**Presidentʼs Address at the 2024 Saitama University Degree Awarding Ceremony**

On this auspicious day, I extend my heartfelt congratulations to all of you who have gathered here for the conferment of degrees by the Graduate Schools of Saitama University. I also wish to express my sincere congratulations to your families who have watched over and supported you with warmth and care. Additionally, I extend my gratitude to the faculty and staff who have guided and supported you in your studies and research. Today, we celebrate 25 graduates from our undergraduate programs, 31 from our master's programs, and 32 from our doctoral programs. Of these, 52 are international students.

As you embark on your journey into a new world, I sincerely hope that it will be bright and full of promise. However, I must admit to harboring a certain degree of concern. The world we live in is accelerating towards unprecedented levels of unpredictability, and the uncertainty of the future is more worrisome than ever before. Consider, for instance, the rapid advancement of digital technologies such as the advent of generative AI. While they offer convenience, they also expose us to the threat of "fake" information. This alarming situation undermines the credibility of "news reporting," which is a cornerstone of the information infrastructure in our lives, and was unimaginable just a decade ago.

Moreover, we are continually assailed by "unpredictable" and "uncontrollable" events in the realms of politics and economics. These include the persistent outbreak of wars and conflicts despite the lessons learned from two World Wars, the social divisions caused by widening income disparities on a global scale, and issues such as natural disasters (including pandemics) and environmental problems.

As you stand on the threshold of this world, preparing to test your mettle in society, what should be your touchstone? Today, I would like to share with you one guiding principle that I believe is crucial.

In the society and world that lie ahead, I would contend that you need to consider "what not to do" on the same level as "what to do," i.e. your aspirations and goals. Moreover, honing your ability to discern the implications of both of these questions is essential. Humanity has embarked on a path of unceasing progress and development. However, there is a "light" and a "shadow" to every phenomenon. The light of progress born from "what to do" invariably casts a shadow. The key lies in how we interpret this interplay, for therein are the clues to how we should face the world of tomorrow.

Robert Oppenheimer, the American physicist recently brought to public attention through a popular film, was the central figure in the development of the atomic bomb that caused unprecedented devastation when dropped on Hiroshima and Nagasaki in August 1945. According to the biography "American Prometheus" by Kai Bird and Martin Sherwin, Oppenheimer clearly recognized the existence and significance of the immense "shadow" cast by this weapon of mass destruction. Of course, his primary motivations during its development were the pure scientific curiosity of a physicist grappling with nuclear research and the desire to meet the political expectations of winning the international race to develop such a weapon. However, this "shadow" continued to haunt him long after the war, as evinced by the accounts of the people close to him.

Upon learning of the bombing of Hiroshima, his initial reaction was reportedly, "It worked," but seconds later, he was "suddenly seized by the terror felt by all those who died." Later, he reflected that this project had created a weapon of mass destruction as "the culmination of three centuries of physics" and, in doing so, had "impoverished physics" not in a metaphysical sense, but in a very real way.

The human horror and remorse of having contributed to mass killing was coupled with the anguish of a physicist who realized that war had exploited physics and hindered its progress as a discipline. We should reconsider and learn from the implications of these two "shadows" that Oppenheimer perceived.

Humanity has continually evolved throughout its long history in pursuit of a better life and more happiness. I sincerely hope that you will cherish your enthusiasm to actively take on the challenge of further technological innovations, inventions and discoveries, the creation of new social systems, and the pursuit of individual happiness. However, you must not proceed based solely on curiosity or in pursuit of profit. What is needed is the imagination and perspective to understand how your actions will impact the lives of each person in society. With this viewpoint, you will not overlook the crucial significance of both "what to do" and "what not to do."

In addition to the area of digital technologies as was mentioned earlier, the "new world" will continue to expand unpredictably in areas such as regenerative and reproductive medicine, intensifying space exploration, more complex international conflicts, and the impact of global economic activities. As those living at the forefront of these developments, I hope you will fully harness your abilities to discern the essence of these various issues and to seek the best course of action at every turn. I urge you to refine your theoretical underpinnings and values that allow you to choose "what not to do" as necessary, always bearing both the light and shadow of each choice in mind.

To cultivate this ability, please continue to maintain the three mindsets you have developed through your academic research as students, "question, learn, and think," once you enter society. Also, be aware that the world evident from "what should be done" in your specialized field is indeed a limited one. Never cease to interact with people in different fields, and remember to continue to build on your foundational values and ethical perspectives.

The world you are stepping into is one where light and shadow intertwine. As long as you have both in mind, you should believe that your future will be storied and rich. I sincerely hope that you will always remain hopeful and keep your sights high. I will conclude this address by wishing you well on your future path. Once again, congratulations on graduating and completing your studies.

September 20, 2024

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