoted exchange is still relevant. Bush's letter was entitled "Science, The Endless Frontier." Bush repeatedly stressed the value of "basic

research” which he defines as “research with no immediate end in mind.” Bush summarized his position:

“...the free play of the intellect, working on subjects of their own choice...”

There were and are three elements of Bush’s notions regarding basic or curiosity driven research. First he believed that it is essential to the long-range health of a society and an economy based on continuous innovation, as is the economy of the United States. Second, it should be largely funded by the federal government, and third it should be conducted largely in colleges and universities. This is fine as far as it goes and has produced decades of innovation based prosperity in the United States. However, “Science: The Endless Frontier” intended to leave, I assume, to subsequent contributors important questions: how should the quality of basic science be

measured? Should every institution strive to be a “research university?” Should every individual faculty member conduct “curiosity driven” research? Are there other ways to increase the innovation yield of basic research? How is curiosity driven research to be distinguished from a mere hobby? How can an institution focus on distinguishing themes if investigators are free to follow their own curiosity? These and other questions have been largely ignored during the intervening seven decades.

In 2013 the Academy of Arts and Sciences published “ARISE II” with the purpose to advance research in science and engineering. A similar report titled “Restoring the Foundation” had been published in 2014. Both of these documents strongly and appropriately defend Bush’s enthusiasm for Basic

Research, but both avoid the hard questions of where, when, by whom, and how much basic research we can afford.

Much has changed in the last seven decades: Science has become increasingly complex. The idea of the lone scientist laboring in isolation is an anachronism; science is now pursued in teams and capital outlays may be in the millions; for example, the CERN project or the decoding of the human genome. As state subsidies to public universities have decreased, tuition has increased so that more student and family dollars are funneled into research by universities eager to maintain rankings.

Corporate R&D expenditures have lessened dramatically. Federal funding of the National Science Foundation and the National Institutes of Health have softened. In summary the

societal support of basic research has lessened; we may have to recognize that we must conduct it with greater care.

Of greater complexity and concern is the fact that curiosity driven research has become conflated with the rights of university faculty members under the concept of shared governance. The rights of the tenured faculty of most universities to control the curriculum, to control membership in the faculty, and to develop one's own curiosity as an academic pursuit, while hotly debated in some quarters, is almost universally supported by faculty members.

However, this is the very concept that I assert needs reexamination. Curiosity driven research is expensive; even moderately sized research universities spend millions of taxpayer and tuition dollars on it. Even granting its salutatory

effect on society, we must count the cost and make conscious decisions about how much of this public good we can afford.

Research, particularly that funded by Universities from taxpayer and tuition dollars, is frequently defended by declaring that it improves teaching. Indeed the statement that the best teachers are 'research active' faculty is frequently heard. I believe the evidence speaks otherwise. Researchers teach less and here as elsewhere practice makes perfect. Furthermore many smaller institutions do little research but excell at teaching. Ultimately, I believe, teaching and research require distinct skill sets.

Vannevar Bush wrote seventy years ago: "Scientific progress on a broad front, results from the free play of free intellects, working on subjects of their own choice, in the manner dictated by their curiosity for the exploration of the

unknown.” No matter how well this doctrine has served us it is time to reexamine this article of faith. Taxpayer dollars are scarce, tuition dollars are decreasing and the cost of internally funded, curiosity driven research is increasing. It is time for re-assessment, not to discard it but to continue to reap its benefits. Universities need more central quality control of university funded research. Universities need the ability to concentrate on themes in their research, which will require some curtailment of curiosity. Universities universally are experiencing cost constraints; research is expensive.

Universities which direct fungible taxpayer dollars or tuition into internally funded research should re-assess this activity for its societal benefit.

It would be a gross overgeneralization to state that until World War II the prevailing philosophy of life tended to be

orderly, linear and well founded; and that since World War II the prevailing philosophy has been characterized as post-structural, post-modern and even post-truth. The dismemberment of notions which were believed to be eternal verities has proceeded rapidly and ubiquitously.

The response time of a popular culture to underlying philosophical notions is slow. We are currently still processing the ramifications of the moments which have been called “existentialism” and an “age of despair.” Participants in this cultural revolution have been particularly well represented in the modern university, and concentrated in certain disciplines. This has contributed, in such disciplines and such institutions, to an aura of foundationlessness, and has degraded America: competitiveness.

I have been, for too many paragraphs, at pains to understand antecedents in the current degradation of competitiveness in the United States. I have been at some pains to stress that while universities may have been complicit, they are by no means solely responsible for this degradation of competitiveness. They do have, in my opinion, a duty regarding it.

Mergers of universities or similar structural changes must not be undertaken for size alone. Such structural change must always be in the context of the institution's strategic values. Structural change must be seen as a tactic to support a renaissance of institutional values.

Universities have contributed greatly to the western world and, it is hoped, will continue to do so. Even though historically, they arose haphazardly, they have become the most important

cultural repositories of the Western world. Universities, large or small, public or private, research intensive or not, our society has placed upon them the responsibility for curating and disseminating our culture and values.

Thus are mergers, acquisitions, and other relationships in Higher Education about institutional leadership and the living out of institutional values and its investiture in the minds and hearts of our children.