

2014 Osaka University Autumn Entrance Ceremony President's Address

From "Tekijuku" to the "World Tekijuku"

Good morning.

I would like to extend a warm welcome to the newest members of our community at Osaka University. I would also like to offer my sincere congratulations to your family members, relatives and friends.

With hearts full of promise and possibility, today you begin your new lives as members of Osaka University. As President of the university it is my distinct pleasure to greet and welcome you today.

Tekijuku, the origin of Osaka University

I will begin by giving you a brief overview of the history of the institution at which you will spend the coming years. Toward the end of the Edo period, in 1838, OGATA Koan founded a private academy named "Tekijuku," with the goal of "helping the people of the world with the latest knowledge." It was housed in a small building, but it had a profound impact on Japan. It was also the origin of the Osaka University which you enter today.

More than 1,000 students were educated at Tekijuku from all parts of the country, studying texts on Western science and technology translated to Japanese. Notable leaders from a variety of fields were educated there, including FUKUZAWA Yukichi, who founded Keio University; SANO Tsunetami, who founded the Japan Red Cross; and OTORI Keisuke, who was active as a diplomat. Graduates of Tekijuku such as these went on to modernize Japan at the beginning of the Meiji period. Their influence is still felt to this day.

Osaka University echoes the words of OGATA Koan, "For people, for society, and for the pursuit of truth." We inherit the determination of the young scholars who studied at Tekijuku and the love of Osaka residents for

scholarship.

Years after Tekijuku, locals played a key role in a transition that brought about our modern institution. Citizens calling for an “imperial university in Osaka” led to the founding of Osaka Imperial University in 1931. They were supported by the president of the Osaka Prefectural Medical School, KUSUMOTO Chozaburo – who later became the university’s second president – and the Osaka prefectural governor, SHIBATA Zenzaburo. The sixth imperial university in Japan, under the leadership of the first president NAGAOKA Hantaro, consisted of two schools, medicine and science. In 1933 the Osaka Technical School became the School of Engineering.

In the postwar era, with the inclusion of a School of Law and Letters, the framework of our current, comprehensive university began to take shape. Under the motto of “Live Locally, Grow Globally,” Osaka University became a national university corporation in 2004 and merged with the Osaka University of Foreign Studies in 2007. Through the merger, we are now a modern, comprehensive university, a representative of the quality of higher education in Japan.

One of the many intellectuals influenced by our institution was a young associate professor in the early years of Osaka Imperial University. He introduced an unproven theory in 1934 about the existence of subatomic particles called “mesons.” He was 27 years old, and his name was Hideki YUKAWA. He received his doctoral degree from Osaka Imperial University in 1938. In 1949, he became the first Japanese Nobel Laureate with the theory he put forth for his PhD thesis at Osaka Imperial University. Later in life, he wrote about his time at our university, describing “something about being here makes everyone feel like working.”¹ Osaka University continues to foster the environment he described, one of open research that stimulates diligent study and inquiry.

Last May, Osaka University's Graduate School of Science received the actual blackboard that Professor YUKAWA regularly worked with at

¹ Source: *The Traveler*, the autobiography of Professor YUKAWA

Columbia University in the United States. Today, the blackboard is used by students and faculty, a lasting symbol of the professor's impact on our academic culture.

Shining forth into the 22nd century as World Tekijuku

Osaka University will continue to grow under its current motto, "Live Locally, Grow Globally." We inherit a history of rigorous scholarship from Tekijuku, built 176 years ago. We have nurtured many eminent scholars, educators, and intellectuals, as well as key government and business leaders. Osaka University will celebrate the centenary of its founding in 2031. As the World Tekijuku, Osaka University aspires to become one of the world's top 10 research universities by that time. 176 years ago, young minds were first shaped at Tekijuku from all over Japan. They spread throughout Japan with new knowledge and skills and paved the way for the new age of the Meiji Restoration. In the same way, researchers, students, and individuals with a strong passion for learning will gather together at Osaka University, the World Tekijuku, to learn and research. They will then share their talents with the world, much like their predecessors. This will be Osaka University's contribution to global society: the creation of harmonious diversity through scholarship. I truly hope you will remember your enrollment in Osaka University in 2014, our first year as the "World Tekijuku." You are writing a new page in the history of Osaka University with us. Let's make our dreams come true.

My talk today is divided into three parts.

The importance of asking, "why?"

First, I invite you to consider the importance of "asking why."

I am sure there were things you wondered about as a child, but, as you grew up, you lost interest, thinking, "That's just the way it is." Perhaps you wondered, "How did the universe begin?"; "Where and how did life come about?"; "Why do other countries and religions exist in the world?"; and "How do these things impact the current world situation?" There are countless questions that we cannot fully answer. Possibly we stop wondering because some questions seem too simple or common. A

university is a place where you can find the answers to these questions, questions that we cannot answer with previous knowledge alone. It is a place where you uncover hidden causes, or solve the as-yet unsolvable. You and you alone are to find the answers. It is a place where you can share your doubts and find your answers. The intent of all scholarship is to ascertain the true essence of things. The place to practice scholarship is a university.

Consider the so-called “accidental” discovery of the first antibiotic. Sir Alexander Fleming, the famous biologist, devoted himself to the development of drugs for infectious diseases. It is said that one day he noticed germs were not growing near a fungus that was mixed in a culture dish by accident. Usually, researchers would consider this a fluke and dispose of the dish, but he wondered if something in the fungus might have prevented the germs from growing. He named that putative component “penicillin.” Later, Howard Walter Florey and Ernst Boris Chain read Fleming's paper and succeeded in purifying penicillin in 1940. Fleming, Florey, and Chain won the Nobel Prize in Physiology or Medicine in 1945, and the discovery of penicillin has since saved incalculable lives worldwide.

This penicillin story is commonly framed as a chance discovery; however, I see it as a testament to the importance of keen observation and intellectual curiosity – these were the true qualities that led to this discovery. Intellectual curiosity and the questioning of common wisdom as motivators for basic research bring about the technological innovation necessary to preserve human society. It results in advances such as innovative products and state-of-the-art medical care. In addition, it plays an important role in encouraging dreams and hope in society. Though important, there is more to life than merely having clothes to wear, food to eat, and a roof over our heads. As art enriches our hearts, basic research enriches our hopes and dreams for the future. The power of a university resides in its ability to open the way to the future and inspire people to dream. The driving force is intellectual curiosity that urges us to never stop asking, “Why?”

Ascertaining the true essence of things and moving towards the future

This brings me to my second and related point, about the necessity of “ascertaining the true essence of things and moving towards the future.”

We face an excess of global-scale changes. Modern society, rooted in material civilization and born of the industrial revolution, has radically impacted us all in return for human prosperity. We struggle with the depletion of fossil fuels and the risks of nuclear power. Environmental problems such as global warming and the spread of infectious diseases pose new challenges. Moreover, developments in medicine and improvements in the social environment have resulted in an exploding world population. In addition to food supply issues, in developed countries in particular, a rapid response to aging societies is needed.

Your task will be to perceive and adapt to these global shifts. I believe society is bettered by those who ascertain the true essence of things, the true essence hidden in complex problems; those who can take initiative in solving problems, unhindered by traditional approaches. The ability to ascertain the true essence of things is the ability to find key factors and mechanisms in perceivable phenomenon. It is for this reason that universities conduct advanced research and provide highly specialized education.

Furthermore, we must consider a shift in perspective. Relinquishing the idea of conquering nature with science and technology, we should live in harmony with the environment. Often we have conducted bioscience and medical research with the belief we somehow could sidestep unavoidable issues such as aging, disease, and death. This outlook must change. Our goal should be to enjoy life while dealing with these diverse problems. In this way, we need to see things not from a single perspective but from many.

One of these perspectives involves the big picture. A common saying invites us to “see the woods for the trees.” This is true - doing something good for one of the trees is not always good for the forest as a

whole. Even if a measure for a particular tree is optimal in the short term, ignoring long-term, big-picture effects could have lethal consequences for the forest, resulting in the loss of all the trees. Each tree depends on the forest as a whole.

A liberal arts education promotes this manner of multifaceted thinking, as it assists students in acquiring a broad knowledge base and the flexibility to apply it in novel ways.

In the globalized world of the future, our earth will continue to be a smaller place. We will need to build relationships, cooperate and collaborate with those with a multitude of languages, cultures, religions, and nationalities. To adapt in such a global society, we must cultivate "openness," by which I mean the ability to see things from the perspective of others. Openness and a mindset of sharing will allow us to better understand and respect our world's cultures and philosophies.

Creating harmonious diversity through scholarship

Third, I believe that this openness is nurtured at universities, through the universal language of scholarship.

Diversity has been a driving force in the development and enrichment of human society; still, human society is replete with examples of strife caused due to differences between peoples and religions. The scholarship at universities, a kind of language common to all humankind, has the power to overcome such discord. Much like art and sports, academic scholarship facilitates communication and mutual understanding. Scholarship is a means of international friendship, a way in which we can expand our circle ever outward. In the community of the university, bonds formed with those from different backgrounds develop over time to bring more harmony to society.

Universities must strive to contribute to a new community where people live in harmony despite their differences. The scholarship at universities can act as a universal language and usher in an era of a harmonious global community. I believe this is the mission of universities

in the 21st century. In this way, universities must take initiative in creating and contributing to a multicultural society.

This is why I urge you to travel abroad and interact with people in different countries, and why Osaka University is proud to offer a variety of programs for that very purpose. I hope you take steps into our global society and exercise your fluency in the universal language of scholarship. Make the most of these opportunities to do your part in bringing about an era of harmonious diversity in our global society. That is your vital role in the 21st century.

Reaching the top of a mountain

Finally, a personal life lesson I would like to share.

You are now at the summit of a massive mountain, your admission to Osaka University. What are you thinking having conquered this mountain? Whenever I talk with students or young people, I stress the value of reaching the top of the mountains we climb in life.

We do not know how high the mountains in our lives are before we find ourselves at the peak. What matters is that from this new vantage point we can see wider and further than before, regardless of the height of the mountain. Here, we look back on the path which led us and forward to the mountain that awaits us next. We may not see signs as we climb the mountains in our lives. Nobody knows how far they are up the mountain — whether they are only halfway there or nearly at the top. But once we make it to the peak, then and only then do we know that we have reached it. The top of the mountain suddenly unfolds before those who have persistently believed and made the effort — much like the discovery of penicillin by Sir Fleming, 86 years ago.

I am sure that now you feel the joy and momentousness of your achievement atop this mountain as you survey the view stretching out before you — the future. I hope you will make the effort to climb new mountains one after another, reaching every summit you choose.

Dreams are for achieving

I believe your future holds infinite possibilities. Today is an exciting day – hold on to this excitement and make your dreams come true. At the 100th anniversary of Osaka University's founding in 2031, you will have inherited the world. I hope you make every effort to achieve our great dream to make Osaka University one of the top ten research universities as the World Tekijuku. Achieving dreams is difficult, and that is why they are called dreams. A dream is not reality and cannot be achieved easily. So it is only too easy to think that achieving dreams is impossible and, thus, give up. If we hold on to our dreams and continue to make every effort to achieve them, one day, those dreams will come true.

Remember “Dreams are meant to be achieved.”

Allow me to close by wishing you all good fortune, and once again, congratulations and welcome to Osaka University.

October 1, 2014
President of Osaka University
Toshio HIRANO