We will now commence the 36th Space International Student Architecture Award, second theme presentation. Let's begin the second theme presentations with the participants who are attending offline today and our jury member, Architect Kim Chan-joong. We hope this will be a helpful session for you. Thank you.

Hi, I am Kim Chan-Joong. As briefly mentioned earlier, it seems that the students are finding it challenging due to the broad range of topics, so I would like to provide a more specific discussion on how to approach the theme today.

What I actually wanted to emphasize in this competition, as you may have read through the content a couple of times, is that there is a significant focus on technology. You might find it somewhat challenging due to the abundance of discussions about technology, but in fact, when I talk about technology, it refers more to the everyday technologies commonly used in our lives rather than specialized technical concepts.

Take mobile phones, for example. They are dominating our lives, and if you consider the functionalities they offer, it's astonishing. I'm not sure if any of you have seen or used the early versions of phones like flip phones, but during that time, communication was truly the most important aspect, and even texting wasn't as prevalent. In fact, typing messages was so inconvenient, the mere ability to make phone calls without the need to stand in line at a public telephone brought a remarkable transformation to our lives. Nowadays, there are hardly any people watching TV at home because a significant part of our lives is integrated into these devices. Numerous aspects of our lives have merged into these technologies in just a decade. This has resulted in significant transformations in various societal systems.

While services like Apple Pay are starting to be introduced in our country, many people already use Samsung Pay. Losing a wallet used to be a big problem in the past, but now losing your phone can be as catastrophic as losing your life. In this context, one might wonder about the relevance of architecture, but what I want to convey here is that the most crucial keyword is ‘cross-industry’, a term I used previously. The issue of sustenance has always been the most important throughout human History and When the process of sustenance becomes inconvenient, people begin to make collective efforts to transcend those challenges through human ingenuity. For example, the Age of Exploration was not solely triggered by abundance, but rather by the growing discomfort that led people to venture out to the seas. As things started becoming inconvenient, people felt the need to explore the seas and new lands. In that process, significant changes occurred, not only in society but also in architecture. However, architecture cannot always lead everything. Architecture is typically more the result of receiving and incorporating the changes and phenomena of society into spatial forms than a kick starter of such societal phenomena. So, the concept of 'lagging industries' emerges here. Architecture is not a pioneering industry; it emerges when the societal system has been somewhat

structured and is concretely implemented. If we consider this aspect, the current social situation is indeed extensive.
However, what is currently the most pressing need in our society, and what is the biggest issue when it comes to our sustenance and livelihood? That is the question that lies ahead of us.
We have a global population of over 8 billion people now, and due to various environmental and resource issues, food problems are not urgently felt in our country. However, looking at it from a global perspective, food issues will become significant in the near future. Food distribution and supply not being adequately distributed lead to conflicts and crises. Just take the ongoing war in Ukraine, for instance. It's not just a fight between two countries; it affects the global economy and various logistical aspects, and now it even affects food. You can see it in the news constantly.
The global population of 8 billion is divided and fragmented, but the overall population density has become excessively high. As a result, any individual's slightest disturbance can potentially shake the entire structure. So now what, we have reached a point where we need to find something else again in order to sustain our lives. This is where the essence of this discussion begins. So, are we now at a point where we have to explore lands beyond Earth in order to find alternatives? Such scenarios, contemplating venturing beyond Earth, have been considered not only in science fiction but also as actual scenarios for a long time.
The initial scenario, which I don't exactly remember the author and the year, came about in the 1860s. It was not a work of science fiction dreaming about outer space but rather a serious discussion about the emergence of a new worldview that we need to find a new discovery beyond the ocean.

In this process of change, since architecture is considered a latecomer industry, we can accept those changes after they have already happened. However, is this always the case? Not necessarily. Because you have probably heard a lot about concepts like the metaverse or similar ideas, now architecture or the architectural profession continues to remain confined to the traditional and classical realms of the past, its expertise will gradually erode.
It's similar to this situation. Just a few years ago, when a photographer took a photo, people would say, "Wow, it's amazing!" But with the advancement of technology, such as SLR cameras and camera apps on smartphones, the gap between amateurs and professionals has been narrowing. People now know that if they invest in good equipment, they can take good photos, and they can surpass the experts of the field to some extent by investing in technology. Nowadays, there are clients who use SketchUp to create rough designs of the houses they want. why not do it yourself then? Well, they may not have licenses to do it themselves, but the point is that our expertise is thereby starting to be challenged. However, paradoxically, people who are good at using cameras will be able to recognize the quality of professional photographers' work. In the past, when they were simply amateurs, they thought, "this person is good." But now that they can actually take photos using good equipment themselves, they can discern how well that person was doing it. So, the core of all these discussions is that true experts can survive on their fields, and the others may face increasing difficulties. Because there are technologies that are available to offer those skills. Mobile phones play a significant role in

that.

Anyway, as technology develops and progresses, efforts to explore beyond Earth have been ongoing. The Apollo series, for example, started from the space race between the United States and the Soviet Union. After the first moon landing in 1969, there were Apollo missions up to Apollo 17. Since then, space development has not stopped for over 50 years, although it has been stagnant. The reason why it is not being pursued is quite complex, but simply put, it is difficult and sensitive to define the territorial rights for a place like the moon. China also announced its plan to send people to the moon, and the United States has the Artemis project. In the Artemis project, they are making efforts to send people to the moon again for the purpose of establishing a lunar base by 2050. There are already some elements of power competition involved in this, such as who will seize the initiative in space development. Space development should be a concept that develops not as a competition but as a cosmopolitan concept, where different countries on Earth can live well together. However, in reality, among major countries, there is a feeling of being on edge and competitiveness. Nevertheless, despite that, it is still important for us to explore what the advancing technology is for the ongoing new era of exploration. It would be great if you could first search for what this evolving technology is. This is quite crucial.

So, what I mean is that while we talk about autonomous driving, if we say that in the near future, around 2030 or 2050, we will send people to the Moon, or Elon Musk who says that he will establish a basecamp in Mars by 2050 and relocate a million people there. You may have heard something like that before. We already sent people to the Moon 50 years ago, but the reason we are not sending them now is due to various political and social issues. There are sensitive areas between nations, and there are also cost-related factors. However, now we have reached a point where we are inevitably compelled to venture into space, and there are various reasons igniting a strong drive for us to explore the cosmos. Now, if you think about the process of going from Earth to Mars or from Earth to the Moon, what do you think should be there? Beyond the simplistic notion of merely transporting humans to distant destinations, when we delve into the details, for example, in the case of Mars, it would take several months for humans to travel there. And during that journey, humans would need to be alive, which means all the concepts we associate with consciousness and sustenance would need to be encompassed within that context. The most important thing about the Artemis project is not just the concept of sending people to the Moon or Mars, but the various technological infrastructure required to reach there. Do you think we will carry steel and concrete from Earth to establish a Mars base? Probably not.

So, if we think about those scenarios now and how technology would evolve, the fact is that you all already know very well that building houses with 3D printers is possible. There are even people in the market who actually build houses using 3D printing and sell them even though it is still in its early stages. And what about building houses on Mars using 3D printing? There are doubts and various discussions about that too. But when it comes to sending people to Mars, the concept of 3D printing is actively considered much more than what we think on Earth, focusing on using the Martian soil as a base for construction using 3D printing. This is because we can't transport materials like cement or

concrete there. Just like in the age of exploration, reducing weight is crucial to mitigate the fatigue that comes with long-distance space travel. Everything needs to be minimized. We won't be carrying bags of rice with us or packing warehouses full of food and meat for months or years of space travel. In the past, ships mostly replenished supply through intermediate ports, but exploring space wouldn't be possible in this case. So, the question arises: How do we transport everything?

Indeed, in practical terms, there are startups that have made significant advancements in micro-scale modifications of food; vegetables and meats, or even cultivate meat through cell culture in space. When you eat it, it tastes just like real beef. But now, they don't bring cows with them. Instead, they take very small samples of cell cultures or seeds and use them to actually cultivate the cultured meat. So, what I'm talking about is that the technology developed for space travel will actually be commercialized on Earth before it becomes a reality in space development or creating a Martian base on Mars. Indeed, there are vegan, such as soy-based products, designed to mimic the texture of meat, which you are probably already familiar with. Behind these developments lies the foundation of exploring ways to practically process and manufacture food according to these scenarios.

That's why cultured meat will soon be available as a commercial product. Its inception lies in the preparations for the new era of exploration, including fuel resources. The concept of sending humans like Voyager spacecraft on unmanned satellites is completely different from sending living beings. In fact, beyond sustenance, all the compressed forms of our daily life and activities need to exist within that context. Space development involves not only technological aspects but also the involvement of researchers, anthropologists, psychologists, and others. This is because over the course of several years in space travel, various social relationships arise, and it is important to understand how people can emotionally cope with them.

That's why when the International Space Station (ISS) was built, the industrial designers played a significant role. When those industrial designers discussed with NASA engineers, the engineers had their ideas about how things should be designed. However, the industrial designers strongly argued for having a circular observation window next to the seated position. The engineers kept opposing it, saying it was unnecessary. But in reality, the astronauts who actually experienced weightlessness in space said that they spent a certain amount of time each day just looking through the window. They even say it was the most enjoyable time for them. So, that one circular window turned out to be extremely important.

Therefore, instead of judging everything based on our current industrial structure on Earth, let's think about what we would need to live in space. It's not about building space stations; it's about considering what we would need in order to live there. Let's think deeply about that. Many interesting ideas can emerge from there. And then, when such technologies are developed, what changes can they bring to our way of life before they are actually applied in space? Let's imagine and create scenarios of how architecture could change. That is, in fact, the most important aspect of this topic. It's not about building space bases but rather about what we would need if we had to live in space. If we think about extreme situations, we will find many.

For example, let's consider communication-related aspects. Currently, there is a delay of

approximately 7 minutes in communication between the Moon and Earth, as far as I know, due to the distance. There is a point where the delay occurs because of the distance, but there may be ways to minimize that delay. You may not know exactly what that technology is, but you can imagine it. What if communication between Earth and Mars were truly real-time, and what if it didn't work? There are various possibilities to consider.

To be honest, If I give too many examples here would lead to a narrow focus on those specific topics, I may not be able to provide a wide range of examples, but let's talk about the Gulf War. When soldiers were injured in battle, doctors couldn't be sent to do surgeries in the desert. So, at that time, one scenario that was being considered in the United States was sending robots for remote surgery, where doctors would wear gloves and operate on injured individuals from a remote location while observing the procedure through a screen.

In this way, the doctors would perform surgeries using robots in combat zones. They made extensive preparations based on that scenario. However, the reason they couldn't carry it out at the critical moment was due to a few seconds of delay. You see, although I'm not a doctor, I've heard that surgeons can change in an instant the decision to cut or not cut something. But if there's a slight time difference between here and there, even if they decided not to cut here, they might end up cutting there because the action has already been initiated. So, due to a gap of a few seconds, the surgery may become a failed one, carrying a significant risk. There are stories like that.

That's why when you think about technology, not just in architecture but in a broader sense, you can find many insights in different areas. Currently, one approach to eliminate the few seconds of delay is to launch satellites into ultra-low Earth orbit. When you launch them higher, it takes time to reflect back to earth due to longer distance. So, these satellites are placed in what is called a geostationary orbit, which is very close to the Earth. If they are placed close, they can communicate immediately, without any delay. Do you know who is doing this? Elon Musk is doing it.

In the SpaceX program, every time they go out, they carry 80 satellites and layer them in the geostationary orbit. This is what he is trying to do. He is trying to establish the infrastructure.

Then, anyone can enjoy real-time Internet in Africa or the Amazon or even in Antarctica. This is a somewhat inclusive statement, but it's actually a frightening story. One person will have ownership and control over the entire infrastructure. However, in the current situation where self-driving cars are already being widely deployed, we have limited alternative choices available. Even autonomous driving relies on real-time communication, and a delay of more than one second poses a significant risk. That's why layering with geostationary satellites becomes a crucial point for the benefit of humanity. Even now, those who invest in the market, in SpaceX, there are massive investors, and their investments may not be directly related to this topic, but it is because in the stock market, a one-second difference in betting can make a huge difference. That's why, although I don't remember the exact numbers, the servers or terminals of the stock market, which are all connected by submarine cables, take several seconds. But by using Elon Musk's geostationary satellites, it can reduce it by 0.4 seconds. That's why they invest in it. It may seem like the discussion has veered off topic, but what I want to talk about is that Is all this discussion completely unrelated to architecture? One of the key

reasons why South Korea has become an internet powerhouse, is due to apartment complexes. In South Korea, where high-density apartment buildings are clustered together, it is incredibly easy to connect the entire complex by simply inserting a fiber optic cable. There is no other place where you can efficiently lay down ultra-high-speed networks like in South Korea.
Therefore, there used to be discussions in the real estate market as well. It was said that the closer a property was to a central telephone office, the more expensive it would be. This was based on the belief that internet would be faster in those areas and slower as you moved farther away.
Of course, that perspective was somewhat exaggerated.
If you look at places like Venice, which exist in the same era, they couldn't bury fiber optic cables within the city. Of course, now the concept of communication is shifting towards wireless rather than cable-based, so it doesn't matter anymore. But when fiber optic cables were being laid, I remember there were still shops in Venice that used telephone modems to connect. It was shocking at that time, although it may not be the case now.
Anyway, when we look at the city structure or the configuration of these apartments, which we often criticize for their poor quality, there is an interesting aspect in which the spreading of such infrastructure was very efficient. Setting aside whether it is good or bad, there is undoubtedly an inseparable relationship between technology and architecture.
Now, let's consider how we can imagine our near future by grasping one of the technologies that are developing towards the space age. If we assume that the technology has been somewhat developed, what aspects of our near future could change? There are countless possibilities, so it might feel overwhelming, but if we narrow our thinking down by focusing on one interesting technology, we can have a more focused approach. In the past, during the Renaissance era or when art reached the level of an industry, there were many instances where forms such as ceiling and wall paintings emerged as an integral part of architecture. The booming industries of that time eventually became embedded in architecture. There are points where they integrate and become unified. Let's try to find those points now.
Therefore, aside from the architectural phenomena that are currently happening,
In the pursuit of humanity's advancement into space, there are already target points in terms of the applied technologies. As I mentioned earlier, communication, weight reduction methods, and various other aspects are considered. It extends to even contemplating food and clothing. In fact, space station has elements resembling playgrounds or recreational areas. Because we are humans, we need to find ways to relieve stress in somehow. Since We don't spend our time in space solely working mechanically for 24 hours a day. In order to maintain certain human attributes in this different environment from Earth, technologies are continuously being adapted and aligned accordingly.
Among the technologies that arise from this process, there are many that have the potential to greatly change our lives compared to the present. Let's try to catch those aspects.
There may not be a definitive answer to this, but rather than focusing on right or wrong, it is important to consider the novelty and logical construction of the story or scenario.
Some examples I mentioned earlier, such as Elon Musk and his ideas, were actually derived from

fictional imaginations. While it can be attributed to exceptional intuition, they were also shaped by certain elements of fantasies or daydreams during his youth.
That's why you may have seen on YouTube, for example, rockets being launched and then reversed to descend back to Earth. It's something that used to exist only in science fiction. The rocket flies off like a bullet and then comes back down through reverse propulsion, as if it were straight out of a comic book. When I saw that, I was amazed because it resembled the cartoons I watched as a child. And now, we are actually doing it. Why do we need to do that? Because we need to use 80 rockets each time we go up. We have to use them continuously; that's the better option. In the past, during the Apollo era, they would use tremendous amounts of fuel and discard the rest, relying on certain essentials to return. Now, we can't afford to do it that way. By persistently searching for solutions driven by necessity, we discover these aspects.
To give you a little bit of clue, in my personal opinion, I have always thought about where the foundation of technological development lies. It lies in the fundamental nature of human beings. Therefore, I often considered that the direction of technology is heading in is towards creating a mythical world.
Robots have been present in ancient Greek mythology In ancient mythology, there was a figure called Talos, a bronze automaton, who was said to patrol the island of Crete, circling it twice a day. This task of continuously patrolling the island twice a day was deemed too burdensome for humans, leading to the creation of the bronze automaton to fulfill the role of constant surveillance. Although it was referred to as a "bronze human," it essentially represents the idea that humans
don't want to do inconvenient things. Many of these creations that emerged from mythology are rooted in human desires and nature, and technology gradually realizes and brings them to life. I believe that technology plays a role in materializing these ideas.

Regarding space-related matters, they didn't arise solely because of the existing technologies. In fact, storytelling about space has existed long before the emergence of current technologies. During the process of implementing these stories, technologies have greatly advanced. Among them, there are many that will likely influence our lives in the near future. I'm not specifically asking for architectural expressions, as that could be a form of illustration. Instead, it's about finding the best medium to convey one's thoughts.
If you have the opportunity, it's important to consider this by yourself, but it's also crucial to incorporate perspectives from various fields such as sociology, psychology, or humanities, as well as engage in discussions and exchange opinions. The scenario of autonomous driving cars, for instance, was already conceived in 1952. An article was published in The New York Times about a technology developed by MIT, stating that drivers would no longer need to drive and could let go of the steering wheel, enabling autonomous driving. When I saw that, I was really amazed because the news predicted that autonomous driving would become a reality in the next five years, back in the 1950s. It was in The New York Times. But now, even though autonomous driving has reached Level 3 or Level 4, and the technology is continuously being developed, it still requires a lot more time to achieve the

same level of practicality as what was mentioned in that news article. It's not just a matter of technological advancement; there are various factors involved. There have been societal perceptions and accidents that occurred. Who bears the responsibility for insurance claims? Is it the car company? or the person sitting inside the vehicle? There are many complex variables to consider. It's a challenging problem indeed.
There are still talks about whether this constitutes sudden acceleration or not. Even with this, there are complex social issues arising, and the concept of autonomous driving where people should really let go is not clear in the current situation. So, due to the interaction between societal and cultural backgrounds and how technology respond to them, it's not easy for changes like this to happen completely all at once... If you consider those aspects, it might make the discussion much more interesting and profound, don't you think? Give it some thought.
<Question>
In my opinion, it seems like complex technologies are needed to shape and implement something. For example, AI seems necessary, and 3D printing as well. Can both be presented simultaneously?
<Answer>
Yes, that's right. Ultimately, your question is whether you can use complex technologies in a multifaceted manner. For example, presenting two or three different technologies simultaneously, it's a very good question.
Yes, you can definitely do that. Because it won't operate solely based on a single approach. Simply put, if there's a technology A and a technology B, such as AI and robotics, and then communication may need, they won't work independently. There needs to be coherence and interaction among them to achieve scenarios where they function properly.
That's one aspect, and as I mentioned earlier, you can also consider certain fundamental aspects of human nature. It's also because I want us to escape from the thinking that is too immersed in architecture. In fact, that's the most important reason why I posed this task. Because we, ourselves, have been one of those who value the architectural aspect, and I have been teaching students that way. However, I wanted us to move away from that perspective a little bit and explore a slightly different direction.
Because, as I mentioned earlier, although it's a recurring topic, I gradually started to feel that architecture lacks the flexibility that other industries possess when I observed it being immersed. When I actually came out into the field, met people, and worked, I realized that the gap was widening. That's why architecture itself is what I consider to be the ability to think comprehensively, and you have been continuously learning that ability since your undergraduate. Imagine placing a white sheet of paper and giving conditions: "Design a house." Then, throughout the semester, you work on that white sheet of paper, doing designs, and ultimately submit a 3D model by the end of the semester. And in that model, you consider how the circulation of this room will be, etc.
You have received a lot of training to think comprehensively and holistically. That's why, in fact, I believe the mechanism of architecture and education is very good. We start from nothing and gather various resources, conduct research, take photos on-site, create site plans and contour maps. We do

a lot. So, through this multidimensional approach, we create something, regardless of whether we did well or not by the end of the semester. It's truly remarkable.
But now, as we keep searching for resources within the boundary of architecture, the world is changing too quickly, and we have reached our limits. That's why we, who study architecture, really need to embark on a new voyage. That's the message embedded in this. So, don't immerse yourself only in architecture. We need to combine the situations unfolding around us. Since technology is now almost synonymous with culture, when we look at these technological aspects, we can think, "Ah, among the technologies that can take us into the space age, there might be these." Let's try this and that. So, what you propose can become a space or a device. Therefore, the most important thing for you is to take a few resources, focusing on them, and create a new scenario by utilizing them in a multifaceted way.
You have already received a lot of training. If you confine yourself to only building houses, you can become limited. That's why I did this with the intention of breaking free from that mindset. I hope you find it very interesting. Don't take it too seriously; there are many fascinating technologies out there.
<Question>
Is this competition about imagining a time of preparation for space exploration rather than a time of actual space exploration? Does it involve imagining scenarios that encompass not only industries directly related to space but also indirectly affected ones?
<Answer>
Yes, that's correct. It's not about designing a lunar base on Mars or anything like that. Of course, that could be a part of it, but the intention is more about assuming that the time for such a period is near and considering how the current technologies would further develop or what new technologies would emerge in the future.
For example, the development of cellular agriculture is a good example of technology that was developed for space exploration but will eventually have implications for our everyday life.
As I mentioned before, there are important issues like food security that have implications beyond Earth. So, research on devices or concepts that can transform waste produced by humans during long space journeys, which could last several months, such as recycling into a circular system, is actively being conducted. This is because the concept of simply discarding or ejecting waste into space is different. It requires energy utilization and regeneration to sustain such long journeys. So, let's say we explore what technologies are available for that purpose and then think about how those technologies can be applied to future scenarios on Earth. How would they change our lives? This kind of thinking is also possible.
We've been drawing floor plans, elevations, and sections for a long time. Let's try something different. In a way, I expect you to come up with many interesting ideas. However, I hope there's at least some scientific basis behind those imaginative ideas. We shouldn't delve too deeply into specialized scientific aspects because there are scientists who specialize in those fields. It would be difficult for us to compete on that level. Reading articles is also important, and it would be great to have brainstorming sessions with team members to freely discuss and exchange ideas.

There are also projects aiming to create base camps that simulate the environment of the Moon or Mars to allow people to live there for several months or even a year. They try to match the environment as closely as possible (excluding factors like gravity).
For example, there are points in the limestone cave on Earth that are considered similar to the environments on Mars or the Moon, in terms of temperature and some other aspects. Prior to that, most experiments were conducted in places like the Mojave Desert in the United States. They simulate what would happen in such environments, observing how people react, how they are affected, and what actions we need to take. Because we are not considering sending just one or two people but rather thinking about colonization in the future, we need such data.
You may not fully grasp it yet, but have you ever thought that anything is possible if we put our minds to it?
<Question> Is it okay if there is no relation to the technology?
<Answer> Actually, it's not easy for a technology to have absolutely no relation. I think there is some level of relevance, both directly and indirectly. There are things that may seem directly related and things that may seem unrelated. For example, let's say we talk about dyeing technology. It may seem completely unrelated, like why would we need dyeing technology for space travel? However, when engineers were deciding on the windows for the spacecraft, they opposed it because the concept of ‘form follows function’, a strong modernist way of thinking, and the individual's mentality was not important in that context. So, they simply said, "It's not needed." But later, it turned out that the small window was actually crucial. Similar to that, although the technology may seem completely unrelated, you can also think about how to utilize it as a technology to enhance the journey. You might think, "Oh, dyeing technology can be better if we do it like this (But do not propose dyeing technology as your main concept)."
As I mentioned, space is a completely different world, it doesn't necessarily mean that humans strive to reach there by fundamentally changing themselves, but more likely we are trying to solve very difficult problems that arise in the process of moving our lives from here to there using technology. On Earth, we need dyeing technology, but we don't need it on Mars. But that's not true. We can think about how we can make the dyeing technology that we need on Earth better there.
So, there can be two types of technologies. There can be a technology that has variations from the original and continues to promote consumption, and then there can be technologies that tap into the essence. Those are the technologies that propel humanity forward. Of course, there will still be some capital connections behind those technologies. Setting aside shallow technologies that can be achieved with a slight modification, what we need to focus on here is having the ability to take steps forward with technologies to some extent while discussing.
Even at this moment, there's a fight between hydrogen cars and electric cars. The smaller ones are electric, while the larger ones are hydrogen. That's how things are being sorted out. Because hydrogen is much lighter in weight but has a larger volume. For small-sized cars, the hydrogen device itself is relatively large. However, it is much lighter than the weight of the electric cell underneath an electric car, so hydrogen can be used as a power source. As a result, we are considering that Urban

Air Mobility (UAM), like drones or flying taxis, will also lean towards hydrogen fuel cells. Because using batteries is too heavy, and hydrogen energy is much lighter. Whether the infrastructure of transportation agencies will be divided into hydrogen-based and electric cell-based, or if the concept of devices using hydrogen energy develops into smaller concepts, and the concept of cells disappears, we don't know that for sure. That's why predictions are needed.

Those predictions cannot be right or wrong because they haven't happened yet. But one's ability to analyze information and one's thoughts about it are important in this aspect. Otherwise, we would just be believing information, and currently, there is too much information from the government, and there are also many fakes. So, even news cannot be trusted as it is. That's why it's important for you to gather such information, analyze it, and present your own thoughts and claims based on it.

This competition doesn't have a definite answer, but you can present your own arguments. The challenge is how to judge them, which is a concern. It should be fun.

I hope that the content of my speech helped you a lot.

That's all for the topic explanation session. Thank you.