Disaster Recovery and Build Back Better Prof. Ram Satheesh Pasupuleti Department of Architecture and Planning Indian Institute of Technology - Roorkee

> Lecture – 09 Cultural Heritage: Reassembled

Welcome to the course, disaster recovery and build back better. My name is Ram Sateesh Pasupuleti. I am an assistant professor in Department of Architecture and Planning, IIT Roorkee. Today I am going to talk about cultural heritage re-assembled. It was one of the project where I was familiar with, and I was also partly part of the ongoing project of the moving Kiruna in Sweden

And today I will explain you that how the whole city has been moved and what are the challenges involved in this moving as town, and what kind of participatory approaches has been adopted, what kind of concerns it has the development authorities have shown, and what kind of confusions they have ended up with. So this whole thing I am going to discuss briefly about the Kiruna project.

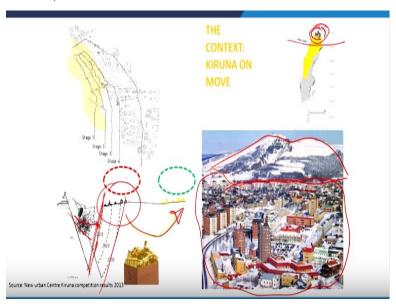
Where I was working with professor Kristina L. Nilsson and my colleague Jennie Sjoholm from Lulea Technological University where she did her own PhD as well. So I will be referring to their contributions on their academic work also the project work. So it will give you an idea of what are the various challenges in the relocation context. So when we talk about Sweden we always see thinks about the Scandinavian geographies with very harsh climatic conditions.

If you ever go to Stockholm up south in the Swedish part, it is much more closer to the European landscapes, but the northern climates are much harsher. I used to live in Lulea Technological University place called Roneo which is 35 kilometres from Lulea, and here the temperature goes off to sometimes -20, -30, -32 so this is how the variance in the winter times and many of the months we do not see even the sunlight.

It hardly comes for one or two hours and then disappears very gently and in summer we do not see it all the night, the sky never gets darker. So it is very extreme kind of temperature either -30

degrees, -20 degrees, -10 or maximum the +15 degrees sort of thing. So this is a place somewhere in the arctic circle after the polar circle on the border of slightly in the border of Norway and the Sweden, the Finland. So this is the place where I am talking about Kiruna and this is the arctic circle.

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So in the photograph what you are seeing here is mine, you know countries like Sweden the rich by means of mining investments you know the mining resources. So whereas in Norway it is rich in oil resources so similarly this particular mining town has been not a very old town, but it is hardly 150year old town. So this is iron-ore mine what you are seeing and this is the Kiruna town.

Now, just imagine any mining town in these kind of harsh climatic situation it exists the people are existed because of the iron-ore. Because there is a business sector involved in it because there is a livelihood component involved in it why would people go all the way to -30 degrees and start living there if there is no employment opportunities? So when this iron-ore have started just 150 years before and that is where people started developing a small habitat for them.

And the problem with this mine I mean it is one of the richest ore. They started digging the mine, and they are going underground when I was living in 2013 it came almost down to the city centre close to the city centre. So now they thought that this is going to you know because the mining

activities may hamper the living of the city, you know the city life it may anytime it can bring danger to that whole habitat.

So then they thought why not we move the city into a different place a safe place so in that way they started analysing the geotechnical analysis have been done and they looked at how you see this mining activity keep on going in different stages and by 2033 it will almost reach here. So in that way you are actually living on the whole cities on an iron-ore which is not safe for living.

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So that is where the thought process of why not we relocate to a better place; a safer places. If you look at the Kiruna context, first of all, there is also Sami tribes lives around this region and whose main occupation is about reindeer herding and they have this dog sledges and what you are seeing is the river which gets frozen completely and it is used the dog sledges uses as a kind of passage.

So here the winter climates one has to understand a barrier becomes path, and a path becomes a barrier in a different season you see. So here a barrier as a river has now become a path it is connecting different spaces and similarly the Sami tribes their traditional livelihood is all reindeer herding, and that is how the tourism has been enhanced like 'ice hotel' is one of the place and also the Lapland near to the Finland side.

They have also some tourist attractions of Santa Claus village which we call it as Rovaniemi. So that is how this whole winter experience is and very authentic, and it is unforgettable experience for the tourists who come to this particular place.

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Now when they start deciding to move, where to move, so finally they have identified another place A and place B. This place is basically next to the Luossavaara mountain which was earlier a mine has been closed, and there is no mining activity going to happen there, and it is much more safer. Obviously when we think about if it is a safer point we always prefer yes we may move to A because in B the problem is the mining activity is going in this direction.

So sometime later it may reach to B as well so we may have to go somewhere else, but in reality the authorities have chosen this. How they have chosen? Because in order to move a city you need to think of moving the services you know the whole underground services service infrastructure has to go and also there is also some uncertainty how after 50 years what is going to happen with this mine.

So a lot of reasons they prefer to go for the B because it is easy to expand the extend their services part of it then the Kiruna Kommun and the mining company the state-owned mining company LKAB all together they have actually floated a competition and for the new city centre

for Kiruna and finally the winning entry is the 'white architecture' with Ghillaradi + Hellsten architecture Space Space AB and Vectura consulting and evidence BLW AB.

So like there is a 'white architects' and his partners have won this company they developed about a 100 year master plan how from 2018 how it can be gradually improved like for instance first you move this and then later on this whole thing is built up you know so in that way gradually how this city has to be progressed and about a 100 year transition plan they have developed.

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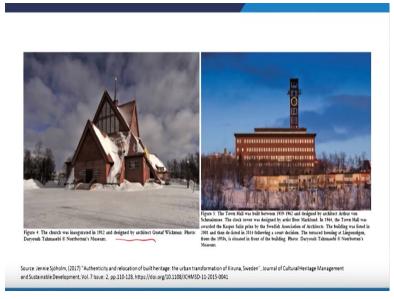
Now when they started developing you know one of the important aspects is they talked about these highway corridors if you ever happen to make these corridors onto this line then what kind of impact because the Sami tribes they says that you know the moment you are making these highways and the whole development it is going to take the reindeer herding routes you know these are the what you can see is reindeer herding routes.

And you know these grazing lands become smaller because the moment you are taking out the whole city from here to there and this whole transition is going to have an impact on the ecosystem you know and that has been the animal you know grazing sources where do they graze so that is what the Sami tribes have actually understood the whole process and then finally they have decided of they moved this whole highway corridor.

Which is connecting to the railway station and the new location as well so the highway corridor has been constructed and this is how they even showed the concern of the tribal people and their livelihood resources and also the natural resources as well.

Now comes the problem yes we are moving to a new city maybe the whole housing sector can be rebuilt again maybe we can demolish the whole housing. But what happens to the culture because a lot of emotions which are attached by these people, one is the Kirunavare Church and the Town Hall and there are also many other buildings which are all listed buildings in 1984 so what happens to these particular historical buildings you know the listed buildings which have carry a lot of emotions and society have laid upon these emotions, and it has created an image within the society.

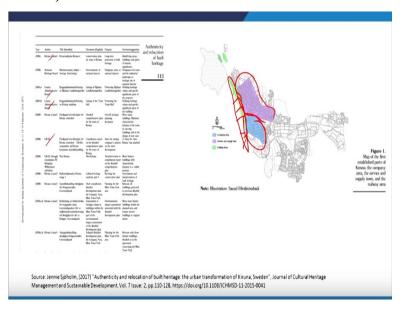
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So now, in fact, this church was actually designed by architect Gustaf Wickman, and also the Town Hall where Arthur Von have designed this, and in fact this is a place for a kind of civic centre you know the civic engagement centre is all, this is one of the image the cultural image of this particular Kiruna. It is not very old like 14th or 13th century, there are hardly 100 year old but still they carry a lot of meanings to those people who live there. So the problem is how to move these heritage buildings.

We cannot, it is not easy to demolish these important buildings and then we are going to construct a new set of image because it is to play with the peoples emotions peoples belonging. And Jennie Sjoholm what she did was because in this particular point of time there is a huge jargon on you know who is doing what and there are many reports coming on reports and reports.

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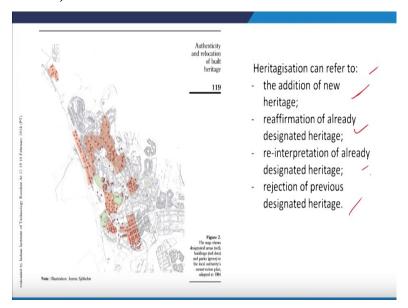


And in fact there also to understand the Kiruna character and the belonging of it like you can see this is the LKAB company land, and this is the Kiruna Kommun this is the service and the supply town and wherever the railway aspect is there this is the railway land, so you have these 3 are the major stakeholders of the Kiruna one is the railway the other one is the LKAB state-owned mining company and the other one is the Kiruna Kommun to serve the people.

And a lot of documents a lot of heritage board there is lot of documents coming in Kiruna councils country administrative board, and LKAB and a lot of consultants which are developing all the reports but then Jennie what she did was she tried to really put together and she tried to analyse you know what is the purpose of this whole document and how are they related to the conservation of these heritage buildings.

You know what are they talking about to get the jargon of what is happening so I am just showing a gist of her work.

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And then in 1984 what you can see here is like it is all the red dots which are actually talking about the designated areas you know they are all the listed buildings around, and there is a conservation plan which has been adopted in 1984. And here the heritagisation have actually referred to various aspects; one is the addition of new heritage because when they came to know that yes the Kiruna is going to move further.

And then there is a relocation aspect which has been planned out for these heritage buildings because apart from the reconstruction aspect they are also talking about the relocation of these heritage buildings so then that is where people started recognizing their listed heritage buildings, and you know the designated areas, and that is where probably they are claiming some more importance to certain buildings.

And also the reaffirmation of already designated heritage so how they are giving a reaffirmation as a special importance on it again so that they emphasise that this is the most important building you need to keep that on the move as well. Re-interpretation of already designated heritage and the rejection of previously designated heritage this is where the whole process went on.

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Controversy over built heritage - 2009-2012

The General Director of the National Heritage Board also wrote a debate article, in which she highlighted that the initiative to protect the historic buildings now under debate was made by the local authority itself, but she also stressed:

"The battle is about which history we will be able to tell about Kiruna [in the future] and thereby about the modern Sweden of the 20th century" 37 (Liliequist 2011:29, author's translation). (From Jennie Sjoholm 2016)

Let us see how it went, and there have been a lot of the controversial aspects of how this particular culture has going to be taken into account in the move process so that is where even the general director of national heritage board also wrote in a debate article that you know the battle is about which history we will be able to tell about Kiruna in the future and thereby about the modern Sweden of 20th century right.

So this is where the Jennies work talks about bringing all these interpretations of what different agencies are thinking what the government is thinking is about what different boards are thinking about you know so and when you are taking an opportunity of the move always people think about how we can envisage with the modern thinking you know how what kind of history you are going to tell about it.

Or we will still bring back these old things or you were completely coming with a new thing you know that is whole thing the concerns of the different stakeholders. And coming to the Heritagisation process I would like to emphasise on 3 important aspects one is a heritagisation, re-heritagisation and de-heritagisation.

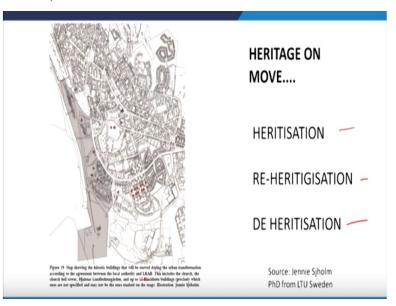
So one is the heritagisation process I just explained you that in 1984 the whole listed the conservation plan has been developed. And when the Kiruna is on move when people know that these buildings are going to move to the new location as well and that is where they started

reaffirming these the significance of these heritage properties even the old miner have stayed here the first miner have stayed here or his cottage or a railway track, railway coach you know like that there are various aspects which come into the picture and then they started reheritagisation that is where Jennie calls it as re-heritagisation.

And then finally this whole media jargon is very different and interpretations are very different at the end of the day the decision makers come onto the board looking at the financial cost how much it is going to cost to move that Kiruna Church or the Town Hall, a Kiruna Church, for example, the heritage structure which has a huge long almost very long span structures of the wooden shingles.

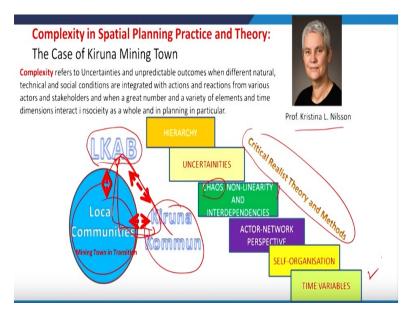
So they have to take care of each and every shingle out, and carry it, and place it, and erect it. So this is going to cost few millions worth of project you know so then they try to assess the budget of it you know what kind of so after all taking care of the practical considerations.

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That is where they started looking at the last stage of in a more practical way of how we can deal these certain buildings you know so the de-heritagisation process have started and that is where they come up with about 12 Black horn buildings and you know there is a few about 17 structures 12 to 17 structures they have identified yes these will be taken care of on the move.

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Also there has been complexities in the spatial planning practice and theory I was working with Professor Kristina Nilsson and Kristinas work is based on planning complexities being a landscape architect and the planner she looked at what kind of challenges involved in it and especially in moving the town and she adopts the critical realist theory and methods, and she brings different aspects into what are the real challenges.

In fact, if you look at it there is a LKAB which is a state-owned mining company and the Kiruna kommun which is a municipal board and where is the local communities the people who are actually relying on the town. So there is always a tripartite relationship with these 3 stakeholders. One is LKAB is the financial support for that, and the administrative support is the Kiruna, and the people relying on both.

Now the people has a confusion who is going to take the move who is responsible for the move because whether it is a duty of the municipal administration or Kommun administration or it is a duty of the their funding agent to who are actually the whole and soul mining institution LKAB. Who is the decision-maker here whom can we approach right so there is become who is on the higher order.

Whether the Kiruna Kommun is on a higher order whether the LKAB is a higher order that has created a lot of confusion. Also the uncertainties, today yes we are planning for next 50 years we

are preparing ourselves maybe after 50 years we may have to move to the next place but then 50

years before itself they are also thinking about how we can invest on advanced technologies like

prefab or anything or to easily move the places later on you know.

So all these thought process has went on but the real problem is let us say in another 10 years

they have invested a huge amount of money in the relocation with the advanced mining tools and

techniques let us say in another 10 years the whole mine is closed or if the mining sector comes

into a different financial crunch you know so what happens then what happens to this kind of

investment.

So all these certainties and uncertainties are in question because that is where they have to look

for kind of alternative livelihood systems and the chaos which has been created by this

interrelationship and the non-linearity and also the interdependence is because these people

depend on this to maintain their Kommun and these people depend on the financial aspect and

you know this whole relationship are very much interdependent with each other.

And the actor-network perspective you know whose role is what who will take a decision what

role is Kommun has to play what role the LKAB has to play you know these whole challenges

have been a big task. Also the self-organization you know how each of the institution is self-

organized by itself in its role how they defined it you know.

And the second thing is about the time variables, when we say about the time various you know

what kind of because we are working in a harsh weather conditions and how we are going to

move this project let us say if you are taking about 5 year, 10 year, 2022 if you want to move it

up then what segment of the people we have to take care and then how to connect them again

back to the workplaces so there is a lot of project management issues as well.

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Adopting to 'new' Kiruna - 2013-2015

And it still continues...

So that is where I would like to brief you about this is how these are the challenges were involved and what I really appreciate in this process is Sweden unlike in many countries in South America when they are moving some towns or some Hamlets because of the mining issues. In South America what they did was they just gave the Chinese companies they gave the money to the people, and they just ask them to vacate the places wherever they want they go.

But here they are at least considering even the animals, the grazing grounds, the ecosystem and they are thoughtfully thinking about what happens to the future if we go like this if we invest this was it really worth that is definitely a very thorough thinking process I can say, and still there are many challenges even within that sparsely populated urban areas as well. I hope this will help you in understanding the challenges in the relocation contexts.

Thank you very much.