

Alternative Futures for Universities and Business.

T1 Session 1: "Our future, Our world: views on the future needs of business"

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Although universities in some form or another have been around for a very long time, and served many different functions over the centuries, the great state universities of the 19th and 20th Centuries were created to be engines of massive social change, intending to transform their polities from being diffuse, locally-focused feudal or pre-industrial agricultural entities into globally-triumphant modern military-industrial nation-states. As a consequence, a strong symbiotic relationship developed between universities and economic enterprises.

The organizers of this conference, and especially of the panel today, seem to assume that the close relationship between universities and business should and will continue into the future. I intend to problematize that assumption. The close relationship certainly was not characteristic for most of history, and it may or may not be characteristic of the future. In addition, it is also necessary to problematize the future of both "universities" and "business." We should not be confident without carefully consideration that either will be in the future what they are in the present.

The Rise of Enterprise and the Modern University.

Germany.

The first modern universities arose in Germany in the 19th Century. In contrast to the old established "liberal arts" universities in France, Italy, and England, the new German universities emphasized practical arts in science, engineering, and human management. They also furthered the concept of universities as agents for state-funded and state-focused scientific research and development. These new universities were so successful in creating a powerful modern German nation-state that it took the other modernizing nations two "world wars" to tame Germany's resulting influence and dynamism.

The United States.

In the US until the middle of the 19th century, almost all institutions of higher learning -- including Harvard, Yale, and William and Mary--were basically religious schools that trained clerics while applying a patina of civilization to wealthy young men. No relation between universities and business existed, and none was even contemplated.

Thomas Jefferson created the University of Virginia as the first secular American university in 1824. Other perspectives, inspired by Americans who had studied in Germany, later began to appear in the established universities. But it was not until the middle of the 19th Century--in fact, during the American Civil War in the 1860s--that the first so-called "land-grant" universities were created by the US Congress. Their mission was three-fold: 1) to modernize not only agricultural practices but also the farm-family itself; 2) to transform surplus farmers into industrial workers and soldiers (and much later into consumers); and 3) to invent new tools and techniques for military and commercial

development. The relationship between universities and businesses thus began in earnest. Nothing was more important for the rapid transformation of the US from an isolated rural backwater into a world military-industrial giant than the practical knowledge imparted and powerful technologies invented by the land-grant institutions which Congress created in every US state and territory.

Japan.

The role of universities as modern military and industrial nation-builders is nowhere clearer or more outstandingly successful than in Japan. The literacy rate in the late Tokugawa era, including for females, was arguably among the highest in the world. Much of the content of education, especially of the private schools led by *ronin*, was secular and practical. This provided a strong backbone upon which first a French and then a German mode of higher education would be erected by the Meiji-era modernizers. A reformed and reinvigorated Tokyo Imperial University and its affiliated research institutes took the lead in highly-focused and enormously successful nation-building training and research. They transformed Japan from an entirely isolated and feudal polity into a major world colonial and economic power in the twinkling of an eye.

Korea.

In Korea the story is fundamentally the same. Traditional Confucian education served in various forms for almost a thousand years. Its main task was to produce scholars and administrators--certainly not businessmen or consumers. The system resisted internal change, such as that proposed by the *Silhak* movement. However, the Confucian forms and substance eventually were completely replaced by a system of higher education (warped first by Christian missionaries, then by Japanese colonization, and ultimately by American domination) that was firmly focused on creating an internationally-competitive nation-state based on modern military and industrial ideas and structures. Transformed from a dominated, divided, devastated rural nation into a high-tech powerhouse in merely four decades largely by the power of modern higher education, Korea today is an envy of and model for the developing world.

Success, and the failure of success?

The modern universities in all of these countries, focused on the task of building a strong nation-state, were breathtakingly successful. A strong bond between higher education and commerce was created. The countries that established such universities became the economic and military powerhouses of the early 21st century, and they intend to remain so by keeping the bond tight. At the same time, countries that did not create such universities--usually because they were stifled by the imperialism and colonization of the earlier industrial nations--are now doing everything they can to build universities and businesses that imitate, rival, and eventually will surpass those of the current powers.

As a consequence, when most people think of the future of higher education and their relationship with business, they understandably think of continuing, expanding, and improving on very successful forms and processes that are now almost two hundred years old.

I am convinced such thinking is profoundly misleading.

Thinking of the futures as alternative, plural and open.

Before we plan for the future of universities and their relations with business, we need first to anticipate the continuities and changes that may lie ahead of humanity over the 21st century. We then must ask what knowledge, skills, values, attitudes, and institutions might be needed to address the challenges and to grasp the opportunities. However, as a person who has been engaged in futures research at the local, national, and global level for a very long time, one of the lessons that I have learned is that the futures must be viewed as plural, alternative, and the arena of effective individual and group action. One does not "predict" "THE" future and adjust to it. That may have been feasible several hundred years ago before industrialization, commerce, and modern universities destroyed stable agricultural societies, but to assume so now is a fatal mistake in the fluid, dynamic, and profoundly uncertain world that industrialization and commerce have themselves produced.

Thus, instead of anticipating and planning for "THE" Future, one needs to conceive and explore many Alternative Futures, and then envision, design, and move towards a preferable future--constantly monitoring the horizon for signs of new alternatives and new preferences as people die while others are born, and new ideas, technologies, possibilities, and challenges emerge.

It is absolutely essential that we not think of the future of higher education and its relationship with business *only* as a continuation or improvement on the present. A world composed of strong, sovereign, militarily- and industrially-powerful nation-states with businesses in need of specific new scientific and technological information in order to keep them and their economy strong and growing is certainly one possible future. But it is not the only future. And it is by no means either the "most likely future" or necessarily a "preferred" future towards which all wills should bend.

One Alternative Future.

There is, for example, very good reason to believe that the main challenge ahead for humanity is not the production of more military weapons and consumer goods, but sheer survival. This may be the case as oil essentially vanishes before equivalent energy sources emerge, sea-levels rise, climate changes, potable water disappears, new and old global pandemics ravage, fertility rates decline (or rise) sharply, and religious extremists, environmental refugees, and local citizens fight and kill for dwindling land and resources.

Not a pretty picture, but certainly not an unrealistic one, and clearly one that suggests the need for a different kind of "higher education" and focus for life from the one we have now. Indeed, some would argue that current higher education is in some measure responsible for many of these potential maladies because of its single-minded focus on

enabling economic growth and military adventures while largely ignoring the resulting cultural and environmental degradation and collapse.

I would say that one of the greatest challenges ahead for all successful universities is to stop churning out people and products bent solely on continued economic growth and to start instead producing people and products that enable the basic survival and eventual evolvability of the planet and all life on it. In its most popular current expression, the challenge facing all of humanity now is called "sustainability". But our universities are largely incapable of fostering "sustainability". All they know is continued economic growth because so far that is all they were ever expected to know and to enable.

If our universities do not embrace "sustainability" instead of "economic growth", they may continue to play a major role in leading humanity to its own destruction, if people who warn of this future are correct. Yet I see little evidence that most university faculty, administrators, governors, or financiers can or will seriously consider and effectively accept this fundamental change of focus and purpose of higher education, if it is necessary for them to do so.

Any good business person, however, knows how to make a profit and to respond positively to whatever economic system there is. Thus, in various places around the world, more and more economic enterprises are either becoming "green" or starting up as "green". This is giving them a major advantage over the many other economic enterprises that remain stuck, with the universities, in the old economic growth paradigm.

Unfortunately, however, the achievement of a "sustainable" future requires much more than any business, or combination of businesses, can provide. It needs knowledge of the design and operation of a dynamic and largely artificial system about which modern academia is largely ignorant. A new "science for sustainability", as some are now calling it, is necessary. I prefer the term "science of the artificial". But such a science, and the creation of new economic theories and practices appropriate for designing and managing a sustainable, artificial world, are not likely to emerge from current institutions of higher learning. Most of them remain locked in obsolete and dysfunctional isolated academic departments and procedures.

But this is but one view of the future! Though powerfully attractive, it is not the only alternative worthy of serious consideration.

Another Alternative Future.

Yongseok Seo and myself have recently argued that a possible future that lies ahead after the present so-called "information society " or "knowledge society" might be designated "a dream society of icons and aesthetic experience." Moreover, we believe that Korea could be the first "dream society" actually to emerge on the planet. If so, then we need radically to rethink both education and business for this future.

Hunting and gathering societies began transforming into agricultural societies about 2000 to 3000 years ago. The first industrial societies emerged from agricultural societies 200 plus years ago. The first "information societies" arose only 50 or so years ago. Now there is reason to believe that the society and economy of the future might be dominated not by the production of food, consumer goods, new technologies, or even new information, but by the creation, production, and engagement of images and dreams, of which movies, television shows, anime, sports, and interactive electronic games are early indicators.

Of course, food, consumer goods, new technologies, and new information will continue to be produced in this future! But just as most people in industrial societies eat well though few people are involved in the production and processing of food, and just as most people in an information society have many wonderful gadgets to play with though comparatively few people are involved in the actual production of gadgets, so also should people in a dream society eat well and have plenty of products and new ideas to play with even though most people will no longer be occupied in producing food, gadgets, or information. "Business" will be substantially different in a dream society, just as it was in agricultural, industrial, and information societies before it.

Thus the educational system of a dream society--towards which Korea could be a world leader--should focus not on standardized procedures and measures, "hard work", the production of new physical things, and the creation of new "information", and "scientific knowledge". Rather, education for Korea as a pioneering dream society should focus on fostering and elaborating images, imagination, creativity, culture, art, dance, drama, music, anime, games, sports, ethics, philosophy, electronics, biotechnology, and nanotechnology. That is to say, education and life might focus on play, performance, and the presentation of self in both virtual and "real" reality, and in the company of diverse human, transhuman, and posthuman kinds of emotions and intelligences.

Conclusion.

There are many other futures before us than just these three--continued economic growth, sustainability, or a dream society--but for now, I wish simply to suggest that when we think about the futures of universities and their relation with commerce that we do so at least in the light of these three alternative futures, instead only of a future that is basically a continuation of the "continued economic growth" future of the past.

The details of how we should engage in this consideration, and then what future institutions of higher education and commerce might actually look like, where they will be located, how they will be funded, by whom they will be governed, who will be learners and teachers and what will be taught and learned, along with their role in fundamental and applied research, commerce, and community-building--and many other factors--will have to wait until another time. But I stand ready to discuss these details whenever that time comes and with whomever wishes to discuss them.

Thank you