EAA Forum 3

EAA Booklet - 8

East Asian Academy For New Liberal Arts
Joint research and education program
by The University of Tokyo and Peking University

Roundtable Discussion 2

World Kyōyō-Gaku and Future Liberal Arts on April 1, 2020.

Takahiro Nakajima　Tsuyoshi Ishii　Kaz Oishi　Yuichiro Watanabe
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Correspondence concerning this book should be addressed to:
EAA, 3-8-1 Komaba, Meguro-ku, Tokyo 153-8902, Japan

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Forward to the Series of EAA Forums

New Scholarship from the Forest of Komaba

Tsuyoshi Ishii (EAA Deputy Director)

This series of forums from the East Asian Academy commenced with the forum entitled "World Human Studies," which was hosted on December 9th 2019. The initial forum laid out the agenda of this series as follows.

[**Purpose**]

Currently, globalization is entering a new phase. Conflicts resulting from the borderless movement of humans, things, and information have created instability in the institutions and values that have defined modernity. Compounding this situation is the arrival of several notable factors: the technological society of the so-called fourth industrial revolution, the crisis of sustainability of human life and the ecological systems of the earth related to climate change, and the blurring of the boundaries that define 'life' as a result of developments in medicine and biotechnology.

We find ourselves wondering what shape the world in which we now live, not to mention that of the future, will take. As the ways in which have constructed our image of the world — views that until recently have rarely been questioned — appear to be increasingly dysfunctional, we have to reconsider the world in which we live and open ourselves to the power of imagination in order to create and nurture a new vision of the "world." At the same time, our current

situation compels us to redefine what is "human." As human beings in the present, we have become what we are not only through our relationship with nature but also through our relationship with artificial entities such as machines and networks of information. Ethnicity, nationality, gender, class, individuality, health, life and death, environment, technology, and institutions, are all among the conditions that constitute what it is to be human and which then must be reexamined in the contemporary situation. This reevaluation is inseparable from the construction of a new vision of the world.

Therefore, we term the new arts, ones that reexamine what it means to be human while imaging the world, "World Human Studies." Here "world" not only refers to the totality of existing regions claimed by nation-states and coalitions but it also encompasses all that we as humans can comprehend. However, we must likewise understand that what underlies this "world" is that which lies beyond our imagination. In order to create a new order for our world it is necessary to start by thinking about what the world is from a perspective that incorporates that which is beyond the world (nature *per se*, the fields of divinity and spirituality). In what we call "Human Studies" we desire to draw from all learning and education that can imagine and foster "new human beings." In this way we seek precisely a scholarship and way of supporting talents that is not limited to modern classifications of disciplines into the humanities, the social sciences, and the natural sciences but is rather based on concept of liberal arts that we find exists in the original practice of scholarship.

"World Human Studies" is a new frontier in scholarship. As a frontier exists at the edges rather than the center of the existing world order, it cannot help but to act in transforming the existing order. In this way, Japan as a country that has experienced both the traditions of Asian and European modernity is uniquely situated on this frontier. We aspire to see Komaba in its role as a frontier of the University of Tokyo help to lead the world in the new arts of "World Human Studies" as a responsi-

ble member of the global community.
The inaugural forum at Komaba was planned as the opening of this new perspective of "World Human Studies."

This is truly an extraordinary project, and although it may sound like a fantastic dream, we do not see it in this way. I believe that reexamining the "world" and "human beings" as a basis and placing our faith in the university where this investigation is to be carried out — thus initiating a change of the university itself — will be the most realistic and most urgent issue for those of us whose lives are part of the university. Following Jacques Derrida, we might say that the particular significance of the university lies with those who 'profess' the future of the world and humanity — namely, the assembly of professors, researchers, and academics. I want to combine this idea with Confucius's teaching that "it is man who is capable of broadening the way, not the way capable of broadening man." The "way" becomes what it is precisely because it is our act of walking itself, extending into the future. Furthermore, the truth lies precisely in the futuristic nature of walking along this path. Here, rather than being limited to an individualistic act, "walking" should be an act of humans working together.

Starting with the forum of "World Human Studies," we, located in the forest of Komaba, have decided to publish a series of forums discussing the vast perspectives offered by this new scholarship. These are not grand symposiums. Instead, they are intimate yet deep conversations. In other words, given the importance of this topic to the changes taking place in the world around us, I hope that the process involving these conversations is an action that "takes its time in a hurry."

June 14, 2020

Acknowledgment

Tsuyoshi Ishii

This round-table discussion was held on April 1, 2020, the first day of the new academic year. I have spent more than ten April 1sts welcoming new students *there* at Komaba. I say "there" because I was not on campus this April 1st for the first time in my career as a faculty member. This year, I was at home connecting to the internet to participate in this discussion, a new situation due to the novel coronavirus pandemic, as all of you know. For me, it was the first academic meeting in which I have participated online, and it has now been followed by so many subsequent online academic events and classes, in which there were many students I talked to without being able to see their faces or expressions.

Following the first round-table, which discussed how to develop our scholarship to rethink our concepts of the "world" and what it is to be "human," our theme this time was entitled "World Kyōyō-Gaku and Future Liberal Arts." Compared the previous round-table entitled "World Human Studies" in December 2019, this year we replaced the term "human studies" with "*kyōyō-gaku*" in order to return to our own tradition of examining the richness of a Japanese context, so that we could seek another possible interpretation of liberal arts, which we

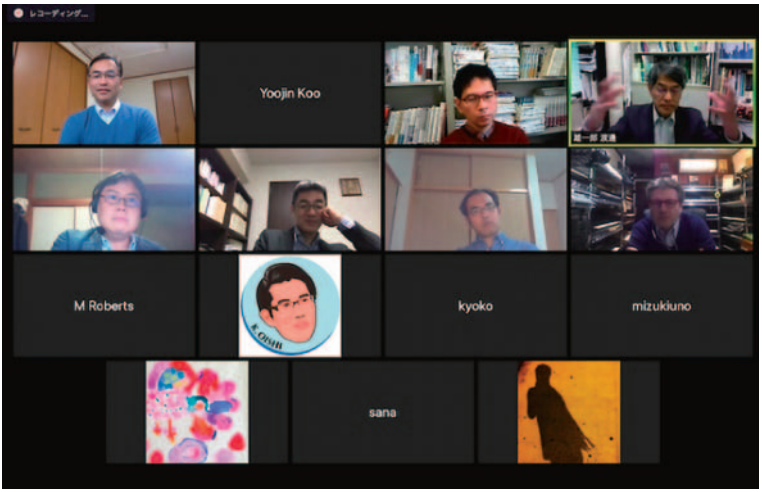
usually see as the proper translation of the Japanese word *kyōyō*.

Revisiting the history of the usage of this word, we have come to realize that *kyōyō* itself has experienced several transformations of meaning. I think, however, the faculty scholars who engage in research and education at the Komaba Campus that is, needless to say, named the College of *Kyōyō*, have demonstrated what the spirit of *kyōyō* represents through their every-day efforts to manage the entire college administration to do its best under the situation created by the pandemic. Namely, there is a flexible imagination in tackling problems we have never experienced before, along with broad cooperation among those in different academic fields and diverse disciplines. *Kyōyō*, thus, is not mere individual knowledge, but rather a collective attitude to make our society better through continuous efforts by each individual who is hoping to become better, even in this unprecedented and difficult time.

Scholars from various departments in Komaba joined in the roundtable discussion to imagine together a future new liberal arts nurtured in *kyōyō* tradition: Kaz Oishi, Yuichiro Watanabe, Jonathan Woodward, Taihei Okada, and Akira Inoue. I deeply appreciate their participation, which made for an entirely vigorous and stimulating discussion. Please allow me to particularly thank to Kaz because this day was the first day for him to work as Vice Dean. The support by the Dean's Office is most encouraging for us. Last but not least, thank you, Takahiro Nakajima, Director of EAA, for moderating the whole session.

July 23, 2020

World Kyōyō-Gaku and Future Liberal Arts



Opening Remarks

Takahiro Nakajima

Takahiro Nakajima

Thank you so much for joining this meeting through Zoom. Today we would like to have a kind of symposium on *sekai kyōyō gaku*. This notion is difficult to translate into English. It is a compound of three concepts: *sekai*, *kyōyō*, and *gaku*. In this compound, we are trying to open a new platform for the coming liberal arts. *Komaba* is the best place to think about this holistic notion of *sekai kyōyō gaku* "world liberal arts."

Our discussion is organized by EAA, the East Asian Academy for New Liberal Arts. This institute was only recently founded in March of 2019, and I have just become the new director of this institute in April of 2020. My name is Takahiro Nakajima, and my area of expertise is World philosophy, especially Chinese philosophy. In the last four or five months, we have begun to publish a series entitled *History of World Philosophy* from Chikuma Shobo. Fortunately, the sales have gone very

well, even during this time in which we have a serious pandemic. It seems, people do want to know what is going on in academia as we face this unstable situation.

World Philosophy, World Literature, and World History are areas of academic interest that are currently quite relevant in terms of what the world means to us. In other words, we in Japan or East Asia are now asked to rethink the universalizing process by re-defining how we conceive the world. In the first half of 20th century, Japan tried to establish a Japan centered universality, which proved to be a serious failure. We cannot make the same mistake again. However, if we do not wish to abandon a universalizing vision, our mission should consider universality once again from the perspective of World Liberal Arts. I hope to learn more about this topic from our six speakers today.

The first speaker is Tsuyoshi Ishii. Welcome Tsuyoshi.

Presentation 1

A Place for Promoting Hope

Redefining Komaba's *Kyōyō*

Tsuyoshi Ishii

Tsuyoshi Ishii

The main theme of our discussion today concerns how we can understand the word *kyōyō*. This is a somewhat peculiar word, possibly because it originated during the process of Japanese modernization and referred to some concept such as culture in English or *kultur* in German. Although many people say that *kyōyō* is a translation of the German German *kultur* or English "culture," the word itself was actually developed historically under the modernization of Japan, especially in the 20th century. For our university in particular, *kyōyō* is a special word because we inherited the legacy of the former *Ichiko* or *Daiichi Kotogakko* that was located at Komaba Campus and eventually became the *Kyōyō Gakubu*, the College of Arts and Sciences. The college was named after *Ichiko*'s legacy, of which the very concept of *kyōyō* was embedded at its core. Nowadays, we regard *kyōyō* as a translation of the term liberal arts. However, in the beginning when the *Kyōyō Gakubu*

was established in 1947, the founders saw *kyōyō* as encompassing general education, which has its own connotation, and is not the same as "liberal arts." On the one hand, the word *kyōyō* per se has been consistently used; on the other hand, the connotation of this word is always subject to variation according to situations and social demands. Since the meaning of *kyōyō* can potentially be subject to change, the founders interpreted it according to how they identified themselves as members of the Komaba community. Thus, I think that the word *kyōyō* itself is always developing and transforming. It is not a stable concept, and in this sense, we are allowed to redefine our concept of "liberal arts" to fit the new challenge which we now confront in our society and the world.

Let me go back to the concept of culture. In the East Asian *kanji* vocabulary, culture is commonly translated as *bunka* 文化. As you know, the concept 文, pronounced as *bun* in Japanese, or *wen* in Chinese, is one of the key topics of my research. Interestingly, in Chinese universities or institutes, colleges of liberal arts are sometimes translated as 文学院, college of *wen*. This means that the Chinese character 文, literally meaning script or letter, is actually able to be juxtaposed with the idea of liberal arts.

From this point, I would like to go back to the Chinese tradition to imagine what a new liberal arts might be. Please see my handout. I noted that some Chinese characters such as 人 and 仁, have the same pronunciation, which is true in both Japanese and in Chinese - *jin* in Japanese, and *ren* in Chinese. In Confucianism, a human being, 人, is not seen as a static, unchangeable being, but rather seen as a self-cultivating creature who can be a person achieving *ren* 仁, which is usually translated as benevolence or simply 'the good.' This self-cultivating identity is the very definition of a human being. In recent years, some Confucian scholars have advocated replacing the term 'human being' with 'human becoming,' in this sense. Akio Tanabe, our colleague at Komaba campus specializing in Indian anthropology,

goes further in the interpretation of 'human being,' discussing "human co-becoming," which illustrates that cultivating our nature as humans is not achieved individually, but through mutual communication and interaction among individuals who are embedded in social relationships. In this sense, we humans self-cultivate together with others not only to develop each of our own selves but also to advance the society in which we exist. An etymological study shows that the shape of the character 文 consists of crossing strokes, as if these strokes allow the character to represent textile weaving. In ancient times, the character could be used to stand for both literature and culture. Therefore, we could say that portraying liberal arts as 文 means examining how people cultivate themselves in terms of character, as well as how they act to change their own society for the better through continuous learning and training in terms of both knowledge and behavior.

In short, the concept 文 can comprise all human behavior that urges us to be more humane, to become human together with others. This is an attractive notion for us today as we revisit the concept of *kyōyō* to reflect on the idea of liberal arts.

In the last part of my handout, I cited Jacques Derrida's "The University Without Condition," in which he interpreted the word "professor" as meaning person who "declares publicly."

> This word of Latin origin (*profiteor, professus sum, eri; pro et fateor*, which means to speak, from which also comes "fable" and thus a certain "as if"), to "profess" means, in French and in English, *to declare openly, to declare publicly*. In English, says the OED, before 1300 it had only a religious sense. "To make one's profession" then meant "to take the vows of some religious order." The declaration of the one who professes is a *performative* declaration in some way. [...] I insist on this performative value of the declaration that professes while promising." (Jacques Derrida, "The University Without Condition," in

Without Alibi, trans. Peggy Kamuf, Stanford: Stanford University Press, 202, p.214)

This is another interpretation of liberal arts. As we now educate our students and engage in discussion with other scholars across the world here in Komaba, all of us are performatively acting to "profess" something to society and in our scholarship itself. Derrida concluded this beautiful speech at Stanford University by saying "take your time, but be quick about it, because you do not know what awaits you." (ibid., p. 237) This is very impressive advice for me and for all of us.

Discussion Session

Takahiro Nakajima Thank you so much, Tsuyoshi. It is a beautiful opening. I'd like to ask you two questions. I am trying to think of something new under the concept of "human co-becoming." The "co" refers to a kind of a mentor. I think we cannot start this process of human becoming without a mentor. When you mention "self-cultivation," it reminds me of the very strong tradition of "enlightenment" in Europe as well as in China. "Enlightenment" always asks us to take such a framework of self-enlightenment, which often lacks the dimension of others around us. I would like to break free from such a traditional type of enlightenment framework. Do you imagine an alternative framework that has a different self-cultivation or self-enlightenment process? This is my first question to you.

My second question is relevant to the notion of professing. The notion of professing is somehow different from the notion of confessing. I think confession is related to the notion of self-cultivation and an important part of confessional nation-state as a very powerful framework of modern thinking. If this is the case, we must understand professing in a context different from confessing. In this respect, the notion of *wen* 文 in Chinese could be useful to us, because *wen* is sometimes replaced by *jiao* 交 in combination with other characters. In my understanding, *wen* is neither a self-cultivating process nor confessional process. How would you consider it?

Tsuyoshi Ishii Thank you very much for your truly insightful questions. Actually, these two questions are interconnected. I have just finished the paper that you asked me to write, in which I discuss the

Chinese philosophy of *kanjō*, sentiment or emotion. It will be published by Chikuma Shobo in June as a part of the *Sekai tetsugaku shi*, the History of World Philosophy, edited by Professor Takahiro and other scholars. What I tackled in this paper was basically the notion of the modern enlightenment. Since the modern era, we have regarded rationality and emotion as dichotomous categories. However, in the Chinese tradition rationality and emotion were integrated as 心 — *kokoro* in Japanese, or *xin* in Chinese — which is usually translated as "heart-mind" in Anglophone Chinese philosophy research. Then, this *kokoro* may contain both rationality and emotion, which are to be cultivated through everyday life experience. Emotion is not the opposite of rationality, yet both of these impulses must be trained. In the end, you could do some good without rational decision making if you by chance found yourself in an emergency situation such as in the well-known trolley problem. There is a famous anecdote in *Mencius*: if you saw a small child who was about to fall into a well by accident, your heart-mind would suddenly be filled with strong feelings of anxiety and concern about the child. Mencius said that this was a *xin* of compassion, which is a clue for all humans to be good people. The reason why we are able to cultivate ourselves to be better people is because all of us share the clue, the heart-mind, which allows us to empathize with each other. It is not any kind of inner self, but rather is an interactive feeling urged by the outer impulse. We are always connected with others, from the very beginning of our lives. This is what *Mencius* and other ancient Chinese philosophers teach us. So, when I refer to self-cultivation, it is not something conducted within some inner, authentic self; rather it is interactive behavior with others. Looking back again to the word *kanjō*, which consists of two characters of 感情, we notice that the latter character *jō* 情 also stands for the outer situation — the circumstances or environment. This indicates that the second character stands for what is not complete within inner self. This is my answer to you.

Qin Wang A very simple question for Professor Ishii. You mentioned the complexity of the Chinese character *Jō* ("qing" in Chinese). I'm wondering if there is any possible relationship or space for communication between this kind of idiosyncratic Confucian concept of *Jō* on one hand and, in the present-day, the very popular theoretical concept of affect, which is translated in Japanese as "*jōdō*."

Tsuyoshi Ishii I think they are interrelated. *Jōdō* 情動 is also translated as emotion and sentiment, the same as *kanjō* 感情. As a matter of course, there are differences as well as overlapping meanings among concepts such as emotion, sentiment, and affection in European languages. How should we consider this? Is it clear how we articulate these differences?

Qin Wang I don't think it is simply a problem concerning the correspondence between two different language systems, which never ever works. The problem always is that, when we try to say something about the complexity of these Confucian terms or words, we may easily oversimplify the western or European concept that we use, as if, say, "emotion" is starkly distinguished from "reason" or "rationality," which for me is a problematic gesture, especially when the concept of "emotion" is related to the Heideggerian concept of mood, which is neither subjective nor objective, but rather is both situational and related to personality. The use of the concept of emotion itself in German, British, and American literature is, to say the least, always complicated, if not disseminated. Thus, what is precisely ideological in this regard is to reduce the concept of emotion to a kind of oppositional framework between emotion and reason. That is the underlying concern of my problem.

Tsuyoshi Ishii I see, so in the field of "*kokoro no tetsugaku*," a Japanese concept that is often translated as the philosophy of the mind,

some scholars now advocate a new trend in their research examining the emotional turn of philosophy. For example, Yukihiro Nobuhara, our colleague here at Komaba campus, wrote a monograph entitled *Jōdō no tetsugaku nyumon*, literally translated as an introduction for the philosophy of emotion. In this book, he used the word *jōdō* as a translation of emotion. But it also naturally contains some overlap with the images of affection or sentiment. I think it is not possible to have clear-cut definitions that differentiate these concepts from each other, even in the European linguistic tradition. From the viewpoint of Chinese philosophy, *jōdō*, in a sense, also presents intriguing interpretations because Neo-Confucian scholars in the Song dynasty regarded *qing* — the way *jō* is pronounced in Chinese — as human nature in motion, which itself is another matter that could be the subject of further exploration.

Qin Wang Thank you very much.

Taihei Okada I have a question for Prof. Nakajima. In your response to Professor Ishii's presentation you said, "confession" is opposed to "profession." I would like to know more about what you meant by this.

Takahiro Nakajima I have a very simple answer for you. Confession is the philosophical basement of the nation state. Professor Prasenjit Duara tried to analyze the basement of nation state by using this notion of confessional state in *The Crisis of Global Modernity: Asian Traditions and a Sustainable Future* (Cambridge University Press, 2014). According to him, it is strongly related to a very powerful modern political ideology. It means that by using confession in modern sense, we can produce a good nation-state embedded in modern individuals.

Profession would be different from this type of confession. If this is our case, how can we understand profession in the way Tsuyoshi talks about to declare openly or publicly? In other words, how can we

understand this openness or publicness? Can we rethink of the university as a place for the forthcoming liberal arts?

Taihei Okada Yes, but I guess Professor Ishii is talking about human beings. In contrast, you are talking about the nation state. So, we are talking at different levels. Wouldn't it be more fruitful to think of these two different levels as being different to start with, and then try to connect them later? Additionally, it seems that one of the purposes of this roundtable discussion is to express new ideas about teaching. In this light, it would be worthwhile to connect these three concepts: human beings, teaching, and the nation state. This would tie everything together.

Takahiro Nakajima I don't want to connect the nation state once again to this new education. In modernity, the political and theological dimension formed a very strong basis for human beings. I would like to shake this type concept of human being that we have held in modernity. That would be one of our missions to think of world liberal arts today.

Presentation 2

Educing and Liberal Arts

Kaz Oishi

Kaz Oishi

I would like to begin my talk in response to Tsuyoshi's talk and then move on to develop my own ideas, which are in essence the basic ideas that form my concept of *kyōyō*. Tsuyoshi has just talked about human co-becoming and a more or less human oriented idea of *kyōyō*, but I think the term *kyōyō* in Japanese contains complicated layers of meaning, and furthermore, it also has compound layers of history. So first of all, we have to remember that the term *kyōyō* was coined around 1900 when the new Meiji government was established, and at this time the new higher education system, especially the university education system, was modeled after European institutions. So *kyōyō* in Japanese is rooted in modern enlightenment, which also carries in it the meaning of cultivating.

So the idea of cultivating intellectually as well as culturally is the fundamental basis of the concept of *kyōyō*. The Japanese people and the government at that time modeled higher education on German

institutions. So *Bildung* is the term that more or less served as a model for *kyōyō*, while culture would be the cultivation of the mind or cultivation of human thinking. Thus, there is a long tradition of Western ideas, similar to Japanese *kyōyō*. If we just review what has been discussed here, *kyōyō* or I would say *Bildung* is more or less based on the traditional concept of *cultura animi*, or cultivation of the soul according to Cicero, which was later developed in the medieval period to become *cultura mentis*, or cultivation of the mind. Therefore, this concept was more or less expanded and disseminated in the Romantic period as *Bildung*. Hegel is one prominent philosopher who disseminated this idea, and Kant is another facilitator of the *Bildung* concept. These ideas of cultivation of the mind and the cultivation of the soul became more or less secularized, starting in the late 18th and early 19th centuries, and especially in the 20th century. When the concept was imported and instilled in Japanese institutions around 1900 it became what is known as *kyōyō*. This represented the first stage of establishing *kyōyō* in Japanese institutions. This concept of *kyōyō*, however, is different from the *kyōyō* that we have previously pursued at Komaba.

The new concept of *kyōyō* was more or less an idea imported from American institutions, especially American universities, after the Second World War. Accordingly, we have been translating *kyōyō* into English as 'liberal arts and sciences,' The idea of liberal arts and sciences is different from the traditional, old fashioned idea of *kyōyō*. How we should define *kyōyō* now is probably our main topic today. Yes, for the past 50 or 70 years we have been teaching or otherwise involved in the liberal arts and sciences. Now it is the time, I think, that we have to redefine what *kyōyō* is — in Japanese as well as in English. I'm still wondering what would be the best translation into English of what the Japanese word *kyōyō* means. Most likely, this is an issue that does not have a clear answer. It is true we have to continue thinking about this question, and this is a great opportunity for all of us to consider how *kyōyō* can be redefined and how we should set out to pursue a new mode,

or a new stage of *kyōyō*. Before I move on, however, let me just summarize what *Bildung* or *kyōyō* represents to me. Tsuyoshi introduced the concept of *Bun* 文, the Chinese character. I very much like the idea and even included the concept and his argument in the book I recently edited on Samuel Taylor Coleridge's philosophy. I was very impressed by Tsuyoshi's idea of *Bun* as constituting a human network or a network of intellectual beings. It is a communal state of ideas and critical thinking which serves as the fundamental basis of human culture and human society. This is a new definition of *Bun* for me.

Culture is not exactly identical to *Bildung*, but still there is a kind of similarity between the two ideas. For me, culture or *Bildung* comprises different stages of knowledge. While in Japanese, *Chi* or 知 is a term or character we usually use to discuss ideas or knowledge, but here there are four or five different related concepts of knowledge. So information is very much a primary or basic concept or stage of *Chi* or 知. It refers simply to the fragmented information we usually collect by using Google or by reading magazines or newspapers. However, this information cannot be defined as knowledge, as it is unsorted, unstructured, and disorganized. It is when we organize these fragmentary data or bits of information that it can be unified as knowledge.

Perhaps some of the classes or courses we have been teaching at Komaba provide something very much like this type of knowledge. That is, it is one type of collected information, and this information is organized in a certain special field. Students do not need to read many books and engage in discussion in the classes they attend. What matters is how much they know about a certain subject. Yet, this cannot be defined as wisdom. To develop knowledge into wisdom, we have to apply the knowledge we have acquired to different aspects of human life and to the different conditions that exist in human society. We can then define the organized knowledge as wisdom. Thereafter we come to the next stage: culture. So culture is different from wisdom in the sense that it is not only the wisdom of individuals; rather, it is more or less

communal wisdom. Of course, there is a personal aspect to it, which we call *kyōyō* in Japanese, when someone has intellectually cultivated his or her own mind. In this case we often call this individual 'a cultured person.'

However, culture also has another meaning: communal culture. As we bring people together who have critical thinking as well as good knowledge and can apply wisdom to different situations in society, culture becomes communal. So, if we try to apply this hierarchy of culture in a college of arts and sciences or liberal arts and sciences, what we have to pursue, what we have to aim at ultimately, is clearly 'culture,' the top of this hierarchy. Then we must address how we can do this in our teaching. How we can introduce this idea in today's globalized society is a big question.

Before I move on, let me briefly discuss the term liberal education. When I recently tracked down when or how the term and concept of liberal education has been used in English, I came upon an idea from John Henry Newman, a 19th century theologian who converted from Anglicanism to Roman Catholicism in the mid-1800s.

In his book on university education, Newman defined liberal education as a process of cultivating a philosophical habit of mind and a very traditional concept of *Bildung*. He also saw it as developing intellectual culture and training good members of society. So here, we can see the term culture is defined in two ways. First, in a personal sense, it means culture, representing the cultivated habits of the mind, and secondly, culture comprises the qualities of human mind that allow us to constitute the welfare of human society. Therefore, not only Newman, but other philosophers and intellectuals including Coleridge, who I will briefly turn to later, also used the term wellbeing or welfare in terms of education. So education, especially higher education for 19th century people at least in Britain — I have not looked at other European societies — for British intellectuals in the 19th century and the early 20th century, education, especially at higher institutions, was a process

of training individuals to be good members of society.

In the university system, therefore, liberal education emphasizes social function. This is why I think university education in the 19th century became a target of social criticism because it turned back against social needs and realities. Oxford and Cambridge, in particular, and other old fashioned universities were criticized by the quite new middle-class members of society. Then, one figure who I think of as an interesting figure in re-defining liberal education in the 19th century is Samuel Taylor Coleridge. I was very much struck by his use of the word education. He tried to distinguish the term education from the idea of instruction, which is defined simply as conveying information and knowledge to students. Education is a different thing for Coleridge. It is 'educing' or eliciting the faculties of the human mind, which again, is same as cultivating the mind. At the same time subordinating these facilities to reason is his definition of education. In this sense, reason has a very Kantian implication. Coleridge was heavily influenced by Immanuel Kant. So reason here is very much an absolute *thing itself* existing above the human sphere. We can just ignore that kind of Kantian transcendental concept of reason in today's education, however.

So, now let's move on to how we are going to redefine this traditional concept of education or liberal education. I had a chat with Tsuyoshi some time ago regarding how we are going to define *kyōyō* in Japan. One difference between Tsuyoshi and myself is, I think, Tsuyoshi has introduced the terms human becoming and human co-becoming, which I think represent an extremely important idea. And yet, for me, it is still human oriented. This concept has a very anthropocentric viewpoint in this regard. But in today's society there are different forces and different factors surrounding human society and human beings. One critical problem for all of us concerns the environment, and the environment itself is not centered on humans. Of course, we humans create huge environmental problems, but still the environment itself is constructed in the way it is regardless of what we humans do.

Additionally, society is very much human oriented: it is a type of fabric of humanity or the fabric which human beings have created, produced, and facilitated. Yet society has a force that operates independently of individual human beings. So social sciences or humanities can focus on humanity itself, in the human mind or spirit or the soul. We can still pursue education whilst cultivating the human mind. But today, we also have to pay attention to human society, which contains the field of social sciences as well, and also to environmental science. So if we apply the term *kyōyō* to science and social science, we can say it is a cultivation of the human mind. And yet we now have to define it very differently. So how we can apply the term and the concept *kyōyō* to today's science? This is a significant question, especially in terms of today's globalized society, and as a reaction against globalization, we need to think about how to address this de-humanized process of globalization. If we look at the sciences, technology has always seen continual progress. Recently, digital technologies have been rapidly developing and humans have created other new technologies, but still this movement and development occurs regardless of what we are doing.

Therefore, we need to define or incorporate or encompass this new field, the science of today, as part of *kyōyō*. That is, not just to teach fragmented knowledge or fragmented information, but to provide very organized and crucial elements of human sciences. So basically, what I want to say is that we need to think about how to address the diversity of these academic fields as part of *kyōyō*. How are we going to include all these diverse views of culture as part of an education that educes human intellectual faculties? I have not come to any conclusions yet, but I feel this is what we have to do to move on to a new stage of *kyōyō*. Thank you.

Discussion Session

Takahiro Nakajima Thank you so much for your very well considered talk. I think 19th century romanticism created a very strong notion of humanism as a human centered doctrine.

Kaz Oishi Yes.

Takahiro Nakajima You have been studying Coleridge and 19th century Romanticism. Against this background, you are now trying to rethink this human centered humanism in the 21st century. How can we think of *kyōyō* as being different from a simple system of information or a simple introduction of information to students? I would like to ask one question: In modern Japan, especially in the Taisho era, the Japanese pursued *kyōyō* based on "personality," which was closely related to 19th-century romanticism. However, it seems to me that the personal self is a much more complicated notion in comparison to the private and the public self. It does not belong to the dichotomy between the private and the public. How can we situate this notion of the personal self in a new *sekai kyōyō gaku*? How can we redefine this notion of what is personal in a context in which we try to combine social sciences and natural sciences? This is my question. Do you have any concrete ideas about this?

Kaz Oishi Thank you very much. Yes, I haven't paid attention to the concept of personal self. However, another term we may be able to use to describe human beings as being a part of society is the individual. In our daily lives we can often use the words individual and personal

interchangeably, but fundamentally, they are very different. The personal has a connotation that implies an ownership of identity, psychologically as well intellectually. This is the concept of person or personal. But if we refer to individual, it means someone whom we can't divide to any degree, it means an individual, a person as an isolated being in society.

So, if we think about a dichotomy of private and public, I would think individual is a term which we have to use, especially in society and in the social context. So, if you go back to the romantic period, yes Coleridge used the term person more often than individual. When he used the term individual, which always tends to isolate human beings in what can be seen as a very atomic society, it was as Thomas Hobbes conceived human society, where individuals fight against each other in a society. This social vision is shared by Bentham's utilitarianism. So, Coleridge took issue with this utilitarian concept of society. J. S. Mill is an interesting figure who tried to accommodate Coleridge's communal idea into utilitarian individualism. Yes, individuals are important, yet at the same time, individualism tends to isolate each human being into a fragmented being, which results in the society reaching a critical state, thus calling for a redefinition of human society.

So, this is perhaps how we should conceive personal or person in contrast to individuals. However, today I think the individual is a more crucial idea, especially when we consider our current globalized context. Individuals, not just an individual in one unit, one community or one society, or in a particular country or particular region, are connected with the globalized community, either via internet access or via commercial network. So this suggests how we have to think about individuals in the new context, especially in the academic context.

Takahiro Nakajima It is very relevant to our discussion. I love your last phrase "educing human intellectual faculty." It is quite fascinating to me. Nonetheless, I would like to propose another image by referring to "blooming" instead of or in place of "educing," because "educing" is

derived from *educere* in Latin. There is an anecdote in the *Mencius* in which a man tries to pull some seedling rice from the ground, concerned that it is not growing well, only to find that he has killed the rice by doing so. So educing is in some way a very dangerous intervention, but blooming is an engagement that enhances students to change. Is there any notion similar to blooming?

Kaz Oishi Yes, there should be, yes. I can't think of a good example yet, but this is his word and blooming is the ultimate ideal of human education or human intellect in this sense.

Takahiro Nakajima Alright, thank you so much. Is there anyone who would like to comment or ask a question of Kaz?

Jonathan Woodward I just wanted to comment on the very last point, because suddenly whenever I think of education, I think that's a very interesting distinction there — the educing versus the blooming. But when I think about the role of a teacher and the role of education, then it's all the words that are associated with blooming. So it's about nurturing, right? That's what we do for our students — we nurture them, we feed them and water them like plants to allow them to bloom. But also the other term that probably isn't used enough in education in Japan, but which is very important, is 'scaffolding.' We provide support, we provide something for our plant to grow up so that it can bloom. So for me that's just a very interesting idea because it really chimes with what I would like to see as the role of real education. It is just a simple observation.

Kaz Oishi Thank you very much. Yes, so scaffolding is an interesting part of education. We try to systemize our educational process for each discipline or course, etc. So what we really need to do is put a scaffold in any course we are organizing.

Jonathan Woodward Yes, it's never organizing for organization's sake. It's for building the structures that allow the growth and they can be individual as well as they can be generic.

Kaz Oishi So yes, true. Thank you very much. I kind of kept thinking about scaffolding. I can't think of any good term for this in Japanese.

Yusuke Wakazawa It is quite interesting to find that both Ishii sensei and Oishi sensei have mentioned the idea of culture as part of envisaging a future form of liberal arts, because "culture" as a critical concept may sound old-fashioned in terms of the history of western philosophy. Neo-Kantian philosophers, Ernst Cassirer (1874-1945) in particular, once developed "culture" as an analytical framework for examining the various forms of human activity that underlie the cultivation of human mind. However, Martin Heidegger (1889-1976) was skeptical about their attempt to do this and undermined the foundation of "cultural philosophy." Intellectual historians of twentieth-century philosophy often view the Cassirer-Heidegger debate in Davos (1929) as the fall of this neo-Kantian pursuit. Heidegger basically put an end to Cassirer's ideal of human cultivation. Nowadays, there is little discussion of cultural philosophy while there is a massive amount of ongoing research and discussion on political, economic, or even natural philosophy.

So, I would ask you about the significance of (re-)introducing the idea of culture into our intellectual inquiry. How can we revitalize culture as a philosophical concept? What does this cultural philosophy promise to us, compared to what political, economic and social philosophies have achieved? I am very sympathetic toward its future possibilities, as the term "culture" could cover something more than, or different from, what "social" means.

Kaz Oishi Yes, good question. I agree, we tend to use culture more or less as synonymous with human enlightenment in relation to human

society, but culture should be seen as implying something more than that. I think that's your suggestion. Is that correct?

Yusuke Wakazawa Yes!

Kaz Oishi On my part, I'm wary of a sort of Heideggerian influence behind the term culture. And many philosophers tend to use the term culture in an old fashioned or human oriented manner. Yet if you go back to the etymological origin of culture, it means cultivating the ground. Thus, the word originated more or less in the agricultural context. So if we apply the concept of cultivating the ground to cultivation of the human mind, then it becomes the old fashioned philosophical concept of culture, but if we go back to the fundamental or etymological origin, yes, culture must be cultivation of the ground. That ground is very much society or the natural world. So it can be easily applied to natural sciences as well.

C. P. Snow says two cultures divide humanities and social sciences from natural sciences, but I don't think that is correct today. We need to have one more or less uniformalized concept of culture, both in the field of humanities and social sciences as well as in natural sciences. So culture is not a kind of cultivation of the human mind or intellect but rather a cultivation of the world with our society and also a cultivation of the natural world. Having said that, the universe is too vast for us to cultivate, I am afraid. Yet we still have to pursue how the universe was created and how it is organized. In a way this is another important part of human society. Therefore, actually we have many fields we need to cultivate, which then can altogether be defined as culture.

Yusuke Wakazawa When we talk about culture, we often speak in some way about the "ground" we need to cultivate. In this respect, culture represents our constant interaction with the "world." I think that the link between these two terms, world and culture, would be

crucial for us. The reconceptualization of culture would entail reconceptualizing the world, and vice versa.

Kaz Oishi Yes, I agree. Absolutely agree. Thank you.

Presentation 3

Life Science and/in Future Liberal Arts

Yuichiro Watanabe

Yuichiro Watanabe

I am a plant scientist and I try to understand how human beings interact with the many other organisms and land around them, the world. So, based on this type of research, we are trying to understand what human beings can do to the world through life sciences. So, today's topic is about what *kyōyō* is or what *kyōyō* education is, I suppose. So, I'm still wondering what I can talk about, but first I will try to briefly introduce what we have learned, through history, about basic principles in life sciences. About 150 years ago, Gregor Mendel established a theory of genetic principle, the law of inheritance. And he predicted the existence of a type of particle containing genetic information, a so-called gene. At that time, he didn't understand this gene as a molecule. Almost a century later, we understand that genes are material composed of DNA.

The principle of most biological phenomena is transmitted

through information stored in the DNA molecules. So, this represents the starting point of the strong link between some substances/molecules and the identity of an organism, or life if you will. Therefore, we are struggling to understand how we are organized or composed from such molecules. We now understand that our genetic information is a complex system of a certain number of genes. We have a mass of about 20,000 genes, roughly speaking, as human genetic information. I can say that a human being is substantiated by genetic material at or about the level of information from 20,000 genes. So, we are now trying to understand how many genes or how much genetic information can be organized in a system or how these things make up our identity. But I'm a human being as well.

Still, even though we understand that our genetic material is composed of this amount of genetic materials, 20,000 so-called genes, there is still a large gap between our real understanding of life science and the question what we are as human beings or what our existence in this world represents. So, we are trying to gain a greater understanding of how to handle this type of knowledge. We feel there is a large gap between the great amount of information that comes from genetic materials or a combination of intermolecular interaction and a real understanding of our identity. The human action of thinking is quite unique, by unique I mean humans can think by ourselves and try to understand what life is, what an organism is. Even so, we ourselves are also organisms.

We are struggling to understand what life is, what organisms in the world are, by using the human brain. The brain is also composed of certain kinds of molecules. This is quite complicated, but I'll try to simplify events and narrow down it to one or a few specific issues. Try to understand, this is our daily life, but still, such knowledge is quite fragmentary. So, we would like to sum up or assemble all this knowledge in order to understand what it means to be a human, and furthermore, what our world or society is. In this way we are trying to understand

what represents a peaceful coexistence between or among other organisms and our earth. Still, yet, a combination or simple summation of each component involved would not explain something such as the whole world.

Now we would like to understand, or we should have some knowledge from, the social sciences or humanities in order to find some similarities in the way humans gain understanding of the world. I would like to incorporate such approaches/procedures in real thinking to understand all the issues we face in the world. In that respect, I'd like to see how people here try to understand how you are thinking about this society or human beings and what you make of this. Following this method we would like to introduce your procedures/measures into our present life science studies.

Discussion Session

Takahiro Nakajima Thank you so much for your great talk. Thomas Kasulis in his research on Japanese philosophy tries to distinguish detached knowledge from engaged knowledge. We are inclined to think that natural science, including bio-science, is a discourse based upon detached knowledge in which we usually use induction, deduction, or some kind of reduction as you referred to. However, it is also true that natural scientists, especially bio-scientists, try to consider very complex systems. For this purpose, only using a simple way of thinking such as induction or deduction does not work. Charles Sanders Peirce proposes the notion of abduction instead of induction or deduction. In the understanding of complex systems, probably a way of thinking such as abduction would be effective. That is my very naive thought. If this is the case, a Kasulisean idea such as "engaged knowledge" would be very useful even in natural sciences. In other words, in the framework of engaged knowledge, some kind of agency, be it personal or individual, is already embedded in the knowledge system. What do you think about this other type of knowledge which is different from reductionism? Do you find any point in which natural sciences, social sciences, or humanities would be merged together?

Yuichiro Watanabe It's a very interesting question, and it is very worthwhile to think about this possibility. Actually, normally we natural scientists try to understand a basic principle based on some equations, and we set some assumptions/conditions as a starting point. Based on such conditions we believe we can make predictions about what will happen. I think that is a kind of reductionism or determinism. However,

once we look at our life, or organisms, or evolution, in my personal opinion often such approaches cannot explain what we have seen in the past, especially during the evolution of organisms.

For instance if we look at our body plan, or the composition or structure of our body from a scientific point of view, our human structure is not ideal. Or we could say it is not so well designed, not so complete sometimes. We cannot explain why our bodies have such an incomplete structure. Yes, it is the result of something. So yes, we should think about such events or facts based on different points of view like Nakajima sensei just brought up. Personally, I'm sorry to say that I am not so familiar with such engaged knowledge, which is something I should know more about. I understand we should be ready to cooperate with/exchange such points of view.

Takahiro Nakajima John Dewey, a pragmatist, once noted the possibility of weak causality in referring to genetic method. Genetic method is a term, which at the time it was invented was highly influenced by genetics. When we face issues in genetics, it is hard to understand these matters using a simple causality system. We are asked to consider weak causality. What do you think about this weak causality in the discourse of bioscience?

Yuichiro Watanabe I am not so confident that I can answer correctly or properly, when we look the evolutionary path of life and organisms, some creatures entered some kind of narrow path during evolution. Maybe there should be a better way for them to easily survive, but they exist the way they are due to just some kind of coincidence or chance. Some organisms take different forms, but this may not the best solution in the end. Yet these organisms still have this structural design in their body plan. So, there is a kind of interaction between other creatures or environmental issues, or at times some other process may be involved.

We cannot predict where we are going during the evolutionary

path when we neglect what factors such creatures face, such as environmental conditions, climate changes, or the existence of hostile enemies or something similar. I'd like to say that if we address the question of why we have such structures or body plans, we have to think about what kind of climate or environmental conditions and, for instance, what the availability of food may have been at a particular time and so on. So we cannot predict what will happen in the future, or what happened in the past if we do not determine and explain such surrounding conditions.

Takahiro Nakajima Thank you. Any comments or questions from the participants?

Tsuyoshi Ishii Thank you very much for your very interesting presentation. My question is about the way we usually place nature as being opposite to humanity. However, I am wondering how we could distinguish nature from artifice. We discovered the molecule, the gene, and today, we know viruses exist in the world and influence our bodies and our health even though they are invisible, even it would be impossible to discover them in our daily experience. Before the discovery of viruses, our ancestors would give another interpretation of infectious disease. My question raised here is: Are the molecules, genes, viruses and so forth natural or artificial? Or in short, what is nature?

Yuichiro Watanabe This is a quite tough question I suppose. But I think that we cannot make such a strict distinction between nature and artifice. For instance, our body, we think, is completely isolated from nature or other external aspects of our existence, but when we look closely at our body, for instance, we have a kind of tube from our mouth to anus, our intestine or bowels, that could be considered outside our body. Actually, this is continuously connected from the top to the bottom of our body. And we have to eat something that comes from the

world or our environment, that is food. Food comes into the mouth and we digest it in the intestine. The digested food still is located outside the body. and moreover, we maintain/cultivate a kind of mass of bacteria inside our body, in the intestine. Bacteria give off some metabolic by-products that are either good or bad for our health. It is really a co-existence between our body and our environment.

To some degree I have now ventured away from your question, but what I would like to say that the distinction or border between our body and the environment is not so strict. But possibly we are inclined to see it this way. In the past life science, we tried to understand our existence as totally isolated from the environment, totally composed of some biomolecules. But what is different (in nature) was that our biomolecules co-exist with other molecules in these environments, and they sometimes co-exist with organisms or microbes as well. So we would like to incorporate this type of knowledge and try to understand and share a true image of the identity of life. In this way, it reminds me of the situation between human beings and social events. One human individual is not so independent when we consider society or our world. Then how can we think, in the same way or a different way, of life sciences? I am sorry I cannot explain this well, but what I've given are quite rough answers.

Ishii Tsuyoshi Thank you.

Jonathan Woodward Can I just also comment on this question? It's a big question. I mean I think there are many, many aspects in which you can discuss this, but you have to be very clear about how you define your terms of artifice and natural for example. Okay, so let's say you walk into a Softbank shop and meet their latest robot. Is that artificial or is it natural, I mean, all the materials the robot is made of are all natural materials that come from the same substances we are made from. There are so many levels on which you have to address that and maybe you

mean man-made, I don't know, something that came from human design. That's one way of framing this question.

And really, that's a fundamentally important question addressed by artificial intelligence researchers. I will talk a little bit about that in my talk, but that's a truly interesting question of the difference between for example, man and machine and that's driven many things. But I think that question, yes, is enormous one and we could have this whole meeting just discussing that question.

Yuichiro Watanabe Yes, quite a big issue.

Tsuyoshi Ishii Just quick response: *bun* 文, which I referred earlier, also means a function giving language to the outer world.

Akira Inoue Thank you very much for your fascinating talk, Watanabe sensei. Actually, your discussion bears upon how to go beyond the limitations of Western science. As Nakajima sensei implied, your research project is truly holistic, going beyond intellectual demarcations given by the narrow confines of Western science, and maybe I shouldn't say that, because I belong to a kind of Western scientific research paradigm, but it is challenging. And it is indeed interesting to see how to go beyond these limitations in science from the viewpoint of biology.

Yet, I want to know more about what kind of science, or, more precisely, what kind of approaches you can employ? You must have in mind some different concrete approaches. I would like to know a bit more about some of them.

Yuichiro Watanabe Thank you. We are gaining greater knowledge, but we are still in need of some new concepts to help us understand a population or mass of organisms in order to predict what will happen in the next stage, in the future. So, yes, I have no strict, confident answer at present. Most life scientists try to introduce new technology, but I don't

think this is so new, but rather it is called bio-informatics. Handling huge amounts of data coming from 20,000 genes, their interaction or expressions up and down and the ways in which they are combined.

Yet I don't think this kind of approach itself can explain everything in order to understand the entirety of things or the whole world in the environment around us or across the globe. So I am quite welcoming of new ideas and would like to learn what we can do or what type of new approach can be invented to understand these larger issues. Now, that is my actual question or thought at this time. I'm sorry, I don't have a definite answer at present, but rather quite large questions or issues.

Presentation 4

Technology and Interdisciplinarity

Jonathan Woodward

Jonathan Woodward

First of all, thank you for this opportunity to join this discussion. It's the first time, I have to say, that I've ever joined this kind of discussion, especially one with a topic so broad and encompassing as this, and it was about a week-and-a-half ago, I guess that Professor Ishii asked me if I would join and say something and probably, like Professor Watanabe, I was a little perplexed at first, and I thought, what on earth should I talk about? What should I think about? But the idea has been running around in my head since then, and I have lots of crazy ideas and I've been trying to condense some of them into something rational and coherent to say. So I will probably talk for certainly more than 10 minutes because there's a lot of things I would like to include. I sent a handout, which I hope you've seen. When I sent that to Yoojin, I described it as a kind of brain splat. It really was my first attempt at trying to get some of my mixed-up thoughts down on paper, and I've

still got a long way to go but I hope to share a few things with you that can maybe promote some interesting discussion.

So here's what I'm going to do. I'm going to talk about three things. I'm going to present a few bits of context, mostly this is personal context. We've been talking about the personal and the individual earlier, but this is very personal. And this, I think, is important because obviously I'm not from Japan originally, and I have experienced a very different education system and, therefore, reflecting on *kyōyō* is an interesting experience for me, because it's so different from what I'm used to. So I'll say a little bit about that. And also provide some context from my research, and then I'll move on with some things that I think are important to take into account by considering, particularly, the future. We have not talked a lot about the future yet. And finally I will end with some very early attempts to try and distill out some ideas or pragmatic suggestions about what we might do from some of these things. So, first of all I'm going to tell you about my school history, okay?

So, I was actually in the last year of UK students who, when they were 16, took O-levels. They're now called GCSEs and they changed a little bit. They were called O levels then and what I want you to see is that during the age of 14-16, these are the subjects I studied at school. My school said, "You can study only eight subjects." So, from the age of 14, I studied mathematics, physics, chemistry, biology, English language, English literature, French and German — only sciences and languages. I didn't study history, or geography or any other similar subjects. My history, my geography, my social science, my humanities, my art education all stopped at the age of 14.

When I was between the ages of 16 to 18, I took my A levels and at my school at the time, I was allowed to study three subjects only, mathematics, physics and chemistry were the ones I chose and all students took General Studies. What did I do next? I went to university, I studied for my undergraduate degree for four years, it's in Oxford if you graduate over four years, you automatically get a Master's degree.

And I only studied chemistry; chemistry, chemistry, and nothing but chemistry. And then I did my D.Phil (my PhD) for the next four years, and I did even more chemistry. Okay, so it's not very awe inspiring, is it from a *kyōyō* perspective? So I wanted to just set that out, because *kyōyō* was something very new and different for me. I'm sure you've all heard of, early specialization and that the UK education system works like that, but I think when you actually look at an individual's history, it's quite stark, the difference. So I think that's an important context.

I also thought that probably you don't know what my research is about and it informs what I'm going to talk about. So I wanted to just talk about it in a very broad sense — a couple of aspects. The first is that particularly since I've come to Komaba and I've been exposed to *kyōyō*, and I've taught in this environment and I've worked with colleagues from very different fields. I think I've expanded my ability to do some of the things I'm going to talk about.

So although I'm very much a chemist, what my research really tries to do at the moment is address some interesting bigger problems. For example, one of the big ones that we look at is trying to answer the question of how animals detect and exploit the Earth's (extremely weak) magnetic field. This is a remarkable discovery of recent years that animals have a magnetic compass. They can use it for navigation, they can detect the earth's field, and this ability is built-in - it's innate. There's a very, very interesting question of whether we humans also possess such an ability. Nobody knows the answer to this question. There's been some progress in the last few years but we still don't know. Maybe we have another sense and because it's not visceral, we don't know that we're receiving that information but maybe we are. Anyway, this is a very big question and we try to address it, and this question — solving this question is hugely interdisciplinary. It requires aspects from many different fields. Alright, so here are some examples: behavioral biology, photochemistry, biochemistry, neuroscience, quantum physics. Just to name a few, there are others too.

But the idea here is, 'Is this is truly interdisciplinarity?' This is solving a messy mixed-up problem that requires the jigsaw puzzle to be put together with pieces of thinking of different kinds. I think this is quite different from most disciplinary approaches. Okay, so I think that the distinction between multidisciplinary and interdisciplinary is a very important one. And in my laboratory day to day, the way we operate is very much multidisciplinary. Alright, so we do different things. We build microscopes by ourselves, for example, we need to use engineering, for example we have workbenches, we do mechanical engineering, we build our own electronics. We use our own optics, we do chemistry, we do cell biology, we grow cells in my lab, we manipulate them, we do genetics, we do laser spectroscopy, computer simulations, and quantum mechanics. These are the different disciplines and we apply them pretty much wholesale to solve different problems but it's not interdisciplinary.

We're not using cell biology and laser spectroscopy at exactly the same time. So, this gives me a very kind of particular view of interdisciplinarity and multidisciplinarity. Okay, so then I also want to start thinking and moving because when it comes to *kyōyō*, maybe I'm mistaken, but primarily we're talking about education I believe, we're thinking about the future of education and how we structure it and how we imagine the goals and aims of our educational system. So I wanted to say something about my own experience in working in education for a long time and in particularly where interdisciplinarity comes in. When I worked in the UK, I was a lecturer in the UK for many years before I moved to Japan, and I was involved in developing a brand-new degree program in the UK called I-Science. So it was actually Integrated Science. This was kind of unique — it was it was unlike any other degree in the UK. Not only was it interdisciplinary, but the entire degree was taught by problem-based learning.

So, let me give you an example. Here's something about how the structure worked. What it was, was that we didn't think along the lines of conventional disciplines of physics, chemistry, biology, archeology, etc.

but rather different aspects of those were fed into different themes of things like fundamentals, materials, structures, environments, systems, communications. And then the modules, the subjects that the students studied or the courses that they took, were combined again from parts of those themes, to solve renal problems. So, for example, the very first course that students took when they arrived was called Prophets and Powers. And the aim of that sort of five- or six-week course was for them to design a new Stonehenge. So they were opening a Stonehenge Visitor Center. And as part of that, they were going to build an exact replica of Stonehenge, but not with modern tools, they were going to have to research exactly how Stonehenge was built originally and try and do it as authentically as possible. Okay, so this is the idea of interdisciplinary and problem-based learning. Problems and interdisciplinarity go together in a big way.

I wanted to just think of another example that I've been interested in since I've been here at Komaba. In Komaba a few years ago, I was very lucky, with PEAK, we established a relationship with universities in Sweden through what's called STINT. And we had a visiting professor from Uppsala University and he and I — although we have extremely unrelated research interests, we got on very well, and we decided it would be fantastic to think about, could we build a course that we taught between Komaba and Uppsala, and that was truly interdisciplinary and was based on solving real world messy problems and had different kinds of students working together and applying different skills to solve problems. So we built this course, it's called Managing Sustainability in Global Industrial companies. There's some information about it there (in the slides) but really this was quite remarkable.

If you look at the bottom, what we really do is address various aspects of sustainability in companies, from any perspective. So even our own disciplines where three of us were teaching this, experts in ethics and sustainability and innovation and myself in sciences and then my colleague who's a lawyer, she's a legal scholar. And we try to solve these

messy problems from multiple perspectives. And this was a defining moment for me at Komaba. Teaching this course was unlike anything I've ever done before and was completely fascinating. And I think the students get, what the students get from this course was great, so there's some context there. So I think the key point from my background is I've become from various perspectives, very enamored with the concept of interdisciplinarity and its differences from multidisciplinarity.

I'm going to change direction for a moment.

I wanted to just talk a little bit about technology. I'm going to try something. So, if you look on your screens, you should see that there's a button that you can press to react, that you can send a wave. I think there's like a reactions button at the bottom. Let me see that. So I wanted to just... I don't know if I'm going to be able to see you well but the question I had was, 'How many of you know what the singularity is?' The technological singularity. I'm not going to ask any of you to explain it but if I were to ask you, could you explain what the technological singularity is?

Okay, I was really curious to see how well understood a concept this is, and I'm not going to talk in detail about the singularity, and I'm not going to try and explain it in detail, but it just gives me a sense of how well known this is. Actually, in the PEAK first year seminar, the first course that all the PEAK students take, we had a debate about the technological singularity, I think in about 2014. The point I want to make, however, is about technology. Here are some kind of extreme quotes. This is from 2017, SoftBank CEO promises super artificial intelligences with IQ of 10,000 in 30 years.

There is this idea of a technological singularity, which is basically the point where artificial intelligence surpasses human intelligence. That's it in a nutshell. Whether or not this is likely to happen is a topic of debate. And I don't — I'm not going to offer any opinions on that, but what is doubtlessly true is that it's based primarily on the idea of exponential growth in all kinds of technology, particularly digital

technology, but actually all of the technology across time has been expanding in its rates exponentially. So if you go back to my handout, the point that I made there is that regardless of whether artificial intelligence will overtake humans or not, which is certainly a debate, there is no doubt that technology is throwing, very challenging situations to us as a society, as human beings all the time. The thing we talked about here was global; sorry, world *kyōyō*, this kind of '*sekai*,' this 'world' term is important. The reason that we're talking about that is because the world became smaller because of air travel and the internet and all these technologies. It's a direct result of technology that we're reconsidering these concepts. I guess the point I'm really trying to make is that technology has not stopped. It's still accelerating. These, as I call them, disruptive technologies are going to be more and more significant all the time, and some of them are so profound. The question is, 'are we ready for them?' and addressing this then relies on people from — experts from across all disciplines. We need to look to history, we need to look to literature, the arts, we need to look to everything to address not what we CAN do perhaps, but what we SHOULD do, or what would be best for human beings. That discussion seems to me to be woefully lacking in the grand scheme of human endeavor. Scientists are left to get on with science with very little input from people who have thought about the implications a bit more broadly and deeply. So it's a general example of what I'm talking about.

So, I will bring things slightly more back down to earth for a moment. There's an interesting quote here (on the slide) that AI has by now succeeded in doing essentially everything that requires thinking, but has failed to do most of what people and animals do without thinking. So there's a long way to go in terms of artificial intelligence and we still don't know whether it would be able to surpass human beings or not, but what we do know is that computers are getting extremely good at certain kinds of tasks. For example, two years ago, we didn't have words like 'deepfake.' AI has just suddenly been able to take video and put

someone's face on someone else's almost seamlessly. That wasn't even something we thought about a couple of years ago. It's happening so quickly and, of course, one of the huge impacts of developments like this is what will be the roles in society, the careers, the work for human beings, when robots can do many of those jobs more efficiently without complaining, etcetera.

So where am I going with this? Well, I mean, one of the things that I think is that it's very clear from looking at greatness and looking at where true innovation and truly great things come from that we work in a very different way to computers. I thought of two nice examples. The first is of Steve Jobs. I don't know if you know, but he credited his kind of industrial design, and particularly the Macintosh and the many things that came out of that, from a calligraphy class that he took in college. He learned all about the beauty of writing. And he made sure when he designed the Mac, for example, that it had these beautiful proportionally spaced fonts. And the writing on a Mac looked nothing like the writing on a PC at that time, and Macs became the de facto route for publishing and things like that.

Another good example is Claude Shannon, the father of information theory. It was a philosophy class that triggered him to take the idea of Booleans representing decisions as zeros and ones and actually start using those to transmit information. So I like this quotation in a book I read recently, "Nationally recognized scientists are much more likely than other scientists to be musicians, sculptors, painters, print makers, woodworkers, mechanics, electronics, tinkerers, glassblowers, poets or writers of both fiction and nonfiction and Nobel Laureates are far more likely still." This comes from a book about "Range." This is a book that talks about how being able to have knowledge and wisdom and experience from many, many different fields is actually the genre changing thing.

So we live in a world where we're not even used to the world as it is now — we're struggling. I mean, there's no better example than the

virus situation right now. But there are so many things that we've already got on the horizon, and there will be so many others. I mean climate change, artificial intelligence, COVID, CRISPR, big data, human computer interfaces. We were talking about the personal and the individual earlier. I mean if computer-human interfaces become a thing — we could all have our brains directly connected electronically through the cloud, you'd essentially be able to share our ideas and thoughts at speed so much greater than we do now. I mean, the effects of those things could be phenomenal. Of course, we don't know whether it will be possible or not but it certainly looks like it might. So in other words, recent and impending technologies fundamentally affect the human experience and so our education must take this as an appropriate context.

Okay, let me try and draw some of these threads together. I think that the first thing I want to say is, if we're reimagining what *kyōyō* is, then certainly from my perspective as a scientist, I think we have to do it with an awareness of where the world is right now and where the world is going. And my idea is not about emphasizing these things, but it's about acknowledging and sharing these things and making sure that these things are known to the world. We go back to the idea of preparing citizens and educating the people that we want in society, and we need to know about these things. So, one of my thoughts was about — I was struggling to find ways to express this properly — but selective emphasis of the contemporary. And this encapsulates a few jumbled ideas in my mind that I've still not quite separated out, but I think one of the things that I've been thinking about is, 'How do you teach it?' This was a big question for me when I moved to Komaba. I was asked to design basically all of the chemistry curriculum within PEAK. And my question was — given that I come from teaching on a chemistry program but I'm now not teaching chemistry to chemists, I'm teaching chemistry to others, 'Should what I teach be the same as if I was training chemists or should it be somehow different?' And I'm always

fascinated to know how people think about this across their disciplines.

I mean, there's always a thorny issue in mathematics; the way mathematicians do mathematics and the way the rest of the world uses mathematics are quite different. So in an undergraduate *kyōyō* scenario, what mathematics should you teach? Should you teach the mathematics that people will use or should you teach the really philosophical, fundamental things of pure mathematics? This is a fundamental question. But I think what I wanted to get at was that usually if you're teaching a course within a discipline, to new students, you start at the beginning, and you start with the basics and that tends to be the really old stuff — the really fundamental stuff that everyone agreed on a long time ago and which is the bread and butter. Of course this is important for disciplinarians, but maybe it doesn't really capture the essence of why this stuff is important as a modern human being. So, my idea is that we should, particularly in hot-topic areas, particularly where this technology is changing the nature of 'being' to some extent, in our early classes in our undergraduate courses, we should be talking about these things, and we should be debating them in the context of the deep knowledge and organized knowledge we talked about earlier. So I know that this was a bit jumbled, but I hope I managed to get something across from it.

The other really important thing that I was thinking about, is that I personally love the *kyōyō* experience. I think I've loved teaching within the liberal arts curriculum and working with colleagues and particularly I like the idea of co-teaching as well. And I see *kyōyō* as basically multidisciplinary; you take a course and it's strictly within its well-defined area and you learn some fundamentals and basics about that way of thinking and that way of doing things, but there's no sense, I don't think, within *kyōyō* as it stands, of the interdisciplinary rather than the multi-disciplinary. So I have this view of starting from the beginning of *kyōyō* and ending at the end of senior division in which you start to move from thinking about multidisciplinarity into thinking about interdisciplinarity.

Problem Solving is the thing that humans do best. I put a note in the handout about chess, right? So the idea is that the greatest chess player in the world was defeated by a chess computer many years ago, and that's because chess is a very particular kind of problem. But if you gave a few really good chess players access to a computer that can analyze the next few moves very rapidly but leave them in charge of the deeper thinking and strategy rather than tactics, then they will thrash any computer that currently exists. So being able to effectively test your muscles on working on interdisciplinary problem solving; solving messy problems, is something I think we should think about in the future of *kyōyō*.

I'll put the last slide up, and this one's a little less well formed, and I'm not sure about the implications of it yet, but it harks back partly to what I just said about tools: give a chess player a computer and the two together, the person and the computer becomes a phenomenally greater chess player than any computer by itself. And, I remember as a student going into the libraries and going through those horrible huge card-indexes trying to find the first research papers I was looking at, and it was slow and inefficient. Now in two seconds on a computer, I can identify any interesting paper in any area.

Our tools for thinking and for being academics and for learning are changing over time. And when we think about the future of *kyōyō*, we need to be thinking about the context of people and how they learn and what tools they use, within our pedagogy. I said here in the pink part, how we do things changes between generations. Our current students don't work or communicate use the same tools as we do etcetera. And these are important things to think about. Okay, so with that I will stop rambling on and I will give you a chance to ask questions.

Discussion Session

Takahiro Nakajima Thank you so much for your rich presentation. I'd like to ask you one single question. What kind of intelligence do we need to consider when teaching students? We come to think that AI may be overtaking humans in the framework of IQ-type intelligence. However, the intelligence we try to expand upon seems to be somehow different from this IQ-type intelligence.

Jonathan Woodward Absolutely.

Takahiro Nakajima Technology always transforms our imagination. Imagination is translated as "想像力" (*sōzōryoku*) in Japanese or "(*kōsōryoku*)" from the German term "Einbildungskraft," which was a major notion in modern German philosophy. *Bildung* also carries a meaning of education. If that is the case, how can we hope for the coming technological revolution in intelligence in terms of the framework of modern philosophy, similar to Kant who tried to determine the limitations of the possibilities of human faculties? Technology has been enlarging the possible conditions of our human faculties, but right now we are asked to think of the dimension of hope or desirability instead of possibility. That is my observation. I feel that the forthcoming intelligence would be relevant to this dimension of hope instead of possibility. How does technology support this enrichment of hope?

Jonathan Woodward That's a very interesting question. I'm not sure I'll be able to do it justice. I think that what you're suggesting is

definitely part of what I was thinking about and trying to explain. One of the things is that this is again a question about what makes a human, and certainly at the current stage, there are aspects of life that computers will do well, and there are those that they don't, and identifying, as you said, where humans can shine in the future still is kind of one of the things I was trying to get at and it's hard to define. I'm not an artificial intelligence researcher, and I think even AI researchers don't really know. There is a debate about where things will get to. But when it comes to the hope question, I think what we're trying to do is to imagine making — well, there's two things and I think one of them is that human beings control their own destiny right now, to a large extent, through their decisions and actions.

There may be a point of no return whereby we no longer get to choose how things happen because of the decisions that we've made before, if you think about nuclear weaponry, right? It's good; the power to destroy all of humanity is there but at the moment, at least we seem to have learned to not mess with that anymore, but there are so many other threats, so many other challenges that the new technology presents and — Yeah, one of the things that I didn't really say clearly yet was, when it comes to questions like, 'Should we build machines that can surpass human beings?' Should we? Should we do that? Should we genetically modify humans with CRISPR to make human beings greater than they are now? Those are enormous questions, one of the problems has been that we're not thinking together. If we're not discussing this on a world-level, then the argument always boils down to well, if this country doesn't do it, then this country will, so that the argument becomes kind of moot but what I'm thinking is, if we begin to truly embrace these problems as a whole; as the whole world, similarly as we're doing now with this virus. We're beginning to, right?

If we embrace these questions as a whole, we can start to think as humans, not as, for example, Westerners, or we can think as humans about whether we should do these things. And therein lies the hope for

me. That's where the hope comes from you, it is being able to think about what we should do and how we should do it, not what we can do, and what endless competition leads us to always do. Sorry, it's slightly away from your topic, but I hope I at least partly addressed it.

Takahiro Nakajima I'd like to ask you a second question related to education. You referred to an interdisciplinary and multidisciplinary approach. And would you now combine these two into one?

Jonathan Woodward Well I mean, I don't see as a replacement. I see it as an extension.

Takahiro Nakajima In that case, how can we think of discipline itself? Do we still need disciplines? For example, you were trained in chemistry. Do we still need such a disciplinary-based education for the coming integrated, interdisciplinary or multi-disciplinary approach?

Jonathan Woodward I think it depends on timescale. I think right now we do, and for the foreseeable future. Actually, I think, well we talked about organization or essentially talked about organization of knowledge before. And I think having categorization and discipline are enabling. There are historical reasons too, but it's a construct that's still useful to do because it allows us particular ways of thinking, and certainly in science, different scales of thinking exist within those different disciplines. So I think it's beneficial and this is why I said in my proposal, it's a move from multidisciplinary to multidisciplinary plus interdisciplinary. It is not a move from 'multi' to 'inter,' as that would imply that you've merged the boundaries and all thinking becomes kind of overrun. So I think certainly, right now, the disciplinary divides are useful. Okay, and they allow us to identify. I mean, there's this talk of tribes — tribalism amongst, different disciplines in science. I think it helps us to do that. But I think it also then helps us to

understand and define what interdisciplinarity is because it is usually looking at views of different stakeholders and the views of the different implications from those varied perspectives. And so you can still define the viewpoint from which you look, you can say from a chemist's perspective or from a poet's perspective, and that's a very useful construct for breaking down the problem into its key parts. Why would you start with a new set? I don't think you need to, so that would be my response to that question.

Takahiro Nakajima Yes, we are thinking of some hypothetical point. It is only a temporal starting point, which means that discipline is a kind of temporal platform for us.

Jonathan Woodward Yes, absolutely. So, I think you go for evolution from here, the question would be, we are coming from multidisciplinary, we're not really coming from a naturally interdisciplinary mindset and, therefore, in the early stages, we can't leap instantly from one to the other, we define one in terms of the other but as interdisciplinarity becomes more manifest, more familiar. We can take the next steps later in the future and redefine the landscape again, but right now, at this stage, the jump should be based on our existing divisions, I think.

Yusuke Wakazawa Can I jump into the discussion? It is very fascinating to hear about the I-Science education, the course you designed in the UK. And I would like to know more about the program's "teaching philosophy," or course policy, which could explicate what ideally students are expected to achieve through attending problem-based classes. In other words, what kind of individuals does this program aim to produce through the I-Science education?

Jonathan Woodward Its goal is to teach integrated sciences in a comprehensive way. But as you said, the approach is very different. You

start from the problem. And there's a very, very structured way in which Problem Based Learning is undertaken and it leads you through each step. It's essentially like doing research. So what students have to do first of all is define the problem carefully. And then what they do is, they identify what they already know, and what they need to know to solve the problem. And then what they do is — well we provide, for example, lectures and materials that they can access, but they demand them usually and they can ask for instruction in certain skills and knowledge. So they'll say, "We need you to tell us about this topic, we need to know that to understand this." And that creates the demand for the knowledge rather than simply sitting students down and saying, "This is the way the world works. This is what you need to know." They come and the knowledge becomes very powerful for them because they're learning it to answer a question that they are trying to solve.

So that's a little bit about how it works. But yeah, what the idea is, is that it's based a little bit on the idea I mentioned before — that most of the big, interesting science of the future is really between the disciplines. It's problems that are much bigger. Most of physics is pretty well understood — the standard model explains every single experiment that has ever been performed at this point. So where you want to create really, really interesting new scientific endeavors for humans is between the gaps, okay? Where these complicated things overlap and, so, I think the course has that in mind; it wants to create students that aren't wedded to fixed divisions — that they accept and understand different ways of thinking. But they're not wedded to one and they're prepared to open-mindedly jump among different mindsets and different ways of thinking to try and solve problems creatively.

Tsuyoshi Ishii Talking about technology, it reminds me of Harari's book. He discussed artificial intelligence, writing that, "The danger is that if we invest too much in developing AI and too little in developing human consciousness, the very sophisticated artificial intelligence of

computers might only serve to empower the natural stupidity of humans." So, I'm wondering how we could take human consciousness into account when we imagine new technology. This is my question.

Jonathan Woodward I'm not sure I can give an answer to that. I think the quotation is right, and I mean, what's interesting when it comes to artificial intelligences, and things like the technological singularity; there are very different views even among scientists. There are people who believe that this might — AI might be the greatest thing to happen to humanity. And there are other people who think it will be the end of humanity, if it were to come to pass. But I think the point I'm trying to emphasize here is that this is racing away all by itself. And we need to bring humanity back into the equation and decide, truly if this is something we want or not? And that is — thinking about consciousness, we still don't really understand consciousness very well, right? I mean, this is another cutting-edge area of science. Neuroscience has taught us an awful lot about how the brain works and how we experience being human, but only touched the surface still at this stage. So this is a kind of profound question but it's a question that we need to think about rather quickly. Your quote earlier about, I think, 'Take your time, but do it quickly.' That's exactly what we need to apply to these kind of questions — that is we need to have a view on these. We need to care, and we need to have thought about the implications before the sciences run away completely.

Presentation 5

Looking at the Past in Future Liberal Arts

Taihei Okada

Taihei Okada

My talk is not about the future. It is about the past. And let me just start with this quote by E. H. Carr. He is a famous historian, and this is from a book of his cited by many historians.

> ... we can view the past, and achieve our understanding of the past, only through the eyes of the present. The historian is of his own age, and is bound to it by the conditions of human existence. The very words which he uses — words like democracy, empire, war, revolution — have current connotations from which he cannot divorce them.

Well, now that we live in the 21st century and given the COVID-19 pandemic, our age is very globalized in many ways. Living in this age means that, even when we look at the past, we have to look at it from a globalized perspective. Speaking about my own interest, which is the

20th century, especially the Philippines and the US, the 20th century is basically the past that is still directly connected to the present. In that sense, seeing my colleagues at the 5th floor of building 14 (History Section for the 1st and 2nd year students), who are all historians and many of whom study much older periods, history is usually concerned with the distant past and with cultures or peoples entirely different from us. And my sense is that, for anybody who lived during these eras, these were happier times than those in which we now live. However, many people say history is such that the present is better than the past. I hold a contrarian perspective: there is no proof that the 20th century is better than previous centuries.

According to Eric Hobsbawm, another well-known historian, the 20th century was the age of extremes; it was extremely violent and extremely consumption-oriented. Sure, in terms of material, we were better off than we were in the 18th and 19th centuries. However, as soon as we say this, we can also pose counter arguments. The 20th century also brought worldwide environmental destruction. In addition, it was the age of colonialism, with war and violence in the global south. In many ways, these facts are all very depressing, depressing in a profound sense. Because some of the progressive concepts like democracy and anti-slavery — if you take a look at a colonial situation — were used as a weapon to denigrate the local population. An idea about progress is something that requires caution. And then, when we see the 21st century, especially now 20 years on from its beginning, some historians or thinkers are rather optimistic. There is obviously much more information. Even in terms of wars and violence, they are not so destructive anymore. The basic worldview of the 21st century is; there're some bad guys and some of the major states would say, "We are going after them and hunt them down" in the name of the "War on Terror." At the same time, we have to admit that, overall, there has been an enormous growth of the global middle class, who now have access to the Internet and smartphones.

At the same time, these optimists claim that humanity came to this point through "progress." Then, what is left for the historian to do now? Obviously, there are some remaining problems. Aside from artificial intelligence, as Jonathan said, maybe there is poverty. However, some people claim that there has been definite alleviation of poverty worldwide, thanks to the market economy. Then, there are also global environmental issues. But what can we do? We live in such a consumption-oriented world, and we cannot really do away with it. Fatalism prevails. So as a historian of the 20th and 21st centuries — a contemporary historian — my big question is, would this COVID-19 pandemic change this sort of optimism about the 21st century?

When I tried to prepare what to say today, I was at a loss. So I went to the EAA's website that the organizer introduced me to, and I scrolled through pages there and then found what Professor Nakajima wrote. It's a good statement. If I could summarize, "Based on the accumulation of knowledge over the past 100 years, it is more important to clarify *what do we want?* over *what can be done?*" This is a very, very profound transformation of how we look at the world. It is certainly the question of this current age. Because in the 20th century, echoing Lenin's Imperialism, the problem was already there and what was important was how to solve it. In the mid-20th century, globalists founded the United Nations Development Program and, in the 21st century, they set the Millennial Development Goals and SDGs. These people say that these are the problems and you academicians should strive to solve them. However, according to Professor Nakajima, this age of problem solving is already over. Instead, we have the question "what should we hope for?"

Continuing on, Professor Nakajima gave us a brief history of the 20th century in terms of philosophical ideas, and he talked about the universal. This is where I started to feel unease. Every time we talk about the universal, there is a strange sense that we always have to talk about the West. That is how the discursive formation was set and how it still

remains. As a person who is interested in the receiving end of the universal, a question like "where does the universal originate?" is nonsensical. Obviously, I don't have the answer for it. Speaking about overcoming modernity, I think the West-East dichotomy behind this train of thought was a bad idea. It became a philosophical source of Japan's invasive war against Asian countries. Beyond that, I am not so sure about where the West is and where it ends. At the same time, we should open ourselves to the universal instead of shrugging it off as unattainable.

We historians usually do not aim for the universal but try to explain the concrete and temporary, something that was there, something may no longer be there, or something which continues to be there but has changed. What can I do to contribute to the ongoing project, this whole new teaching? I tell myself that I should focus on differences, different languages, different cultures, different historical periods, different thinking, different struggles, different hopes, because even when we look at global problems, depending on which society we are looking at, people think of these issues very differently. Furthermore, the very concept of the problem is sometimes different.

For me, it is a sham to say that there are universal problems, and that these should be solved by all humans cooperating together, shoulder to shoulder. Under the sky, no two things or no two people are exactly the same. So we have to look at each situation as fundamentally different. Historically speaking, here and now, we don't really know the meaning of our own thoughts. Only with a lapse of time and from a historical perspective, can we see the whole life course of a human being. Only then can we evaluate whether her thinking at one stage was good for her later life or for the age in which she lived. For instance, some people express such strong racism, but with good intentions, a mixture that we can no longer accept. These good intentions are still there, continuing to this day. For instance, women's rights are a good thing, but when they were used for blaming the colonial society, can we still

call them a good thing? Maybe not.

I should emphasize the importance of seeing things from below. This means we have to see the people who are actually living in a particular condition. Then, my contribution to future liberal arts stems from my training as an area specialist, such as learning the languages and traditions of others. Given the program I'm managing now, I should also try to incorporate some aspects of global studies, because many students are concerned about universal ideas of what problems are. Concepts in global studies come in pretty handy, but if you look at each condition, the very ideas of these problems fall apart. From that stage, learning starts. In this sense, I'm teaching diversity and humbleness before urging students to move forward towards the universal. This is what I prepared for today. Thank you so much.

Discussion Session

Takahiro Nakajima Thank you so much for your very nuanced discussion. I never imagined you would refer to my statement, which I just finished writing last night. In this statement, I do want to distinguish the universality from the universalizing process. As you mentioned, democracy or women rights as universal values are sometimes used to make some distinctions from local movements. Yes, it's true. Universality in this sense seems to fall into a very volatile situation. I do not agree with such use of universality. We have been suffering from this type of universality, a powerful notion to suppress some local moments. That is why I do want to think of universality differently by deconstructing the notion of universality. Right now in China, there is a huge philosophical movement to re-appropriate the right of discourse. Chinese intellectuals are trying to advocate a new China-centered form of universality.

I think this kind of a repetition of the Japanese movement in the first half of the 20th century to advocate a Japan-centered universality. We should never repeat this type of universality movement. What I am now thinking of in terms of universality is completely different. For example, Veena Das, an anthropologist, emphasizes the importance of the notion of "indigenous theory." I completely agree with this approach. So, what should we do next as we pay attention to the difference embedded in "indigenous theory?"

If we think of capitalism today, it always appropriates difference into its own way of managing the world. It is hard to follow up this direction without thinking of the meaning of difference. In other words, difference per se is completely different from the difference that is

employed by global capitalism.

We need a new type of notion of difference, and based on this notion, I think we can invent a forthcoming universalizing process, which is different from the universalizability as a problem of possibility. That is my thinking. Probably the COVID-19 pandemic — pandemic means all of the demos, all of the people — reminds us that there is no exit from our world. In this respect, probably we can elaborate on the way we imagine our world once again. We can imagine a better world by re-defining the difference and the universality. To this point, how does a historian contribute to elaborate this imagination? That's my question to you.

Taihei Okada I guess every time we talk about the solution to a problem, we always talk about the content of the solution. However, to get to that point always involves many complexities. As a historian, I sense that the universal is rather dangerous, because the universal imposes in many ways, but as you also said, differences are dangerous too, because capitalism always takes advantage of differences. Well, that is true. And I cannot say that we can mobilize the masses to abandon capitalism; that was a dream of the 20th century, but it never succeeded. In this light, I return the idea of the concrete: concrete examples, concrete people, concrete situations. I try to present the concrete to others, so that other people can learn from the examples that I show them.

I am a skeptic. I do not provide any kind of solution, but I say, "this is wrong," "that is wrong," and "this is wrong again." Thus, I am backward looking, maybe because I don't like the idea of moving forward.

Takahiro Nakajima Can we talk about the exemplary universality, if you focus on the concreteness?

Taihei Okada What do you mean "exemplary" in ordinary sense of the word? Are you saying that something could be a model?

Takahiro Nakajima Right. The concreteness tells us something relevant to an exemplified conduct or behavior.

Taihei Okada Right. We live in a certain historical condition from which we cannot escape. Just like the people who I am interested in, those who lived in the early 20th century. There was a great amount of racism; it was the status quo and a prevailing value. However, there were people who opposed this status quo even in colonial settings, even in the United States, even in Japan, although the prevailing values were that Japanese were better than Koreans, Americans were better than Filipinos, and whites were better than blacks. If you want to call anti-racism universalizing, we can do so. However, this gets reversed. The oppressed now turn back and claim that we are morally better than the oppressor. The argument that one kind of people are better than the other kind thus re-enters the discourse and it often coalesces into nationalism.

Tsuyoshi Ishii I want to raise a very strange idea; after this so-called singularity, can we still imagine writing historiography, and who could write the history then?

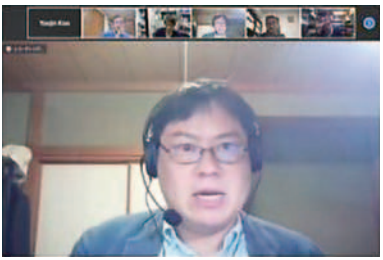
Taihei Okada Well, Jonathan said there are both optimists and pessimists regarding the idea of singularity. But I think the pessimist's argument is stronger. Furthermore, if I take the pessimist's argument, this point of view is that singularity will be the end of humanity. So there is no point of talking about what humans can do, because there will be no more humans. In history, there is no universal perspective or bird's eye point of view, which goes beyond the temporal framework. On the contrary, the idea of singularity always presupposes that there is this

singular, objective, neutral perspective. In other words, singularity in actuality goes against the idea of history.

Presentation 6

Liberal Arts for Collaboration

Akira Inoue



Akira Inoue

My talk somewhat overlaps with other presentations, especially Jonathan's. My suggestion for new liberal arts or new liberal arts education is pretty simple. It has three key ideas. The first idea is that liberal arts for individual elites should be changed to liberal arts for teams. I think this is almost the same as what Jonathan proposed in this roundtable discussion. As you know, since the time of the ancient Greeks, the traditional forms of liberal arts have purported to train elites. These forms of liberal arts state: To become a free and independent person, certain knowledge and skills are required. I think this kind of old-fashioned idea still encroaches on the contemporary idea of liberal arts. In particular, many universities tend to consider liberal arts education in terms of each individual, such that educated elites should know all humanities and sciences.

But I would say this type of liberal arts education is impossible in

contemporary intellectual systems of humanities and sciences, for three reasons. The first reason is that there is an enormous range of sub-disciplines within the humanities and sciences. Let me take up an example from my discipline, political philosophy. I mainly work on the theories of distributive justice, which require various methodologies, such as conceptual analysis, philosophical reasoning, and some methods of testing certain principles. Work in this field also requires certain mathematical knowledge, not at a deep level but at a basic level. Additionally, people who want to work on issues such as democracy and political legitimacy need to acquire relevant skills in a slightly different manner from that required when inquiring into distributive justice. This shows there is an enormous range of various subjects within each area in the humanities and sciences.

The second reason is that the knowledge and skills required to gain a great deal of expertise are deep and complex. For example, as a researcher in the earliest stages of my studies in political philosophy, I needed to acquire mathematical skills. That is why, honestly speaking, I stopped studying economics after going to graduate school. When I was an undergraduate, I studied economics but I quit, because of my poor skills in mathematics.

The third reason is this — the acquisition of knowledge and skills requires special training over an extended period. That is, I think, what I don't need to explain to all of you, because you are perfectly familiar with this.

With these, I want to suggest that the new liberal arts education applies not in an individual elite-based manner but in a more team-oriented manner; that is, educated people or educated researchers use their own expertise for collaboration, or collaborative research.

Now a question arises: What is the new liberal arts education? To be sure, providing many subjects and research viewpoints, like providing various dishes on a menu, is very important and necessary in the system of liberal arts education. But existing liberal arts education places too

much emphasis on the importance of acquiring extensive knowledge and skills in humanities and sciences. However, the acquisition of this knowledge and these skills is impossible for the reasons I have already explained. I want to suggest that we should not focus only on the kind of "knowledge-what"-based approach to the liberal arts education system. Instead, for new liberal arts, we should assign more importance to developing the skills, or perhaps "sense," of how to collaborate with people who have different specialties.

Now, what comprises a "knowledge-how"-based approach? There are three components. The first component is the knowledge-how to organize a novel research project beyond one's area of specialty. For example, I am now doing research based upon what actually Jonathan suggested, that is, a multidisciplinary kind of research, which is called "experimental political philosophy." Let me explain this briefly. As you may know, political philosophers attach importance to philosophical reasoning, from which they try to derive certain normative principles. From more than two premises, they attempt to derive very impressive, normative principles, such as John Rawls's two principles of justice. Yet, at the same time, they emphasize the importance of testing these principles in light of people's intuitions, their moral or ethical intuitions. However, political philosophers have so far tested the normative principles in light of their own intuitions. Of course, they believe their intuitions are shared by the public, but utilitarian philosophers attack the political philosophers for doing this, pointing out that in effect it is nothing more than philosophers' intuition: justification can't promisingly be provided by an appeal to philosophers' own intuitions.

However, if we employ experiments involving ordinary people, that is to say, thought experiments conducted with ordinary people as participants in the lab or in an online survey, then we can gather their intuitions as fruitful and valuable data for testing the principles of justice or principles of other normative concepts. But, to do this, I, as a political philosopher, need to collaborate with people from specific disciplines

who can effectively use statistics, and also with people who know how to create a good design for experiments that can stimulate the intuitions of lay persons. These skills and types of knowledge are very important in gathering reliable data through experiments.

It is thus important for me to collaborate with political scientists and experimental economists. And, thanks to the collaboration, I have had some valuable achievements with these co-investigators. But in order to do so, it is important for me to demonstrate that there exist very interesting platforms for collaboration. This requires some kind of sense for collaborative research. I think building up such a sense or something between sense or knowledge is crucial for new liberal arts.

The second knowledge-how is pretty simple: knowledge-how to reasonably deliberate on certain projects with people in various specialties. I think this is not a big deal, but it is still important. For example, when I discussed certain philosophical topics related to distributive justice with economists, some economists simply responded critically to my argument, saying for example that, "Oh, you violate an important scientific assumption! We can't compare people's utilities interpersonally in the way you discuss!" But as political philosophers normally assume, we do have some relevant kind of comparable scale of utilities or whatever-perhaps, well-being, is a better expression in pursuit of the principles of justice or some other essential values in political philosophy. Therefore, we can't continue to deliberate with the economists, due to their adherence to the assumption put in economics as they would normally.

So, in order to have reasonable deliberations, we need to be sincere and have good "nori" in Japanese. I can't fully explain this in English, but maybe we could call it willingness to do something together. As a matter of fact, my co-investigators are very gregarious in that sense. For one, they like to informally discuss research while having drinks after formal research meetings. While drinking and chatting, we often come up with some ideas and then we decide to conduct an experiment on the

idea, even on the following day! This is the type of thing that happens to us quite often and is very important in conducting interesting experimental research. So, "nori" is very important.

The third one is knowledge-how to tolerate, and even find interesting, the differences among people of different specialties. Let me give an example of the consideration of fairness. Fairness is used differently in various disciplines. In political philosophy, fairness is a more procedure-based concept, whereas economists regard fairness as kind of equity. Psychologists view fairness in a loose manner, which is almost the same as our feelings about fairness. This is completely different from the original use of fairness in political philosophy, but these differences are very interesting and may provide a starting point for new arguments about fairness. Hence, we should enjoy the different uses of the concepts or methods, even methods of statistics, which also differ from discipline to discipline.

Finally, the third suggestion is that multi-authorism should be more widely welcomed in humanities and social sciences. Although this idea may be more relevant to researchers, this bears strongly upon the development of new liberal arts education. As I see it, researchers in humanities and social sciences, especially in humanities, should change their attitude of clinging to single-authorism. In the global context, our research situation is extremely competitive and demands highly original studies in order to attract the attention of researchers across the world. I think we should engage in collaborative research with other people who have a great deal of expertise. However, there are not so many researchers in humanities who are committed to collaborative research. In part, this may be due to an obsession with single-authorism. Hence, it might be provocative, but I want to say it here in this roundtable: It is time to change our attitude and have more positivity towards multi-authorism in humanities and social sciences. This, I strongly believe, paves the way for new liberal arts education. That's it. Thank you very much for listening.

Discussion Session

Takahiro Nakajima Thank you so much for your well-organized presentation. Yes, I completely agree with you when you focus on the liberal arts in a team-oriented manner. And "how" knowledge or a "how" question is much more crucial that "what" knowledge. How can we — this is a how question — realize your suggestions in the very concrete situation here at Komaba? Do you have any concrete ideas regarding this?

Akira Inoue Thank you for asking this important question. I would rather ask other people about how to change the current situation, which I do indeed want to alter in the humanities and social sciences. I want to mention, first of all, professors at the University of Tokyo like Nakajima sensei have truly extensive knowledge. When I entered the graduate school, I was overwhelmed by professors' knowledge. They know philosophy, mathematics, various languages, and statistics. Their knowledge was overwhelming indeed. But in this contemporary period, we cannot cover all of the knowledge or skills in humanities and social sciences. And this is true for many students, even though they are very good learners, very able, smart. Again, they cannot acquire all of the skills or knowledge in humanities and social sciences.

Thus, I strongly believe we should change our way of teaching students in such a way as to give students a sense of multidisciplinary research projects in humanities and social sciences. And if students have a sense of multidisciplinary projects, they can easily collaborate with other people. So teaching tips for collaboration may be sufficient for younger researchers or young students at Komaba, because they are very

smart and some of them have great potential. Note that these kinds of tips, it seems to me, can be easily taught. So just providing certain tips is, I think, enough. However, an attempt to teach these tips does not exist in liberal arts education.

Takahiro Nakajima Dōgen in *Shōbō Genzō* (『正法眼蔵』) tries to elaborate on a new type of education in which a mentor and a student jump together into a very entangled situation. The mentor never teaches the student anything that would allow him or her break out of this entanglement. Simply, the mentor and the student, two of them, are asked to jump into this situation together. That is Dōgen's way of education. It is extremely interesting to me. From my personal experience in education, it is very fortunate for me that my students have never followed my specialty. They never studied Chinese philosophy at all. I strongly believe that it is a very good situation for me and my students. I do not know what's going on in their own research field, but I just listen to their discussions and presentations. That's it! It is one possible way of education.

Yusuke Wakazawa Thank you for the fascinating suggestions about collaborative research, and I generally sympathize with your agenda. I'm wondering if you could present some historical examples of a prototype of team oriented liberal arts. *Dialectic of Enlightenment* (1947) is a well-known outcome of collaborative research between Theodor Adorno (1903-69) and Max Horkheimer (1895-1973), but there could be some other kinds of examples. I actually came across one in the history of philosophy.

Akira Inoue Yes, I don't have enough knowledge about the historical examples, but as I told you, I do experimental political philosophy. To conduct research in this area, I need to collaborate with political scientists and economists who can handle statistics well because we need

to analyze experimental data for a particular project. Of course, I, to some degree, have a basic understanding of statistics, partly because I was an economics student as an undergraduate. However, very recently, statistical analysis has developed in a quite radical and rapid manner. So I can't follow all of these developments. I need to collaborate with people who have the aforementioned expertise.

We can then publish articles in well-regarded journals. It is interesting to note that experimental philosophy is quite popular now, while experimental political philosophy is not, because political philosophers are very skeptical of the use of experiments. I want to change their evaluation; that is, the negative evaluation of experiments. Anyway, we can easily engage in collaboration, so maybe similar historical examples can easily be found. The point is that you can actually do this type of collaborative, experimental research, starting even now. This is not a tall order at all.

Yusuke Wakazawa While you were giving this talk, Scottish Enlightenment philosophers were on my mind. They were pioneering social scientists and they worked together to explore human nature in the eighteenth century. Although they did not co-author books, they gathered and exchanged opinions in Edinburgh societies and clubs. I think that their form of producing and sharing knowledge is surely collaborative.

Akira Inoue Like Hume, right?

Yusuke Wakazawa Indeed. David Hume (1711-76) was a conversational philosopher whose intellectual pursuits were characterized by profound but cheerful exchange with other philosophers. In the Scottish Enlightenment, people from different social, cultural, and intellectual backgrounds gathered and conversed in various social spaces such as coffeehouses, universities, pubs, libraries, and theatres. The generic scope

of this intellectual exchange covered ethics, politics and economics, human psychology, literary criticism, jurisprudence, engineering, agriculture, and so on.

Akira Inoue I really like Hume. So I think my doing research on experimental political philosophy is almost like pursuing David Hume's project in my own way. This is my basic tenet.

Jonathan Woodward First of all, thank you. I very much enjoyed the presentation, and I very much share your views. I kind of wanted to reflect on it in this context, because what we're doing now is exactly what you're talking about in a way, right? One thing you have to do for collaboration is create opportunities for collaborating, and I have been at Todai for nine years and this is the first time I ever talked to other academics about this kind of thing! About what they do, about how they think, partly, of course, it's because many of these are conducted in Japanese, so probably I don't join to the same extent but still there's an importance in creating opportunities for communication that allows you to do this kind of collaboration as you talked about, while drinking a beer.

Actually, I do this global faculty development (GFD) thing at Komaba. One of the things we've tried to do is get everybody to chip in some money. So after we have events, we can have wine and refreshments, so that the discussions can go properly. I'm also interested in having this discussion now, because why are we having this discussion? It's because somebody posed the question, right? The question is about what should this mean? It's a problem to solve and how do you do so? — this problem has an infinity of perspectives and everybody can contribute and we all have today in very different ways. But this seems to me also to be a wonderful way in which collaborations begin, you start with a question that needs asking and you see what people can bring to the table as well. So, I just wanted to highlight the

significance of what you were saying relative to the physical nature of the discussion we were having. There seemed to me to be some resonance there.

Akira Inoue I completely agree. And in fact, when I was a PhD student at the Australian National University where I studied analytic philosophy, philosophers actually jointly wrote papers, and they do so even now, quite often. That is, I think, quite unusual in philosophy. Noticeably, what they have done for joint authorship of a paper is simply having coffee and conversation after lunch time or during tea time.

Jonathan Woodward That's actually the aspect of academic life I missed most from the UK.

Akira Inoue Yeah, that's right.

Jonathan Woodward You sit down, drink tea and talk. So that's where all the great ideas come from.

Akira Inoue That's exactly the point, and I'd say we need more time to have these kinds of things. Actually when I started as a research associate of the department I currently belong to, the researchers frequently gathered in a small research office room in the fifth-floor of Building Two. They just talked about the ideas, very complicated concepts, such as ideas from philosophy, medieval philosophy to modern sciences. But researchers nowadays are very busy, especially at Komaba; we need more time, indeed.

Jonathan Woodward But we also need to create the environment for it to happen. I think the other thing that I missed so much is for example in my previous university in the UK. We had a faculty dining floor of the building. And there it becomes a culture of faculty from

different departments eating lunch together, and just sharing ideas and thoughts. I was a student in Oxford where you have colleges with a formal dinner in hall every night. Everyone sits around and talks about philosophy or art or poetry or science. Every night, the top thinkers sit next to people from different disciplines and shoot the breeze over dinner. And I miss that. I think that is a way in which we can really build the connections between these different things.

Akira Inoue I fully agree.

Wrap-up Discussion

Takahiro Nakajima I'd like to jump to the wrap-up session. Firstly, can I ask EAA people to give a brief comment on today's presentations? Yoojin, can you take the lead?

Yoojin Koo Thank you, Nakajima-sensei. It's actually the first time for us to try having this conference online. And as Nakajima-sensei mentioned, it was kind of difficult to pay attention for a long period of time, but it was indeed a nice try and probably everybody here feels somewhere in their mind that it's going to be a new era in which we have this kind of conversation, networking like this online. Well, as I was listening to your discussion, I thought that *kyōyō* maybe has something to do with a society in a historical context as well; some of the speakers have discussed the definition or roots of *kyōyō* and some other terms, but what I thought is that the meaning of *kyōyō* has changed in the context of society; it is more dynamic than static. Well we are in the midst of the COVID-19 pandemic, and it has definitely changed the ways we live our lives; this kind of context might affect changes in the meaning of *kyōyō*. How people are conscious of or embrace *kyōyō* in our society also matters, I suppose.

In line with this, I came up with the term citizen, because it is a key concept for deliberate democracy. So how can we also think about this concept of citizen in our society as we discuss *kyōyō*? So that's it. Thank you.

Mark Roberts I would also like to thank all of you for very interesting presentations, lots to think about. I was particularly struck by the angles

from which Professors Woodward and Inoue both discussed this question of disciplinarity and how we might rethink disciplinarity for a new liberal arts whether it's a question of how we bring together the study of fundamentals with contemporary issues or how we might try to bring the idea of collaboration into this as well which, I think, is very striking. I have also noticed this over a long period of time that the sciences, especially now seem to be very collaborative. You see papers published with like 10 authors and this kind of thing. It just never happens in the humanities. I think there are, of course, good examples of very productive collaboration that have occurred, not just the Frankfurt School but, of course, Deleuze and Guattari. Guattari was a psychiatrist basically, Hardt and Negri, Michael Hardt and Toni Negri together produced interesting work.

So, I think it's not hard to find examples of that. I guess the question would be, how is that introduced through the pedagogy of new liberal arts? So, I guess that would be the question there. And I think the AI example also is kind of interesting but maybe in an unexpected way through the COVID crisis. Now we're familiar with this idea that, there are the number of cases of infection that are published which may be totally different than the number of true cases that are actually out there, which we don't know what they are exactly. So there's a whole question about that.

I would say, actually, to be a bit contrarian, and I think to agree with what Okada-sensei was saying about AI, I think that if we actually really dig into the history of AI, we will find that it was circling around problems that could not be solved for decades. At the beginning, there was a question of, I have to confess some prior encounter with computer science, but for decades the question was symbol processing. And for decades, people were trying to invent artificial intelligence, and they didn't even know about epistemology basically, they didn't care at all about thousands of years of inquiry into epistemology, and then they rediscovered, "Oh, well, knowledge has to be embodied," okay.

So now that's what they're thinking about. I'll just quote briefly Rodney Brooks who is a former director of the MIT Artificial Intelligence Lab who said, "The bug in this line of thinking is that thousands of AI researchers have been working on this problem for 62 years. We are not at any sudden inflection point, right." So, if there had been an interdisciplinary context for AI research, maybe we'd have much greater clarity about how we should even be thinking about that. That is my observation. Thank you all.

Qin Wang I'll very briefly return to the concept raised by Nakajima-sensei, namely the so-called "exemplary universal." I think it is a very interesting phrase, and it sheds a lot of light on the whole conference. I want to briefly bring into the discussion Giorgio Agamben's explanation of what an example is in his work *Signature of All Things*. So, basically, following Aristotle, Agamben says that the logic of an example is neither deduction nor induction. Rather, it is a logic of analogy, which means that, in order to explain a rule or a law, you must appeal to a certain example, but that example is not in this sense singular, for you also have other examples, you must have other examples if the example to which you appeal is to function. If the example is singular, it can no longer function as an example. Two plus two equal four: in order to explain this rule, the example of "two apples plus two apples equal four apples" must be equivalent, in its exemplary value, to that of "two books plus two books equal four books," and so forth. This renders a very particular relationship between an example and the rule of which it functions as an example, for the example is at the same time excluded from and included into the generality of the rule: in order to explain the rule, it has to be generalizable; but in order to be analogical to other examples, it has to keep its particularity. For example, the logic of example is in reverse to the logic of exception as both are concerned with the structure of inclusive exclusion or exclusive inclusion.

So an example shows a kind of very horizontal logic between

exemplary cases. If you take that into a case for understanding the universal, then the universal is no longer something vertical. It's not a kind of totalizing category under which you have examples; rather, you only have a horizontal relationship, which ceaselessly leads you from one example to another example. Why is this important? I think this is very illuminating in understanding what's happening today, here and now, over the whole world, namely the Coronavirus. We have to reconsider how the logic of examples and the logic exception, respectively, are functioning in all those media representations and information about the virus in different countries in order to give a universal value to what can only be called "global." If all nation states are taking exceptional measures to deal with the problem of the spread of virus, political measures, cultural measures, economic measures, which are almost the same everywhere, which place individual rights under the emergence of survival everywhere, do we have to call these measures "universal," or, if not, how to imagine a possible resistance based on the "exemplary universal"?

If you kind of contrast example with exception, there might be — this is, again, Agamben's critique of modern politics — there might be a lot of ways to critically examine the way in which we organize our daily life, the way in which we understand our human relationships as well as social relationships. And I think that might be one kind of entry point, and that's what I learned from today's conference. Thank you so much for such a fruitful discussion.

Mizuki Uno Thank you very much for the fascinating presentations. I'm glad to be able to attend the meeting today. I attended an online meeting for the first time, and it was a very valuable experience for me. I felt that we probably needed to redefine the word "*kyōyō*" or liberal arts and consider how effective it is for the social system that the virus Covid-19 might bring. Therefore, I thought it was necessary to find effective ways for science and humanities to join hands together. So, I'm

impressed with the idea of joint research by Professor Inoue. And, as Professor Ishii mentioned about the legacy of Komaba, EAA is also promoting a project to exhibit the history of First Higher School, the predecessor of the University of Tokyo, so I will consider the concept of "*kyōyō*" from such a historical perspective. Thank you very much.

Sana Sakihama Thank you for a very rich discussion today. I enjoyed it very much. And I think such discussion among scholars from different fields is very important. My research field is Okinawan intellectual history. As you know, there is the so called "problem of Okinawa," which is deeply related the presence of U.S. military bases in Okinawa. The problem of Okinawa is such a complicated problem. I think it should be termed a complex system, because to consider this problem, we have to understand its historical, political, and economic background. I always think I need to learn economics, political science, literature, or philosophy, but as Inoue-sensei said it's impossible for us to learn deeply in every academic field. So I think academic collaboration is becoming more and more important. Of course, we still have some difficulties. For example, when we talk to a person from different field, it might be difficult for us to understand what he or she is saying, because we don't share an academic framework, or some technical terms. So, to realize this type of academic collaboration, we have to know we are standing at different points. Only after recognizing how we are different from each other, can we share one common question that we have to face to consider our complex problem.

Hanako Takayama Thank you very much. Today, after hearing your presentations I am wondering if *kyōyō* or liberal arts are limited to only the university. I'm thinking about that question in terms of the educational system. For example, when we were high school students or junior high school students, we were learning not only Mathematics or Science but also Japanese. So I do like to continue thinking about this

question of *kyōyō* with our real educational system, especially in Japan. That's my comment. Thank you very much.

Yusuke Wakazawa It was very nice to share research themes with scholars from natural and social sciences today. As some speakers have already mentioned, the University of Tokyo's Komaba Campus is potentially full of such interdisciplinary communications, but we also miss so many opportunities for this. Without physical space like a dining hall or college common room, mediating those conversations are difficult. So I really appreciate Nakajima-sensei and Ishii-sensei's tremendous effort to realize this roundtable discussion. Today is the first day for me to work as an EAA project research fellow. Thanks to your papers and discussions, I have a good start in my research at the University of Tokyo.

I am thinking about liberal arts as a means to reconstruct the destroyed world. Liberal arts as collaborative research would be engaged with the reorganization of knowledge through which we could understand and interact with the transforming world in a proper way. At present, ongoing changes across the planet undermine the foundation of our everyday life and social/cultural practices. Liberal arts need to be a response to this havoc. We need a new intellectual framework to grasp what is going on in a proper manner. I think that is what liberal arts can, or should, do. I am very much looking forward to the next roundtable discussion in May.

Takahiro Nakajima Akira, could you reply something to the comments?

Akira Inoue Thank you very much for giving me an opportunity to hear the various interesting talks from different perspectives and also for the comments upon my presentation. I would say, my doing multi-disciplinary research is no more or less than one example among various

cases including historical ones. That means my suggestion may not be entirely new. But the important point is that: my suggestion is provocative in certain ways of thinking or in certain research areas, even though it has some of historical roots and historical examples. I do not deny that we can learn from such examples. That is exactly what I thought when listening to your comments and asking questions. Thank you very much again.

Takahiro Nakajima Thank you so much. Taihei, could you say something?

Taihei Okada I really learnt a lot from today's roundtable discussion but what it boils down to seems to me that there should be many different forms of collaboration. I completely agree with that. But at the same time, to be honest with you, I have had a hard time teaching jointly with other professors in the past. Compared with teaching 13 times consecutively, it's very different to teach twice or three times per semester. Speaking about the downside of single authorship, we collaborate in many different ways. However, it's very difficult for me to write with anybody else on my own original research. Simply because nobody else has read the same documents as I have read. I don't mind writing a chapter in edited volumes. I have done it quite a few times. Another way of collaboration is that I talk with other historians or other area studies people both formally and informally. That is definitely beneficial. So, maybe it really depends on what kind of discipline you're working in. Depending on the discipline, different styles of collaboration are preferred. Thank you so much.

Takahiro Nakajima Thank you very much. Jonathan, can you say something?

Jonathan Woodward Thank you. Well, first of all, I very much

enjoyed the session. It's been a real pleasure to be involved and I've also learned a great deal. And I think that an important lesson is that we all have examples from our own areas, our own experiences that that sometimes aren't relevant, but sometimes can be relevant to each other. And by casting the net wider, we can get new perspectives on many problems in this way.

So the whole experience for me has involved too many new things going in my mind and not being able to say one coherent thing because I need to put them together better, but in the last comments I like the introduction of this word, 'citizen' because I think that certainly chimes well with how I view education and how I view liberal arts education. And this goes back to the idea of my problem with the question 'Do you educate specialists and generalists in the same way?' Do you? How do you teach? How we teach influences and is influenced by our final goals? Do we want to create researchers? Do we want to create politicians? Do we want to create doctors, who do we want to create and what are we doing? And therefore, when we think in a very broad sense about what *kyōyō* should be, we have to think very carefully about our future audience.

I've learned a lot about the history of *kyōyō* and who *kyōyō* was for. So an important question for me now, thinking about this, is exactly who is Todai's *kyōyō* for moving forward? Okay, so I think I will stop at that point. Thank you.

Tsuyoshi Ishii I deeply appreciate all your participation in this very extraordinary situation during the COVID-19 pandemic. I think that today's discussion is a great starting point for this extraordinarily unusual semester. In the upcoming months, we as scholars should not conduct our research in isolation from each other. At the same time, we as teachers should not isolate any single student either. In order to do so, we have to keep collaborating together, even through telecommunication. As a member of the Komaba Community, EAA will make efforts

to provide a platform to collaborate with you. As a starting point, I was literally very happy to be here sharing these very well organized hours. Thank you very much.

Takahiro Nakajima Thank you so much. When Wang Qin spoke about Agamben, I myself felt that Agamben's recent thinking should be read as something to transform our way of life. As illustrated by Agamben, I think that in this pandemic situation, we should transform our way of life. That is a very crucial point for our forthcoming liberal arts. My concrete suggestion is that we had better have new form of life in academic activities. In brief, we shall open a TEAA time with colleagues. Kavli IPMU has teatime every day for all the members. In a similar way, if we can have TEAA time together with people in different disciplines, we would create an innovative moment in the university. That is my hope.

Last but not least, I would like to say thank you to all of you. We had a very rich discussion. Take care of yourself in this pandemic situation. And see you next time with having coffee or tea at TEAA time!

Contributors

Akira Inoue (井上彰) is an Associate Professor of Political Philosophy at the Department of Advanced Social and International Studies in the Graduate School of the Arts and Sciences, University of Tokyo. His publications include "Rawlsian Contractualism and Cognitive Disabilities," in Edwin E. Etieyibo (ed.) *Perspectives in Social Contract Theory*, Washington, DC: Council for Research in Values and Philosophy, 2018, pp. 155-177, "Justice, Fairness, and Deliberative Democracy in Health Care," in Akira Akabayashi (ed.) *The Future of Bioethics: International Dialogues*, New York: Oxford University Press, 2014, pp. 579-585. He has also published in *Australian Journal of Legal Philosophy*, *Australian Journal of Political Science*, *Journal of Ethics & Social Philosophy*, *Journal of Value Inquiry*, *Law and Philosophy*, *Public Health Ethics*, *Review of Philosophy and Psychology*, and *The Tocqueville Review / La revue Tocqueville*.

Tsuyoshi Ishii (石井剛) is a Professor of modern Chinese Philosophy and Intellectual History at the Graduate School of the Arts and Sciences, University of Tokyo, and Deputy Director of the East Asian Academy for New Liberal Arts (EAA). His publications include 齐物的哲学：章太炎和中国现代思想的东亚经验 (Shanghai: Huadongshifandaxue chubanshe, 2016), *Tai Zhen and Chinese Modern Philosophy: From Philology to Philosophy* (Tokyo: Chisenshokan, 2014).

Takahiro Nakajima (中島隆博) is a Professor of Chinese Philosophy and World Philosophy at the Institute for Advanced Studies on Asia, University of Tokyo, and Director of the East Asian Academy for New

Liberal Arts (EAA). His publications include *Language qua Thought* (Iwanami, 2017), *Zhuangzi and the Happy Fish* (Eds. Roger T. Ames and Takahiro Nakajima, University of Hawai'i Press, 2015).

Kaz Oishi is a Professor of English Literature at the Graduate School of the Arts and Sciences, University of Tokyo. His publications include *The Transfiguration of the English Society and the Poetics of Architecture 1850-1950* (『家のイングランド―― 変貌する社会と建築物の詩学』, Nagoya UP, 2019), *Coleridge, Romanticism, and the Orient: Cultural Negotiations*, co-edited with David Vallins and Seamus Perry (Bloomsbury, 2013), and *Cross-Cultural Negotiations: Romanticism, Mobility and the Orient*, POETICA, vol.76 (Special Issue), co-edited with Felicity James (2011). He has also contributed book chapters to Steve Clark and Masashi Suzuki (eds.), *The Reception of Blake in the Orient* (Continuum, 2006), Steve Clark and Tristanne Connolly (eds.), *British Romanticism in European Perspective: Into the Eurozone* (Palgrave, 2015), and Peter Cheyne (ed.), *Coleridge and Contemplation* (Oxford UP, 2017).

Taihei Okada (岡田泰平) is an Associate Professor of Southeast Asian studies and modern history at the Graduate School of the Arts and Sciences, University of Tokyo. His publications include "Sexual Violence and Trials — Cases from the Japanese War Crimes in the Philippines," *Globalizing "Justice" and Anthropology* (Eds. Hosoya Hiromi and Sato Yoshiaki, Tokyo: Showado, 2019), "*Benevolence*" *and Its Contours: A Social History of US Colonial Education in the Philippines* (Tokyo: Hosei University Press, 2014).

Yuichiro Watanabe (渡邊雄一郎) is a Professor of Plant Molecular Biology at the Graduate School of Arts and Sciences, Dept. of Life Sciences, University of Tokyo, Director of the PEAK (Programs in English at Komaba)/GPEAK committee. His publications include *Life*

and Information (Tokyo: Univ. of Tokyo Press, 1999), *Scientific Understanding of Radiation* (Tokyo: Maruzen, 2012).

Jonathan Roger Woodward is a Professor of Chemistry at the Graduate School of Arts and Sciences, University of Tokyo and Director of the Global Faculty Development (GFD) initiative. He has publications in the areas of both physical chemistry / biophysics (e.g. 'Optical Absorption and Magnetic Field Effect Based Imaging of Transient Radicals,' Angew. Chem. Int. Ed. 54, 8494-8497 (2015)) and science pedagogy (e.g. 'A Tiny Adventure: The Introduction of Problem Based Learning in an Undergraduate Chemistry Course', Chem. Educ. Res. Pract, 11, 33-42 (2010)).