American and Chinese Universities: Building More Bridges Across the Pacific Ocean

An Address at the University Town Library

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It is a pleasure for me to have the opportunity to speak with you this afternoon. I have been living in Shenzhen for three years now. It is an honor for me to address an audience that comes from the broader University Town community, and from the broader Shenzhen community.

This afternoon I will be speaking about a topic that is near and dear to my heart – the way in which universities can help to build more bridges that serve to unite people across national borders. I believe that over the past ten years American and Chinese universities have taken the lead in this effort, and I welcome the opportunity to share my current perspectives on that process.

I will begin by sharing a little bit of higher education history, so that we can all be on the same page. This kind of history can be found in a variety of books, but I will be basing most of this summary on information that you can find in four books published in the last five years:

Academic Charisma and the Origins of the Research University, by William Clark (2006)

In Pursuit of Knowledge, by Deborah Rhode (2006)

The Great American University, by Jonathan Cole (2009), and especially

The Great Brain Race, by Ben Wildavsky (2010).

The central point of this history is this. For more than 1000 years, higher education has been a bridge. For more than 1000 years, people

have moved across national borders to study at universities. And for more than 1000 years, the idea of what a university should do, and how it should do it, has also moved across national borders. Universities are bridges for people and for ideas.

The university began as a religious institution – a place where people could study the central precepts of their religion.

The first universities were Muslim. In the year 859, the Madrasa of Al-Karaouine was founded in Morocco. It is now called the University of Al-Karaouine and is often said to be the oldest university that has been continuously in existence since its founding. 100 years later, the Madrasa of Al-Azhar, now called the University of Al-Azhar, was begun in Egypt. And 100 years after that, in 1065, the Madrasa Al-Nizamiyya of Baghdad was begun in Iran.

The next group of universities were Christian, and they followed an even more intense form of social organization than the Madrasas. In 1088, the University of Bologna was begun in Italy. Eight years later, Oxford and the University of Paris were founded in England and France.

From the very beginning, universities gave people a reason to travel. People left their homes and went far away in order to have the opportunity to study in a university. And from the very beginning, political leaders were not sure whether this travel by students was a good thing or a bad thing. Some political leaders – like Frederick Barbarossa, the German leader of the Holy Roman Empire – invested in supporting students' efforts to go and study at far-away universities in exchange for a promise that they would work for the church or the state after they finished their studies. Others – like King Henry II of England – worried about what we now call "brain drain" and prohibited their young people from traveling to foreign schools.

The University of Prague (now in the Czech Republic) was founded in 1347. It set an important precedent for globalization by insisting that students should be admitted on the basis of their academic merit; 60 years after it was founded almost half of its 4000 students were foreigners.

The first universities in the United States were started before there was a United States, while America was still a colony of England. Harvard, William & Mary, Yale, Princeton, Columbia, and the University of Pennsylvania were all started between 1636 and 1751.

It is important to understand that – until the 1800's – all these universities had a very narrow understanding of their missions. They did not look like modern universities.

Almost all of them were religious. Their goal was to prepare people who would be leaders of the church.

For that reason, almost all these universities taught only a few subjects: religion, medicine, law, and what came to be known as a "liberal education" or a "classical education" -- Latin, Greek, mathematics, philosophy, history, and music. Perhaps the most famous statement of how the rigorous study of these few subjects could provide a general mental discipline came in a series of lectures in 1852 by the English priest Cardinal John Newman, entitled, "The Idea of a University."

And their students were all men. University education was not for women.

In the 1800's, all of those restrictions were pushed aside.

The center for change was Germany. In 1820, Germany created a new kind of university – the research university – with the foundation of the University of Berlin. The core idea was that teachers should be more than just teachers: they should also be scholars who conducted original research that advanced the frontiers of human knowledge.

And the University of Berlin's president, Wilhelm von Humboldt, insisted that the university should follow a principle of academic freedom, whereby researchers could choose what to study for themselves and express their findings without fear that the Germany authorities would punish them.

Students from around the world rushed to Germany to study there. And Germany remained the world's center for university education, a magnet for intellectual talent, until Hitler came to power in 1933 and reversed the process – driving the world's most talented scholars to flee the country.

For the history of higher education, two of the most important students to study in Germany during the 1800's were a pair of Americans – two young friends who had been classmates together at Yale. Their names were Andrew Dickson White and Daniel Coit Gilman.

After completing their studies in Germany, these two young men would go back to America and become the founding presidents of two new universities that reflected German ideas about higher education.

In 1865, Andrew Dickson White became the first president of Cornell University. Cornell was a "revolutionary" university in two ways. Its founder, Ezra Cornell, said he wanted to found an institution where "any person" could find instruction in "any study."

What did Ezra Cornell mean by "any person"? Unlike other universities, Cornell was from the beginning open to men and women of all races and religions. And what did he mean by "any study"? Unlike other universities, Cornell was committed to teaching the classics alongside practical subjects such as engineering and agriculture.

And in 1876, Daniel Coit Gilman became the first president of Johns Hopkins University. He defined the central mission of the university to be research – the advancement of knowledge – and insisted that strong research would improve the quality of teaching. And he organized Hopkins to be primarily a center of graduate-level study, focused on the Ph.D. degree.

Cornell's commitment to being a universal university – open to all kinds of students and all kinds of study – and Hopkins's commitment to being a research university gradually became accepted as the central defining principles of all great American universities.

During the twentieth century, these great American universities replaced the German universities as the most influential bridges in the world of higher education. As the years went by, they became more and more powerful magnets, attracting students and faculty from around the world. That flow of students from overseas grew steadily in the first half of the century, but after World War II it truly exploded. A key force in this explosion was the creation of the Fulbright Program in 1946. The goal of the Fulbright Program was to bring foreign students to America and to send American students overseas, to promote "mutual understanding between the people of the United States and the people of other countries of the world."

During the early 1930's, about 10,000 foreign students were enrolled in American universities in a typical year; by 1955 the number was up to 36,000 students. By 1963, it was 75,000 students. According to the Institute of International Education, in 2009-10 the number was almost 700,000.

But what really drove the trend for the world's best students to come to American universities was not only the Fulbright program. It was also the fact that huge, huge sums of money were being invested to ensure that the teaching and research that happened at American universities was the best in the world.

A big part of that financial investment came from government. Federal and state governments invested billions and billions of dollars to support research on university campuses. They established grant and loan programs to make sure that tuition remained affordable. And private donors provided billions of dollars to support professors' salaries, to build world class buildings, and to provide scholarships on the basis of need and merit.

An important consequence of this investment was that – especially for graduate level education – American universities became less and less focused on training researchers who grew up in America. More and more, they saw themselves as providing a home for talent, no matter where in the world that talent came from. In 1972, American universities gave 15% of their doctoral degrees to citizens of other countries. By 1990, that percentage had grown to 26% -- and in the sciences it was more than 50%.

And what about China? As you all know, for most of its history, China had its own approach to education, built upon a Confucian tradi-

tion. Beginning about 140 years ago, China also began to see universities as bridges that could connect China to people and ideas from other countries.

Mr. Yung Wing was the first Chinese to receive a degree from an American university, from Yale. After graduating he returned to China, and from 1872 to 1881 he organized the Chinese Educational Mission, which sent 120 Chinese students to the US to study science and technology.

Building upon the success of that program, between 1888 and 1898 China launched many of the institutions that would become China's leading universities today. In 1888, Nanjing University became the first to open its doors, and over the next ten years it was followed by Wuhan University, Tianjin University, Zhejiang University, JiaoTong University, and Peking University.

In 1901, at the conclusion of the Boxer Rebellion, China signed a peace agreement in 1901 with eight foreign nations, including the United States. During the negotiations of that peace agreement, the United States had asked for an indemnity of twenty million dollars, but the peace treaty said that the total payment to the United States should be more than thirty million dollars.

In 1907, the American president decided that the extra \$10.8 million should be used to help Chinese students to study at American universities. Part of the money was used for scholarships. And just exactly 100 years ago, part of that money was used to create Tsinghua University, to prepare students for study in America.

Thousands of students came from China to study in the United States under what were known as "Boxer Indemnity scholarships." Many of these students returned to China and made important contributions to the country, including Hu Shi, who became president of Peking University.

In the 1920's and 1930's, many American universities began to form partnerships with Chinese universities, doing work together in China. For example, Cornell University became an active partner with Nanjing

University in the field of agriculture, working closely together to develop a new, more productive approach to cultivating rice.

After 1949, Chinese higher education was heavily influenced for a while by the system of higher education used in the Soviet Union. That meant backing away from the Cornell idea of a comprehensive university and instead having some universities specialize in science and technology while others specialize in humanities and social sciences. After the collapse of the Soviet Union, however, the top Chinese universities have mostly returned to being more comprehensive in their outlooks.

During the period of reform and opening up, the flow of interaction between China and American universities has expanded tremendously. In 2009-2010 more than 127,000 Chinese students went to America, a 30% increase over the prior year. During 2009-2010 China passed India as the number one source of overseas students, supplying almost 20% of all the students who came to America from abroad.

Similarly, American universities became even more active partners inside China. Once again, Nanjing University took the lead, this time partnering with Johns Hopkins University to create a program of undergraduate study that remains active and visible today.

I would now like to turn to the way economic theory might have predicted higher education would evolve in the age of globalization, and how it has in fact evolved.

In the 1800's, an economist named David Ricardo developed a theory of globalization and international trade. Under Ricardo's theory, the reduction of barriers to trade should lead countries to specialize in areas where they have what is called a "comparative advantage." Instead of each country trying to do everything from farming to computer programming, each country would specialize in a few areas. One country would become the world's food supply, another country would become the world's automobile manufacturer, etcetera.

In 1990, it seemed as though this Ricardo theory of comparative advantage was operating in the world of higher education. It seemed as though America was becoming the world's university – it was where

teaching and research would happen, while other countries specialized in other kinds of economic activity.

But over the past two decades we have seen a new trend, a trend that is tremendously exciting. Around the world, other countries have come to view their universities as strategic assets. Unlike a factory which can produce a certain kind of jobs and profits, a university can produce vast public benefits. A university can be a magnet that pulls talented people into the community. Those talented people can then create new ideas that help the local economy and also the non-economic aspects of the society.

And so, rather than deciding to let America be the training ground for their best and brightest young minds, and rather than deciding to let America become the exclusive home for top quality research, other countries decided to make higher education a priority. They began to invest in research universities.

In Europe, in Asia, and in the Middle East, governments said this. "Let's look at the German research university, let's see how it was improved in America, and let's see how we might adapt it and improve it in our own country."

Once again, China is a great example. In 1995, China began Project 211, a program that would invest 150 billion RMB in 100 top Chinese universities. Then, in 1998, China launched Project 985, a program that initially made significant extra investments in the top ten universities and was later expanded to the top thirty-six universities.

China also greatly expanded its effort to recruit foreign students to study in China. In 1997, 39,000 foreigners were students at Chinese universities. By 2007 that number had grown to 195,000.

Of course, China is not alone in this effort. Singapore has made huge investments in higher education – both domestic universities and partnerships with foreign universities – over the past ten years. Saudi Arabia's king has invested 10 billion US dollars in the new King Abdullah University of Science and Technology. Qatar and Abu Dhabi have made

huge investments to encourage American universities to establish branches in their equivalents of University Town.

And in Europe, the birthplace of modern universities, France and Germany have launched major efforts to restore their universities to positions of international leadership. In both countries, the universities had been able to serve larger and larger numbers of students, but in doing so they had seen the quality of their teaching and research fall. As a result they have been attracting a smaller and smaller percentage of students from China who choose to study abroad.

In the last five years, each country has launched new efforts to reward competitive excellence, to develop strong international partnerships, and to make English the primary language of intellectual and scientific interactions.

As other countries around the world became more committed to creating great research universities, the flow of students and professors stopped being in one direction. Instead of it being just a matter of talent flowing to the United States – what many countries worried was a kind of "brain drain" – we began to see talent flowing everywhere. Even as the number of visitors to American universities continued to go up and up, we began to see a much better balance of trade as the number of Americans going overseas grew even faster. And the relevant question was no longer just flows to and from America. More and more, people outside America were choosing to visit other non-American universities. Indeed, last year 80% of the students outside the United States who chose to study in another country did so in a country other than America.

With that essential background, I would now like to turn to my main thesis for today, which is why I believe the interactions that universities foster are so important. I want to present a different view from that presented by Ben WIldavsky in his book, The Great Brain Race: How Global Universities Are Reshaping the World.

Wildavsky first focuses his attention on the contribution that great universities make to their home countries' economic competitiveness. He says that the reason why countries should invest in their universities is that "economic growth and global competitiveness are increasingly driven by knowledge, and ... universities can play a key role in that knowledge. ... Great universities will keep more students at home, perhaps attract more from abroad, and above all create innovative and prosperous economies." (Kindle 940)

Wildavsky quotes the leader of South Korea's new program to facilitate global academic partnerships, who says, "Our focus is on supporting new growth-generating technologies that will spearhead national development."

Wildavsky next focuses his attention on the idea that international education experiences are "less a matter of seeking new cultural or linguistic experiences than simply of finding the best available scholarly brand." (Kindle 2168). In this discussion, Wildavsky suggests that what matters for the student is to get the best possible credential and to get plugged into the best possible network of fellow alumni. He describes the world as becoming a world of "academic free trade," where student and faculty talent of all kinds moves smoothly around the world unless governments choose to interfere with the natural process of what he calls "talent-based mobility." (Kindle 2293).

Let me be clear. It is not that I disagree with the general direction of what Mr. Wildavsky says. I do believe that great universities contribute to economic growth and development, that knowledge is becoming key to that process, and that it is good to allow talents to move freely around the world.

But I think that Mr. Wildavsky risks misleading his readers because he does not talk about the role of cultural differences. It is easy to read Mr. Wildavsky as sounding just like Tom Friedman, the author of The World Is Flat. Mr. Friedman argued that technological change had pretty much eliminated the significance of distance and national boundaries. And that was simply wrong. Technology has made the world flatter, but it has not made it completely flat. Technology has made it less expensive and faster to collaborate around the world. But all that has done is to make the question of cultural difference relatively more important. It has made it even more important for us to try to get an understanding of

whether cultural differences are huge or tiny, whether they never really matter or whether they are now the only thing that matters.

If you read Mr. Wildavsky, it is easy to get the feeling that cultural differences do not matter at all. Brilliant thinking is brilliant thinking, math is math, innovation is innovation. It doesn't matter whether the ideas come in English, French, or Chinese.

I don't believe that. I believe that cultures do matter. And I think that one of the most important functions of university education today is to deepen students' understanding of two things:

first, how much cultural differences do matter and how much they don't matter, and

second, how skillful bridge people can help groups that include people from different cultural backgrounds to work together well, getting the tremendous benefits that come from having diverse groups of people who draw on different cultural traditions, without suffering too much of a penalty in the form of mutual misunderstanding that often arises in groups of people who draw on different cultural traditions.

How much do cultural differences not matter? On almost all the really big, really important things, when it comes down to the deep value questions, I do not believe that cultural differences matter at all. People are people. People want to avoid physical and emotional pain. People want to feel good. People want to love and to be loved.

And so I think it is important that we not fall into the trap of assuming that every difference we see, every behavior we see that looks peculiar, is perfectly normal within a different culture. It's a mistake for Chinese people to look at a rude American and say, "Oh, well, that's OK in his culture, because Americans don't care about how their behavior makes other people feel." Just as it is a mistake for Americans to look at a Chinese person who cheats and say, "Oh, well, that's OK in his culture, because Chinese people don't care about telling the truth." The truth is, American culture says that Americans should care about how their behavior makes others feel and they should also care about telling the truth. And Chinese culture is the same – it says that Chinese people should care

about how their behavior makes others feel and they should also care about telling the truth.

But different cultural traditions do matter enormously when it comes to the question of how people are expected to show respect for those really big value questions while they go about living their daily lives.

A very interesting psychological literature has documented how children who start out the same can develop different cognitive patterns by growing up in different cultures. They can actually perceive things differently, because when they were growing up, they were taught different answers to the question, "What matters? What is important in this situation?"

Let me give you my favorite, simple example of such a difference – one that I stumbled on accidentally in the course of my work here in Shenzhen. The example has to do with how Americans and Chinese people deal with units of time.

If you were to ask an American what day tomorrow is, 99% of them would say, "It's Sunday." If you were to ask a Chinese, 99% of them would say, "It's the 15th." For Americans, the most important time interval is the week. For Chinese, it is the month.

So if one of my Chinese colleagues says to one of my American colleagues, "Why don't we get together for coffee on the 16th?" the American will probably respond, "Do you mean Monday?" And if one of my American colleagues were to say to one of my Chinese colleagues, "Why don't we get together for coffee on Monday?" the Chinese will probably respond, "Do you mean the 16th?"

I love this example because neither culture attaches any moral significance to which period of time you use most. Once people understand the difference, it is easy to overcome it. Americans can learn to frame things according to the day of the month without any emotional anxiety, and Chinese can learn to frame things according to the day of the week in the same way.

But other cultural differences are more difficult: they have value judgments attached to them. To a Chinese person it might be disrespect-

ful to express a disagreement directly, especially to someone who is in a position of authority. To an American it might be disrespectful to fail express a disagreement directly if the situation is one where the authority figure really needs to know whether others disagree.

In a world where technology makes it easier for people to work in diverse teams, across great distances, there is a tremendous opportunity – for businesses certainly but for the non-business aspects of society as well. Diverse teams have the possibility of seeing issues in more complex, subtle, and accurate ways because they bring different perspectives to every problem.

But this opportunity cannot be realized if members of a diverse team are unable to work together because of cross-cultural misunderstanding.

In the years ahead, one of the most valuable skills that any person can have is the ability to help culturally diverse groups to work well together, to recognize cross-cultural misunderstandings and help the team to get past it. That set of skills are what I call the skills of the bridge person.

An effective bridge person must have three qualities. He or she must be able to see the world from his or her own culture's perspective and also from that of a different culture. He or she must be able to engage sympathetically with all perspectives, without rushing to say that one perspective is right and the other perspective is wrong. And finally he or she must be able to explain how the cross-cultural misunderstanding occurred in a way that allows everyone to appreciate it and work towards a solution without feeling that they have lost face.

Modern, transnational universities will do more than just teach well and do important research. They will also be the fertile soil in which multi-cultural bridge people are planted, are nourished, and blossom. Their students, their faculty, and their staff can all become known as the kind of people who make multi-cultural teams effective. They can be the bridges across the Pacific Ocean, the ones who enable China and America to work together in close cooperation, using their separate and complementary strengths together to solve the most difficult challenges that face human beings in the twenty-first century.