



90th ANNIVERSARY

Faculty of Architecture Chulalongkorn University



Photo credit: JongOh Kim

Lecture
Alternative Nature

27 March 2024

ARCHITECTURE & DESIGN FOR SOCIETY LECTURE SERIES:

Alternative nature

วันที่ 20 มีนาคม พ.ศ. 2566 ณ คณะสถาปัตยกรรมศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

ผู้บรรยาย: Assistant Professor Jungyoon Kim



อาจารย์ คิม จองยูน เป็นสถาปนิกที่มีมุมมองและแนวคิดที่น่าสนใจเกี่ยวกับการนำธรรมชาติเข้ามาอยู่ในสภาพแวดล้อมเมือง ภายใต้งานของเธอ มีการใช้วัสดุและการออกแบบที่ให้ความสำคัญกับการสร้างประสบการณ์ที่เป็นธรรมชาติ โดยใช้วัสดุที่ไม่ตายตัว เช่น เหล็กตาข่าย เหล็ก และลูมินีเยม ในการสร้างพื้นที่และสิ่งก่อสร้างที่สะท้อนกันได้ในสภาพแวดล้อมที่ท้าทาย พาร์ค คิม มองเห็นว่า การออกแบบแบบนี้สามารถสร้างประสบการณ์ที่ใกล้เคียงกับธรรมชาติในปี 2050 ได้ โดยพิจารณาถึงการเปลี่ยนแปลงสภาพภูมิอากาศและความต้องการในการเป็นคาร์บอนเนตรอลิตี้ โดยเน้นความสำคัญของการรวมองค์ประกอบฟังก์ชันของธรรมชาติเข้าไว้ในการออกแบบ

การทำงานของอาจารย์ คิม จองยูน ได้มองเห็นถึงบรรยากาศประวัติศาสตร์และภูมิศาสตร์ของโครงการของเธอ โดยเน้นความสำคัญของการเข้าใจเงื่อนไขท้องถิ่นและวัฒนธรรม และศึกษาถึงความท้าทายที่เจอในสภาพแวดล้อมในเมือง นอกจากนี้ เธอยังค้นหาวิธีการในการสร้างประสบการณ์ที่ใกล้เคียงกับธรรมชาติ การชี้แจงของอาจารย์ คิม จองยูน เริ่มต้นด้วยการพูดถึงโครงการในแอนต์เวิร์ป เบลเยียม ซึ่งศึกษาอย่างละเอียดเรื่องประวัติศาสตร์และเงื่อนไขใต้ดินของเมือง โดยเน้นความสำคัญของการเข้าใจบริบทก่อนการออกแบบ

เกี่ยวกับแนวความคิดเกี่ยวกับธรรมชาติ อาจารย์ จงยุน คิม อธิบายว่าเป็นส่วนบุคคลและแตกต่างไปตามวัฒนธรรม โดยเน้นว่านักสถาปัตยกรรมศาสตร์มักสร้างสภาพแวดล้อมธรรมชาติที่ตนเองในพื้นที่เมืองโดยให้คนเข้าถึงธรรมชาติภายในเมืองได้ แนวความคิดเกี่ยวกับธรรมชาติทางเลือกนี้เกี่ยวข้องกับการใช้วัสดุและการออกแบบที่ไม่ตายตัวเพื่อสร้างประสบการณ์คล้ายธรรมชาติ ซึ่งเป็นสิ่งที่พาร์ค คิม นำเสนอในงานของเขา โดยการใช้สแตนเลสสตีลและโลหะกว้างเพื่อสร้างลักษณะการสะท้อนของน้ำ โครงการเหล่านี้มุ่งเน้นที่การให้ประสบการณ์การรักษาสุขภาพภายในสภาพแวดล้อมเมือง

อีกโครงการที่อาจารย์ คิม จงยุน กล่าวถึงคือ โครงการริเวอร์ฟรอนต์ยงฮวา ซึ่งมุ่งเน้นที่การนำเข้ามาความหลากหลายทางชีวภาพและความทนทานสู่ริมแม่น้ำคอนกรีตของแม่น้ำฮัน โครงการนี้มีวัตถุประสงค์ที่จะทำให้ริมน้ำปลอดภัยและน่าสนใจต่อคน โดยใช้แรงบันดาลใจมาจากขานริมน้ำที่เป็นมิตรกับผู้ใช้ในต่างประเทศ นักการเมืองไทยมองหาทางเพื่อทำให้ริมน้ำปลอดภัยและเป็นที่น่าสนใจต่อคน



ภาพจากการบรรยายของ Prof. Jungyoon Kim, "CJ Blossom Park"

Mud movement after flooding



no rain fall: except the summer season, water level of the river is around 3.3m



annual flood: during July and August, the riverfront is flooded and water reaches up to 7 to 8m



after flood: after the water flows back the river, tidal mud remains on the terraced shore

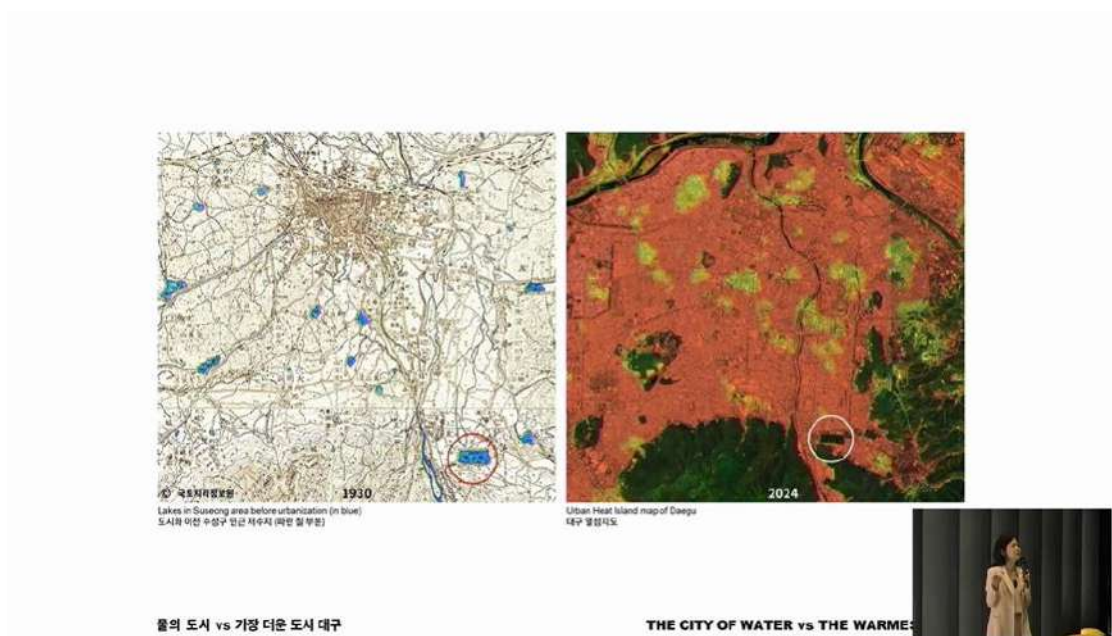


new slopes and valleys: sculpting the wateredge and the flat fields into the sloped flow out line, carrying the mud along with

"Mud- Infrastructure" Yanghwa Riverfront (2011)



ภาพจากการบรรยายของ Prof. Jungyoon Kim, "Yanghwa Riverfront"



ภาพจากการบรรยายของ Prof. Jungyoon Kim, "Floating Hills"



ภาพจากการบรรยายของ Prof. Jungyoon Kim, lecturer of "Alternative nature"

สุดท้าย การชนะการแข่งขันล่าสุดของสตูดิโอของอาจารย์ คิม จองยูน คือ โครงการเวทีลอยในแดกู โดยพวกเขาได้เสนอเวทีลอยที่เรียกว่า "Floating Hill" ซึ่งถูกออกแบบเพื่อลดการรบกวนทางนิเวศน์ ด้วยการผสมผสานระหว่างแผ่นคอนกรีตไฮบริดและเส้นทางที่สามารถเข้าถึงได้โดยเป็นเจอริน่า และมีสิ่งก่อสร้างแนวตั้งที่เหมือนเขาและเขาอยู่ในโครงรอบของเทือกเขาโดยรอบ เวทีนี้มุ่งเน้นที่จะให้ประสบการณ์ที่สวยงามและ

สะดวกสบายให้แก่ผู้ใช้ ทั้งการเติมน้ำไว้สำหรับกิจกรรมในฤดูร้อนหรือระบายน้ำออกสำหรับการใช้ในฤดูหนาว เพื่อให้เป็นสวนหรือพื้นที่สำหรับกีฬาและสันทนาการอื่นๆ โครงการนี้เป็นตัวอย่างที่ดีของการนำธรรมชาติเข้ามาอยู่ในสภาพแวดล้อมเมืองและการใช้วัสดุและการออกแบบที่ไม่ตายตัวในการสร้างประสบการณ์ที่ใกล้เคียงกับธรรมชาติในเมืองได้อย่างเป็นอย่างดี พาร์ค คิม และทีมงานของเขาได้สร้างสรรค์โครงการที่สร้างประสบการณ์ทางธรรมชาติและสร้างสรรค์ให้เป็นที่อยู่อาศัยที่น่าสนใจในเมืองโซล

ARCHITECTURE & DESIGN FOR SOCIETY LECTURE SERIES:

ALTERNATIVE NATURE

27 MARCH 2024 AT THE FACULTY OF ARCHITECTURE CHULALONGKORN UNIVERSITY

SPEAKER: ASSISTANT PROFESSOR JUNGYOON KIM



Landscape architect and Co-founder of PARK KIM, Prof. Jungyoon Kim, shares insights into her studio's work, focusing on the concept of alternative nature and its application in various projects. She introduces the concept of alternative nature, which they have been exploring since 2007. They wrote an essay titled "Gangnam Alternative Nature: The Experience of Nature Without Parks" where they coined the term. After returning from studying abroad, they started seeing their homeland with fresh eyes, particularly the lack of parks in Gangnam, a highly developed area of Seoul. They wondered how people in Gangnam could connect with nature without parks and began exploring alternative ways to experience nature.

Their approach involves using unconventional materials like mesh metal, steel, and aluminum to create nature experiences, focusing on creating reflective qualities even in harsh conditions. They question whether landscape architects will still be able to create such experiences in 2050,

considering climate change and the need for carbon neutrality. They emphasize the importance of incorporating the functional aspect of nature into their designs.

She discusses the historical and geographical context of her projects, highlighting the importance of understanding local conditions and culture. She also delves into the challenges faced in urban environments and the innovative solutions her team employs to create naturalistic experiences.

Prof. Jungyoon Kim begins by discussing her studio's project in Antwerp, Belgium, where they deeply studied the city's history and subterranean conditions. She emphasizes the importance of understanding the context before designing.

The conversation then shifts to the concept of nature, which Prof. Jungyoon Kim explains is subjective and varies across cultures. She discusses how landscape architects often create artificial natural environments in urban areas, providing people with access to nature within cities.



Image From Jungyoon Kim's Lecture "CJ Blossom Park"

This concept of alternative nature involves using unconventional materials and designs to create nature-like experiences. She presents several projects that exemplify this concept, such as the CJ Blossom Park and Hyundai Training Center, where they utilized stainless steel and extended metal to create reflective water features. These projects aim to provide therapeutic experiences within urban environments.

She also discusses the need to adapt to climate change and urbanization, highlighting projects like the Gyeonggi Province North Office Plaza and Yanghwa Riverfront. In these projects, her team focused on increasing biodiversity and creating resilient urban spaces.

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"Mud- Infrastructure" Yanghwa Riverfront (2011)

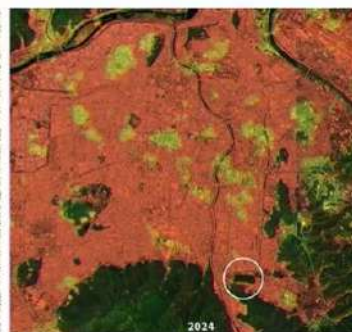


Image From Jungyoon Kim's Lecture "Yanghwa Riverfront"

The Yanghwa Riverfront project is another project she mentioned which they aimed at bringing biodiversity and resilience to the concrete riverfront of the Han River. Before the urbanization of Seoul, the Han River used to flood into the city center during the summer, prompting the construction of a concrete deck along the river to prevent flooding. This engineered waterfront, however, lacked connection to people's everyday lives. Inspired by more user-friendly riverfronts abroad, Korean politicians sought to make the riverfront safe yet inviting.



1930
국토지리원
Lakes in Suwon area before urbanization (in blue)
국토지리원: 1930년 전국지리원 (국토지리원)



2024
Urban Heat Island map of Daegu
국토지리원

물의 도시 vs 가랑 더운 도시 대구

THE CITY OF WATER vs THE WARMER



Image From Jungyoon Kim's Lecture "Floating Hills"

Prof. Jungyoon Kim ends by discussing her studio's recent competition win for a floating stage project in Daegu. To address this, she proposed a floating stage called "Floating Hills". They researched ancient and modern stage designs and analyzed the lake's environmental factors. They found a location with strong summer winds and incorporated an existing island into their design. The stage consists of two parts: a wet stage for water performances and a main stage, both surrounded by eight landforms. Seating accommodates 200 people, with additional casual seating for picnics.

The structure is designed to minimize ecological disruption, with a hybrid concrete slab and a wheelchair-accessible path. They celebrate the lake's horizontal beauty by designing horizontal structures with vertical elements that mimic surrounding mountains. Existing circulation routes for cars and pedestrians are used, with separate access for loading. The seating is adaptable for different events, with a flexible audio system.

The stages can be filled with water for summer activities or drained for winter use as a park or ice-skating area. Lighting is integrated into the seating and theatrical towers, aiming to blend with the landscape. Water mist and circulation systems are installed for cooling, and fences are designed to enhance microclimate comfort. Overall, the design aims to make Suseong Lake a year-round destination for leisure and events, offering a cool escape from Daegu's hot climate.



Prof. Jungyoon Kim, lecturer of "Alternative nature"

In conclusion, Prof. Jungyoon Kim emphasizes the importance of considering local context, innovative design solutions, and adaptability in creating naturalistic experiences within urban environments. Her work demonstrates the evolving role of landscape architects in addressing contemporary challenges while promoting harmony between humans and nature

Special Talk Transcription.

Topic: Alternative Nature

By: Nichakan Srimaung

From : 27 March 2023

Audio/Video Duration: 01:39:33

| | | |
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| 9:20 | Prof. Jungyoon Kim: | So, let me start with the work of Pitchapa and Pie of my studio, spring 2023. The studio was in Antwerp, Belgium. And I always start by really making a really deep section of 100 meters deep at the maximum. They did a great job of studying the history of the build form and subterrain of antwerp. From the 16th century when Antwerp was one of the world's richest cities to the current situation where the city is trying to build 2 new underground highways to mitigate really bad traffic. So, they did this study to see what the history of above and below ground is. |
| 10:45 | | Before I begin to talk about alternative nature. let me start by saying what is the nature that you are thinking about. So I think we can have a conversation about nature with anyone of any age or any nationality because everyone has their own concept or experience or knowledge of nature even though they could be different. so, nature is a commonality but at the same time nature is also very different from person to person and country by country and culture by culture. |
| 11:32 | | Especially for landscape architects, we are supposed to deal with nature. Because I think you all know the professional landscape architecture in America and also in Europe starts by mimicking nature in the congested city. Because many people in that time where it industrialized, People did not have enough time or money to go outside the city to enjoy nature. So that is a kind of starting point for professional landscape architecture to create a fake nature in the city for people to kind of relax and get experience of nature. So, we are supposed to deal with nature and sometimes we have to fake nature and we have to create an experience of nature or modify it sometimes. |

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| 12:30 | | <p>So This is kind of the title. I was inspired by a book called How Thinking as a Geologist Can Help Save the World written by a geologist in America. So I think as a professional, we all need to think about placing this landscape architect with your own profession. how as a professional we need to contribute to help save the world. No one can actually save the world by themselves but we can actually help save the world. So this is the kind of topic that I also want you to think about.</p> |
| 13:03 | | <p>So, what is alternative nature then? This is the term that I have been using since 2007. We wrote This essay of Gangnam alternative nature: the experience of nature without parks for the book called Asian alternity. In this essay It is the first time that we called the term alternative nature. After 10 years of living abroad, we came back and kind of started to see your own culture and land from the third eye like a foreigner. So, we kinda look at where yoonjin and I were born and raised until we went to the United States to study. So, Gangnam is the southern part of the Han river. Gangnam is a very highly developed area and one of the most expensive areas to me in korea. As you can see, we do have the Han river in the north and mountains in the south but we did not really have much park space in the Gangnam area compared to Europe or America, they usually have parks nearby residential areas. We are kind of wondering how people in Gangnam could actually survive without parks. So that is what we kind to start to look at and we were thinking that maybe we can have some kind of alternative way to experience the nature</p> |
| 15:37 | | <p>70 Percent of the Korean condition are mountains. So, all of my ancestors, their daily life is going to the mountains or going to the river just to stroll around. So they did not actually have to make an enclosed garden or fake nature because Korea is a very small and tight country. And this is one of the paintings that we really refer to whenever we have an opportunity drawn by Kyungjae Songsan. He actually went around the country and mimicked the landscape around. So, this obviously really shows</p> |

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| | | how Korean people live with nature. For traditional architecture, the location is more important than the design itself. So until 1960s architecture education taught face design was not the prime thing to educate but the location is more important. |
| 16:48 | | That is how we start the notion of alternative nature. As a landscape architect, we always try to make excuses for nature even though we do not have the green space available in a very hectic environment like Seoul. To the term alternative nature, we really try to create an experience of nature through artifacts. Sometimes the artifacts do not need to be green. It can be stainless steel or aluminum or some kind of reflective quality of the material that reminds people of the experience of nature that they had within nature. |
| 18:26 [Blossom park-CJ group] | | So today I'll show you 4 projects that are built about alternative nature and also what is alternative nature for 2050 which is the year that EU is aiming zero carbon neutral. The first one is CJ blossom park. The name does not really mean anything but it is an R & D campus for CJ group. So, here our notion was making inspiring and nestful natural settings within a city like how we create nature that is kind of relaxing and healing for the researcher who works from very early morning to a very late night. Because the campus usually has a huge amount of land available. They are trying to provide a recharging environment with a green space because it is a very tight urban area. We try to compact this natural experience with the urban settings. So, the client wants us to create a reflection pond in front of the building. But, Korea is not really like Thailand, we have a limited period of year where we can be really functioning because in winter it is very freezing so all the water needs to be drained. So for us, we have to think hard about what kind of essential quality of water that reminds people of the experience of the water. For me, what we cannot really have in the city is a kind of reflection of the wide and deep body of the water. So, we try to revive the kind of experience of the city in blossom park. |

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| 21:19 | | <p>So, this is how it was built in front of the main headquarter roundabout drop off area. This is a reflection pond which doesn't really have water at this time and this one is with water. Because it is a reflection pond and there are people everyday, not just in summer. So, we were thinking of something that is reflective when there is even no water. Ofcourse when there is water it will really reflect the facade and other qualities are kind of projected in. but even if there is no water, they still have this reflective quality. We were brought in after all the architecture and the basement were already designed, so we only have 4 cm depth to work with the reflection pond. So, 4 cm depth with reflective quality. For that what we do is we design the stainless steel frame first then we cut the in to this shape then there is a gap between these frame because of the pedestal and then because of the edge is also shining and the stone is very high polished so it has this reflective quality even though there is no water. And the design is coming from the CJ logo.</p> |
| 24:17 | | <p>As I mentioned, 70% of Korea is mountain and this is a new city in the mountain area. So there are mountains and all the flatter areas developed into apartment housing. So, we are trying to make this roof garden as if it is following that remaining mountain and also the view beyond the landform smoothly blends into the surrounding mountain. Because there are so many mountain areas and people want to develop as much land as they can. So usually at the edge of the property line usually have this civic cut engineering slope. The client wants us to do something with the slope since it can be seen outside of the window on the second floor. What we did was not only decorate the surface. But right beyond the property line is a public park because the city wants to develop flood land for a kind of housing development that makes a lot of revenue. What we did is have a negotiation between the city and CJ. So the city is giving some part of the land and Cj is also giving some of the land to make this much gentler slope. So, both the citizens walking up to the park can use this space to take a break and</p> |

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| | | also workers and use this space as a place rather than an engineering wall. And then this becomes an ephemeral castscape and because it is a cut slope the structure is not strong so this kind of stone blade helps the ground to stabilize as well. and we make this stone blade with a rhino model and cut by cnc to get an exact shape |
| 27:17 [Hyundai Training Center] | | The second project is also about water but we are trying to make it a reflective quality but also sound of therapeutic experience. This is for the training center for the professional volleyball team of Hyundai company, so we are trying to make a therapeutic landscape for professional athletes so they can have a really good break when there is no game. So for this project also we brought in a very late moment when all the architecture design was already done. But this was the site condition and the architect designed an exact square building and what we are given was just any program we want but the client wants us to put in the water feature too. What we did was like a juxtaposition with the building and this water feature and we don't want to disturb a very healing and peaceful landscape, so we tried to make this waterscape as we just peel off the surface very gently following the contour line. |
| 28:40 | | The material of the project is extended metal because of the very tight cost and time. But the idea is coming from the extended metal as a facade of the architecture. The reason why the architect used the extended metal is trying to control the sunlight. and For us, we had gave very little amount of water ever they used, but because of this aluminum cut face of the extended metal, they gave a great magnified reflective quality with little amount of water. |
| 30:11 | | And again here we only have only 6mm thin water but the reflective quality is maximized by the extended metal sheet. and there are 3 pedestrian bridges. so the title of the project is "Pool of Riffles" |

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| 30:41 | | So because there is no receiving water, people feel like Is there any falling of water or not. Because the water body is a stepping pool, we make a very shallow area receiving the water deeper so that the sound is magnified when it hits the ground. So people from far away can listen to the sound hitting the ground but they don't really know where the water goes. So all this kind of trick is designed by us. |
| 31:53 | | Those two projects are what I meant by alternative nature. We usually use mesh metal, steel and aluminum which Korean landscapes do not really use, so we do not particularly use naturalistic material but we focus on how we create the experience of nature like a water body that we try to have reflective quality in a very harsh condition. But what about alternative nature for 2050. Is landscape architect still able to create those kinds of experiences as we do now? As I mentioned that 2050 is when the European countries are aiming to be carbon neutral, so we all know that the climate is changing and getting worse and hard to predict. So that means it is really hard to create this experience of nature without thinking about the function of nature and that is what we are actually thinking. |
| 33:06 | | In 2011, Korea faced a huge flood, the same as here in thailand bangkok. So When we say flood in Korea it is not flood from river because all of that water is highly controlled by the deep dam and hydrological engineering, but when we say urban flood is kind of flashing water back on the road due to the lack of capacity in the underground system. So this area is not a low-income area, it is one of the most expensive residential areas in Gangnam. Because of bad management infrastructure even though the capacity is really big. In 2011,It was very sudden that the cars on the road were under the water. What the government did was increasing the capacity of the underground infrastructure to hope that it will contain all the water no matter how big the rain is |
| 34:59 | | So what we are thinking is for the year 2050 alternative nature can not only be made by unconventional materiality into design |

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| | | <p>imagination but we need to walk through increased biodiversity, water security and respecting carrying capacity of the ground. It sounds very easy and conventional but it really hard to really do this in real project because the clients has they own priority and not usually ecology or climate change and we need to work very wise to archive this kind of goal. and because we are not engineer or ecologist we still need to provide sensibility and pleasure bring in the landscape because that is a responsibility of the designer.</p> |
| 35:51 [Revived Topo, Gyeonggi Province North office plaza] | | <p>So I'm going to show you two more projects that are built that we have the most functionality in our mind. This is a renovation project of the urban plaza of Gyeonggi Province, the biggest province in korea. Usually when you say urban plaza is usually empty and just a hard thing everywhere so it doesn't really do much of ecology and sub surface. So, here we are trying to design the drainage and everything that could actually at least not be harmful to urban drainage. This is the previous condition of those boring conventional urban plaza in front of the municipality building paved with granite. And this is how we are renovating it and it was completed in 2019. Here is what we are trying to do in terms of functional civic space. Is that when it is empty because this kind of pavement has a sense of very empty, so what we are trying to do at the beginning is let's make a place where it doesn't really look boring and still has attraction visually.</p> |
| 37:38 | | <p>All the cities of Korea usually carve out mountains. So the pattern of the plaza was inspired by the loss of the power field of the city but then it looked really complicated and the landscape architecture construction document is not supposed to be just artistic drawings, so we really tried hard to make it easier to construct because nowadays the construction workers sometime they do not speak in korean and if they can not really built by just looking at our construction document we feel it's a failure. So what we did was we only used one module of the ceramics tile with 50*10 cm dimension but two different colors</p> |

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| | | <p>with 8 combinations. Then workers just have their own number of drawings and they just need to find out the module and place it. And this is How we made construction documents and This is what the workers got everyday. So the juxtaposition of the real mountain remaining and kind of the visual mountain the contour is what we want at the beginning but this contour is not a pattern contour. The lowest looking area is actually a low area with only 3% fluctuation so that people do not feel it really slope and the strategy is slope enough to carry the water under the rain. So we research this sub-terrain condition, the geology and the water table location that is based on real data.</p> |
| 40:14 | | <p>So this is what I meant, the area is slightly slope 2-3% slope so the kids are having fun with skateboarding and bicycles because the slope is not too steep that their parents need to be worried about. And also when there is a rain, This is all low catchment area so the water will go into. Fortunately they do not have an underground parking area so it will be filtrated into the subterranean and recharging the water tables. So this is how they used in the summer, they just used the cap at the nozzle so that the water could stay and those are very popular water play areas for children. Visually this is lower contour and it is really the lowest point.</p> |
| 41:13 | | <p>And in Korea, people do not distinguish between plazas vs parks. So, when I went to public hearings They always said even though there is a plaza, where are the trees? We need shade. What we did here was planting the trees with at least 3 meters canopy, so it is enough to cast shadow when it is hot but then all kinds of activities can be happening because the canopy is high enough. We called it an urban forest for cooling situation. So, Just the water circulation that we are imaging whether precipitation as i mentioned because the surfaces are all gently slope into the drain. The water will be quickly moved into those low areas so that we can actually aim that water will naturally filtrating to the sun surface because in the urban area water tables keep going down, people usually abstract the</p> |

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| | | water without recharging. Here, we hope that this drainage pattern continues to recharge the water table. |
| 42:35 [Yanghwa Riverfront] | | <p>So, the last project is the Yanghwa Riverfront. I think many of the students who were brought last January actually went there. In Yanghwa Riverfront, we are actually trying to bring biodiversity and resilience to this concrete riverfront. So, the project was completed in 2011. We designed for 2 years and this is how we did. So briefly to give a history of urbanization in Korea, the Han river is 44 km within Seoul but in total 250 km cover the entire Korea peninsula, so before the urbanization until 1960 usually in the summer it flood into the center of Seoul but then it was okay when there is not many people. But after urbanization it caused a problem : the security and hygiene problem, so the prime minister at that time with cooperation of Mayor Hyun-ok Kim who are both army and mature man, decided to make a concrete deck along Han river so the city would never get flooded. So from 1970-2010 before our design got built the Han river was looking like this and usually the Han river is 3.2 meters the water level. And there is a lower level which is 3.3 meters. So It will be some time under water but usually not. And then this is the middle water level which is 6.2-6.3 meters when there is sometime under heavy rain. And there is a high water level which is 9.3-9.5 meters which is rarely under the water. When there is a big storm, It could be underwater but the city is trying hard to drain water as fast as they can. So it is a very harsh engineered waterfront that has nothing to do with everyday life of people but then the lifestyle of Korean people gets quickly shifted when they are free to go around the world. When they see the Saint River and Charles River in Boston, they kind of aim to have a more friendly river while they are still safe. So, that made the politicians at that time really try to transfer the riverfront to still safe but more friendly.</p> |
| 45:19 | | Especially after the flooding, water can quickly flood back into the river but what remains is this very thick mud. Because the Han River is totally controlled by a dam and stream, what is |

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| | | <p>remaining in the river bed is mud, not sand. So when the river brings the mud with the flooding, even after the water flush back, this mud will remain. And because of the three terrace structure of the riverfront, it is always really hard to remove the mud especially after 24 hours because the mud will solidify and it is really all pie crust. So, it really takes so much time, money, and machinery to get rid of the mud. This is the Yanghwa river before. When there is flooding the river brings the ms also and after water flush back the mud remaining and what we did was we stretched out the steep area of the terraces and then made a series of slopes so that it easier for the mud to move back to the river. Before There is only deep stairs and not that universal, for example like young moms with push cars or disabled people with wheelchairs, they just could not get to the riverfront, but now there is 5%. So, all the waterfront is accessible by all the seasons and any kind of condition.</p> |
| 49:31 [CJ EN Headquarter] | | <p>Very briefly but we also do this kind of small project as well. This is a CJ En Headquarter. Because they have a really tight lobby, what we did was we extended the interior as if it stretched out into the forest area since they have an urban forest outside.</p> |
| 49:55 | | <p>This is one of the very high-end residences that we designed last year in collaboration with an architect. What I'm trying to say here is that the experience and memory of nature is really changing by generation. This kind of apartment housing in Gangnam, which is really expensive, was built in the 1990s - early 2000. The people who can afford in Gangnam have this kind of memory of nature in their childhood because at that time. There is not much organization going on, so they are happy just to have this kind of mimic scene of water and high trees forest that does not naturally function as a natural system. For example, this kind of water has nothing to do with the drainage of the apartment. And because the generation that can afford this expensive housing now does not have a memory of nature anymore, They are young and that kind of landscape design is</p> |

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| | | not actually working. This is what happened last year, supercars are under water because the water systems do not really work. |
| 51:20 | | So what I teach at GSD, I always ask like pim and pie drawings to really think deep into the ground and even if you only draw a 2 m deep drawing section after your graduation, you have to really think at the territorial scale. But why at GSD we always encouraged people to think at this scale and we zoomed into the site. So this is surface water analysis of the entire antwerp when our site is here so I encouraged students to really study through ArcGIS to really see the surface runoff. and This is how they came up with their design idea of these underground highways also working as water infrastructure. |
| 52:23 [Floating Stage Competition] | | Last part, This is a competition that we won last week. So happy that I can be here with a happy mind if I lost this competition, I will be a really sad person here today. So, This was a floating stage competition. We competed with 2 other architects: a Spanish architect and a Jain carpenter, a US architect. We are the only landscape architects invited to the competition. This lake is located in Daegu Province, 2 hours from Seoul, southern part of Korea. Just give you a dimension which is 800 by 500 meters and in total about 2 km if you go around. and these used to be agricultural reservoirs that were built in 1927 by Japanese farmers when Korea was under Japanese colonization. |
| 53:41 | | Our title was Floating Hills. So the lake is quite beautiful. It is very horizontal and usually, as you can see in Yanghwa riverfront, landscape architects have to deal with fluctuation of the water. But here very excitingly the water does not change. so we just got to deal with a very peaceful and flat reflective surface as well as it being very frozen because Daegu is the warmest city in Korea. So what we saw here was these layers of mountains as a backdrop of the lake and the horizontal beauty that the water did not really fluctuate. But the thing is even though people love coming here , they only circulate around and have nothing to do and then no gathering space. So we really think hard about what kind of stage that Suseong lake |

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| | | <p>needs. And we agreed that it would be nice to have a new stage since Suseong is very famous for concerts and it is the only city in Korea that has an opera house. But the thing is what kind of stage. So we started studying the president from the very antiquity to the very present time. As you can see, the roman and greek president have a very steep audience area and have very fixed relationship of the stage and audience but then recent examples have more dynamics and a flexible relationship as if you go to Hyangsuk west lake stage the performance is performing as if they are on the water but because the stage is 3 cm below the water surface which gave a very unique experience.</p> |
| 56:06 | | <p>This is what I mean by territorial scale even if we only work for this lake and this is a map of the 1930s before the urbanization of daegu. There are so many lakes but now only 2 lakes remain. This is the urban heat island of Daegu which is the warmest city of Korea. So we were thinking what if this reservoir were not filled or barred to build an apartment so that they are all there and can cool the air in the summer. So that's what we are trying to do. Why don't we make this water body even more contributing to this warm climate and of course it needs to function as a stage. So This is an old photo published in 1950 and this is Suseong lake from north to south and there is a wind corridor through a valley which starts 100 km starting from the southern part of Daegu. As you can see, the lake is located at the end of the corridor and we are thinking when the wind arrives here at the lake it could be very strong especially in summer when the wind blows from south and southeast. So we did this environmental analysis just to see which corner of the lake has the strongest wind in summer. So obviously where the wind corridor is coming through on this side is where the lake gets the strongest wind in the summer because we are not given the location of the stage we need to find out the best location. There is also one existing island on the site named Dongji island and is already acting as an ecological hub of the</p> |

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| | | lake. How they originally built this lake by putting an embankment at the northwest edges of the lake and this is still a kind of more artificial area compared to near Dongji island edges. So we decided to put the stage at the other corner of the island area and not just one structure but it is a stage surrounded by 8 other landforms that connect to the embankment. |
| 58:58 | | We have 2 stages which are wet stage and Main stage and then surrounded by 8 landforms. So in a plan, water can be filled in a wet stage when they have water related performance and this is the main stage which can also be filled with the water but it doesn't have to be. These three are main seating accommodating 200 people given by the clients and these are more relaxed casual seating like a boston tiger wood music festival where you can actually lie down, having a picnic and casually listening to the music. And then because of the planting, we make an analysis of the microclimate simulation. This area will be 3 celsius lower than before in the summer. |
| 1:00:06 | | In terms of structure, we design this higher hybrid concrete slab. So there is FLP mold for the concrete to be filled and solidified with a 6 metered grid system pile into the subterranean and then the slab will be placed on the site, so the disturbance to ecology will be minimized. So the embankment is 76 and the water is 74.4 and we make the terrain steep enough so that the head of the person who sits in front did not block the view and we provide an 8% path for everyone, even wheelchair can come in near the stage. As I mentioned, dealing with non fluctuating water bodies was a luxurious experience for landscape architects in korea. So we really celebrate the horizontal beauty of the water. So, all of the structure including the building we are trying to make is really horizontal. But then within the horizontality, the structure needs to be vertical and it is kind of dancing between the vertical of the mountain. |

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| 1:01:52 | | <p>In Terms of the circulation, We are just using the existing circulation for both cars and pedestrians. The circulation will be when they get to the admission point, they can just follow the edge of each landform and then naturally go into their own seat. and Then there are separate vehicle accessibilities going to the stage for loading. And there are 3 kinds of seats. There is a fixed seat, more relaxed park seats, and there are so many guests, we can empty the water out and then bring the chair to feed 650 more people. And because it is the stage, we need to work out a system. For the outdoor concert, the company we worked with said no matter what you do to the structure they need to be amplified, so what we did was we minimized the permanent audio system minimizing the maintenance and placed the theatrical towers which mounted the audio, amplifier and lighting. With flexibility, the additional system can be brought in there depending on what kind of performances are performed. and then we also design acoustic.</p> |
| 1:03:51 | | <p>So, we are talking about the temporality and the flexibility of the water feature and the stage. So we can fill both stages with water and also it can be drained out so that it can be a water play area in the summer and also ice skating for the winter. Because you know, we can not use the stage every 365 days in korea. Only like 5 months that the stage will be utilized, so our strongest concept was to use this area as a park so that when it is really hot the people can come out and enjoy the waterfront. Because there is no structure any kind of show or set can be designed and then this is when both stages are filled with water. And then the lighting scheme, Usually the normal days the led light along the seat will be lit and then for the concert the top will be lighting from the theatrical tower. We want both stages and seatings to be part of the landscape. And because the city is really really hot, we installed the water mist at the back of each seat. We also designed the water circulation system as well so that people and trees and grass are all part of the water system. We also even design the fence with this 10 cm wall so</p> |

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| | | that when wind blows through the fence it will cool down so that microclimate or the path will be more comfortable in the summer. It barely snows in Daegu but if it is really uncommon we hope that the people get very bold scenery when they come to this lake. I Think we can play Video for the ending. Hope you enjoy, Thank You very much. |
| 1:09:36 | Aj Shusak: | Thank you, very inspiring session and classes about landscape design and before we move forward to the QandA session I would like to Invite The Dean to take a photo. |
| 1:11:07 | Aj. Ken Chongsuwat: | Thankyou Jungyoon for the lecture. I think most of us and our students are really flattered. First of all thank you for coming to the university and I would like to thank faculty at INDA, and the Dean for connecting us together. I think The idea is we kind of open out the questions from the crowd and also my own question, so if anyone has any thoughts feel free to ask. |
| 1:12:14 | Audience: | Thank You so much for sharing us sessions and wonderful pictures and beautiful projects. I think everybody here is also really excited to see all of this process that you are sharing with us. And I think it is really amazing to see that you dig deep into those natural elements like terrain, hydrology and those wonderful kinds of analysis. But I have 2 questions. So the first one would be about as you are professors and academic professions, Can you suggest to us between nature and design in every project what was your thought on that which might be useful for the students. And the 2nd question is I am also a landscape architect and graduated from here. These days we know that climate change is a very crazy issue. In the condition of Korea, what did they have for carbon neutral policy and how did that impact the way you work as an architect? |
| 1:14:11 | Prof. Jungyoon Kim: | Thank you. So, let me answer the second question first. So, I think when jam is working as an intern in 2013. So, he did a great job in one of the competitions at that time. It was making a park on the site where previously there was a thermal power plant in Korea near the river and the government is trying to put it underground because the community keeps complaining |

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| | | <p>about having the thermal power plants on the ground level because they are blocking the accessibility to the river. So what we did was, because it was thermal power plants so we thought the park should be something to symbolized the issue at the same time really addressing issue of climate change so it is kind of similar thing all of the comfort simulation and how we create a landform in kind of a way that the micro-climate is comfortable making the time of the year that people actually outside is elongated. But it was 10 years ago and the juries still don't understand what we are trying to do. So the term climate change is not very common and then of course did not think that it should be with landscape design. But we won that competition, the Suseong Lake, and I think juries really appreciate the fact that we did all of this analysis to comfort the location of the stage in a priceless remaining water body of the city because the city is the warmest of Korea ofcourse. We see that at least in the professional world in Korea it is really changing and then people think that the climate change is real but then unfortunately impossible yet. People talk about the change but I don't think anything has been done. So, I think hopefully the design of Suseong lake stage could actually make a kind of breaking point because it is a public project and it has been getting a lot of spotlights because there are a lot of foreign names invited. and then now we won the competition. And also there is also a bridge landing near the lake which is a competition won by Junya Ishikami and he is helping our project to get more diverse. So hopefully the project help raise an awareness of climate change and also politician speakers.</p> |
| 1:17:34 | | <p>The first question is a balance between nature and design, right? So At the beginning I mentioned that the professional architects started mimicking nature in the city but then we don't really have much land left in the city area all over the world. So we don't really have the condition of Frederick Law where he has a huge amount of the land available in New york city not that i am saying that it is easy job for him of course but we just</p> |

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| | | <p>have different conditions now to create this outdoor space. So I don't really have an answer but as i said creating experiences of nature will be getting hard because we can not predict the climate anymore. I mean Korea has very distinctive 4 seasons but now we have really short spring and fall. We have a really long summer now so last summer was even hotter than bangkok. So winter can be very cold or too warm. We just don't know So I think that we have to really figure it out together. I think Thailand landscape architects have already done great. I don't think the word balancing is even working anymore because nature is something we have been ignoring so much. and it is kind of taking us back to what we have been doing. I don't really have an answer sorry but hopefully I can find some answer next time I come.</p> |
| 1:19:35 | Aj. Ken Chongsuwat: | <p>Thank You. This is one of my own questions. We in the industry have landscape architects and architecture students. In the first project, you mentioned that the landscape architect comes after architecture most of the time. And then there is a later project that shifted to landscaping and even won the competition. The landscape architect won over the couples of architects, right? So In terms of the profession that you see landscape as a shift especially with climate change and how does the landscape architect becoming more prominent?</p> |
| 1:20:22 | Prof. Jungyoon Kim: | <p>Great question Ken, So, yeah that competition really meant a lot to us because it was a really rare opportunity that wasn't distinguished between an architectural project or landscape project because we were usually brought in as a landscape architect. Usually the schematic design and site planning are all done, so we have to try a lot. For example the cj blossom park, all the mechanics and ducts location are always set but we did modify the location of duct and vent according to the land form design. So, we have to have all of the fighting really to archive that but for this project, that kind of distinction between the disciplines did not exist but of course the city saw that the stage itself that usually architect design so that they</p> |

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| | | <p>brought us and 2 architect abroad but I think we can do actually is really kind of understand the land and the community that the community that use the lake everyday and then the location even though we not given the specific location. The 2 architects just followed the location of the existing stage at the very center of the site. I mean Not that I am saying that someone is better than the others but I think the strength of landscape architects is that we always work with the land and the air and also we can do multi-scale too like we can do territorial scale and we think about garden scale. so that is a strength of the landscape profession I think.</p> |
| 1:22:56 | Aj Shusak: | <p>The last project is really interesting and when we talk about location, it is a very different approach from the architect. and I guess the analysis at the larger scale like thermal then also the wind really becomes the major factor that you choose the location. and I would like you to explain a little more about the role of this wind and thermal condition that you choose the location based on that? or you choose the hottest part to make it cooler or you choose the cooler part to make it comfortable. Also, in the winter would that wind play a role? because In terms of thermal condition, the things that architects can manipulate are winds. This is interesting because as a landscape architect in Thailand you face the same problem.</p> |
| 1:24:14 | Prof. Jungyoon Kim: | <p>So, there are many factors that we considered for the location. First of all, when the Japanese farmer created an agricultural reservoir 1927. So, there is a river flowing on the west of the site and it used to be a source of water for farmers. but then when the population increased, they tried to keep the water for drinking and everyday usage. So, the farmer made an organization to secure the water for agriculture. Because there is water runoff from the mountain. This is the embankment that they made at the northwest side of the reservoir, so it makes more sense if we build any things along this embankment because the other edge is a very naturalistic edge. So that is no.1 that we do something here. and also this island is an</p> |

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| | | <p>artificial island but then it is kind of working as an ecological stepping stone between Incheon river to the other river so these fish have this island as a stepping point when they migrate from this river to another. So, we don't want to mess around this area and this is a very shallow area. So, usually fish prefer shallow areas rather than the deepest 7 meters depth. So that is why we are trying to do any construction at this point. Then also we have this strongest wind in the summer at Suseong lake. I think it is a very critical point. Wind blows from the southeast in the summer and this is the same direction with the wind corridor. By the help of the wind corridor, This northwest corner gets the strongest wind but in the winter, the wind is from the west, so that means this land form will make this center area kind of warmer because the landforms are blocking the wind from west. So, The landform is really working for the wind in the summer but against the wind in the winter. Thankyou</p> |
| 1:29:07 | Audience: | <p>Hello, Thank you very much for the lecture and I am very interested in the Yanghwa riverfront project. I really admired the balance between ecology and also the culture and how people used the landscape. I'm a bit curious about the beginning process. of like unfolding the mud infrastructure. What I am wondering is which one comes first in the process? Is it the government that wants to renovate this riverfront or is it your research on the temporal changes of the mud that initiated this project?</p> |
| 1:29:59 | Prof. Jungyoon Kim: | <p>Thank you, I mean the government never usually called us or anything of course they initiated the project but kind of the trend at that time, transforming the riverfront is just turning some civil engineering work to a park. So, people can picnic or play soccer or basketball. So, definitely ecology or climate is on their agenda because it is usually step by step. they do not usually do 3-4 steps beyond, right? But then for us, the decoration on the surface isn't interesting enough so that is why we bring this idea of maintenance cost. So, the government of Seoul was spending 500,000 USD every year to remove only the mud. So,</p> |

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| | | <p>we are saying there is a lot of money that we are spending just to manage the mud so at the construction it is only 10% of that amount. But they still need to clean up but the maintenance cost is hugely reduced. So, it is actually for us to really come up with the concept. We are actually lucky also in a way that along the Yanghwa river we did not have a major gas line or something so that is why we can modify the sectional typography rather than just reducing the surface. So, it was our concept but it is funny we do not really explain this project in a way that i am explaining to you. I mean we were really trying to use political terms at that time to convince them to let us do what we wanted to do. I don't think we mentioned the mud problem to them. You don't have to explain your project in one way.</p> |
| 1:32:13 | Aj.Ken Chongsuwat: | <p>To continue that conversation, I think what you mention were ex-military right? That is parallel to our site, the Chao Phraya river. As you have experience that they have different typology altogether, I wonder if you see some of this opportunity parallelism between the two rivers and the idea of public space?</p> |
| 1:32:46 | Prof. Jungyoon Kim: | <p>I mean It is hard. I try not to talk about other countries' situations with a very shallow knowledge actually. I mean Yanghwa at that time, the country was really governed by ex-general military Mr.Kim hyun-ok. Now the politicians in Korea are barely from the army. It is a very different situation. But There is a beauty of those like high-modernists who believe in technology and using technology to rule the country. So really modifying nature is one of the high-modernist tools. Really trying to modernize their country by green and building infrastructure, so there is a kind of parallel at that time so i don't want to be criticized because korea at that time was poorer than north korea. So they did their best in their cities in their time but time changes so what you are doing now is very valuable and I know the students are trying to look at how people who actually live along the river are affected by all these building walls and everything. So I'm sure back in the 1960s in Korea, there must be students who like this,</p> |

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| | | students who are looking into alternative ways of doing the river. So I think my work that we are doing now is an accumulation of those try and errors that has been done before and we are just building upon it. So the role of the academy of what Chula is doing is exactly what we are supposed to do. |
| 1:35:12 | Aj.Ken Chongsuwat: | Maybe we have one time for squeezing one last question. Then we have to break |
| 1:35:32 | Audience: | So, Thank You very much for the lecture, as previously mentioned we have a lot of land lacks from urbanization. My question would be how do we give back or restore the ecology back to a form where no one required access to human service and maintenance? |
| 1:35:56 | Prof. Jungyoon Kim: | Thankyou, The prior generation when they were working as landscape architects or architects. I mean of course other conditions may be worse than now. At least they have clients to work with and they are not that harsh, so now as i mentioned and you mentioned, we are in a really tight condition and so much to intervene underground as well. I mean water tables are getting lower and lower because we are extracting so much underground water. In korea, we have this Seongsongdong area where everything is happening together and there are always like 3 subways are going across from -100 deep to -125 so imagine how much of underground water is everyday being removed because the construction itself is already removing the water underground. So, the government of Seoul is pulling 100 tons of tap water every day to recharged the underground water because the groundwater layers are empty, which means the structure of the geology will be weakened. Ground will be collapsing so they did 100 tons of tap water drinking water to filter that. So in a way, we are dealing with climate change by abstracting underground resources but on the other hand other groups of architects and designers and politicians are still abstracting sources of nature without thinking about it with a totally different agenda. So, I think in education for example, they really tried to teach underground as well. They are not |

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| | | visible so it is very easy to ignore. I think this kind of agenda needs to be really talked about in academia so that we can actually deal with a very thick line of land that is horizontal and wide but deeper and vertical so we really think about nature in a more holistic way. |
| 1:39:23 | Aj.Ken Chongsuwat: | Thank You, I think that's a great ending. Thank you for coming in and thank you for giving us the lecture. |