8.0 Conclusion

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Summary of the design story for Msc Landscape Architecture graduation thesis

A year in research of the town of Otsuchi in Japan.
How could a Landscape Architecture approach towards design have created a tsunami protection that respects the genius loci of the different places?

As a landscape architect the reason I took up this project was the multidisciplinary aspect of it, yet out of it rose more the idea of an strength of landscape architecture as a profession individually while also working with this team of engineers.
Japan has a strong history of disasters; it deals with these like the Netherlands deal with its floods and being above the sea level - with constant resilience. The rather larger impending danger is that of an aging population, deserting places like Tohoku where there is not much of an economy left. Japan needs to work on keeping its local regions alive and develop to regain its potential that was once present through the country.
The prefectural top down solutions proved to be a limitation in creating solutions that are based on the local aspects of a place. Space making is something that requires help from the top down and in a certain sense direction, but it requires local ingenuity and a keen eye to details in its strategies aimed at reconstruction of the local community.

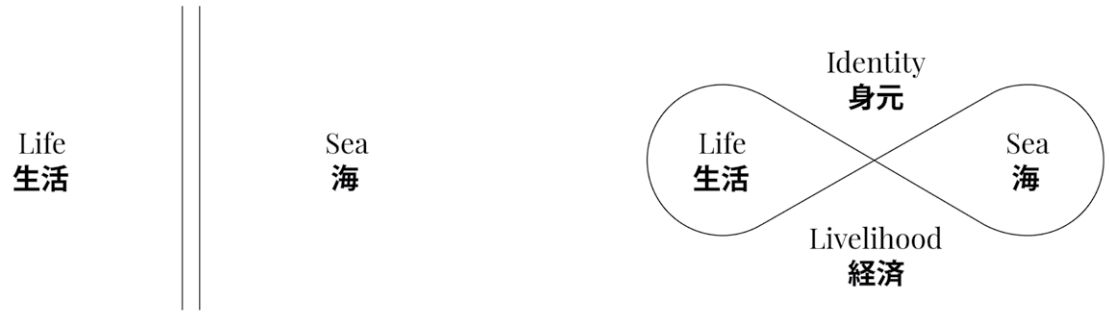
While protection took centre stage a lot of aspects of the city were forgotten and could die down in memory if not for the people who keep its culture alive. Aspects that really matter to the people are in the traditions, livelihood, economies, culture, food and spirit. The sea wall/land consolidation or the idea of zoning various solutions do not bring to the table how it will create a lifeline for the citizens. This, besides the fear causes many people to turn their back on such cities and move to other larger cities and here it is important to get new innovative ideas to surprise them with the opportunity to stay back with a livelihood that flourishes.

As a landscape architect I think this whole link was missing in the current reconstruction work with no presence of a landscape architectonic designer and the lack of an element that went beyond planning and zoning to mark out what in fact made each of these bays different or special from each other. In fact, there was no planning document that showed in detail how these bays had societal variation and the opportunities available. Without these it is impossible to create a "place that people identify with" from a location.

On a larger scale the idea of resilience through design stood out and creating a zone-based protection over a line based protection was one strong inference from the study. The other was structures becoming adaptive organisms compared to hard backbones was very important. This is something that could be taken as a concept in an exemplary project for any disaster struck area. Adaptive pattern planning based on local gems of identity (may it be food, economy, culture helps the local reconstruction progress much faster than creating a structure and letting people do their own job of growing a village out of it.

Besides this a multidisciplinary approach in a hard-right state thought of mind with the involvement of designers, planners, historians, artists, entrepreneurs could play even a larger role in such a case.
Picture no 76 illustrates the conclusion in a simple theoretical model of two situations. The current situation shows how life and sea have been separated as a model and the other theoretical model shows loops of systems to be formed between the sea and land while working with the identity and livelihood of its citizens.

The involvement of a new design process creates opportunities and as a reconstruction process it was very vital to create systems that develop from the actor's point of view. The current built design is a static concept , it is not a reconstruction scheme that tends to change with time or mold to the users need. Creating that space for opportunities is something that needs to be used in the newer model as illustrated in the picture on the right. The city and the people need to identify and build themselves around something. They cling on to the hope of a new city and with that comes opportunities.
This is an research into design thinking that supports a participatory process that involves various actors - humans and other fauna which participate in the natural system creating a link that stitches the landscape.
It also builds on the body of knowledge on designing with genius loci and creates an example for identity-based reconstruction in post tsunami conditions.



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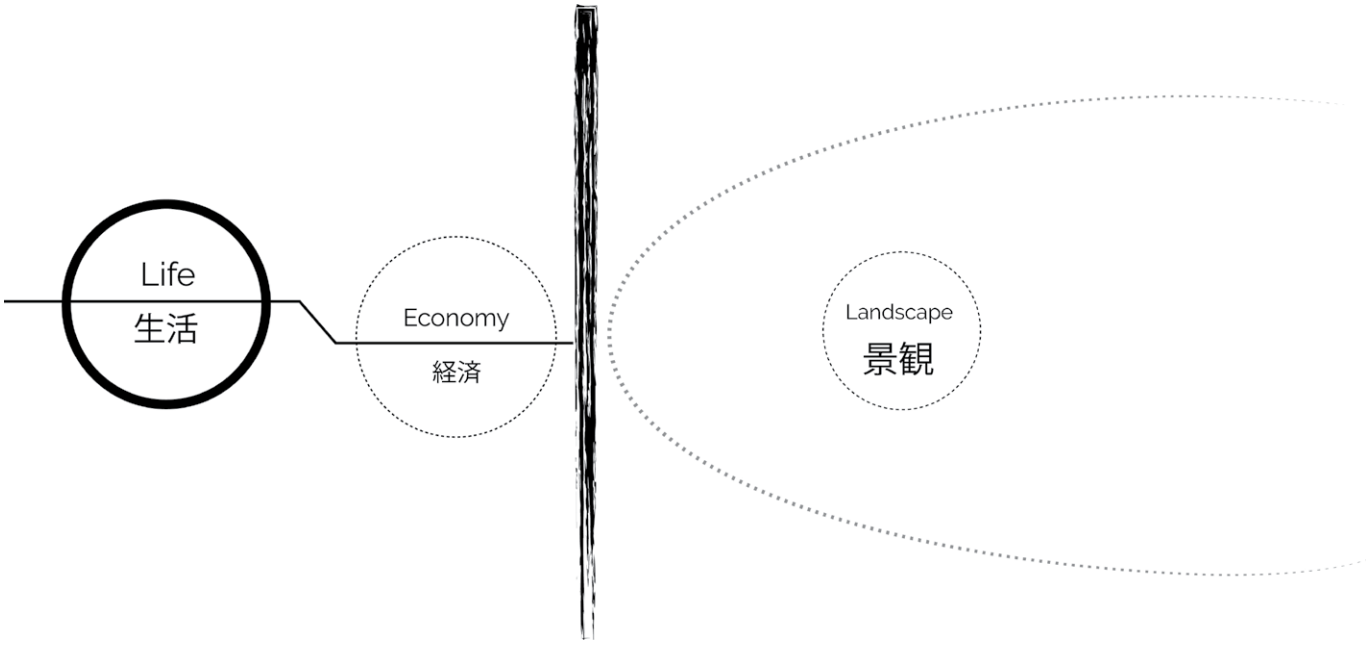

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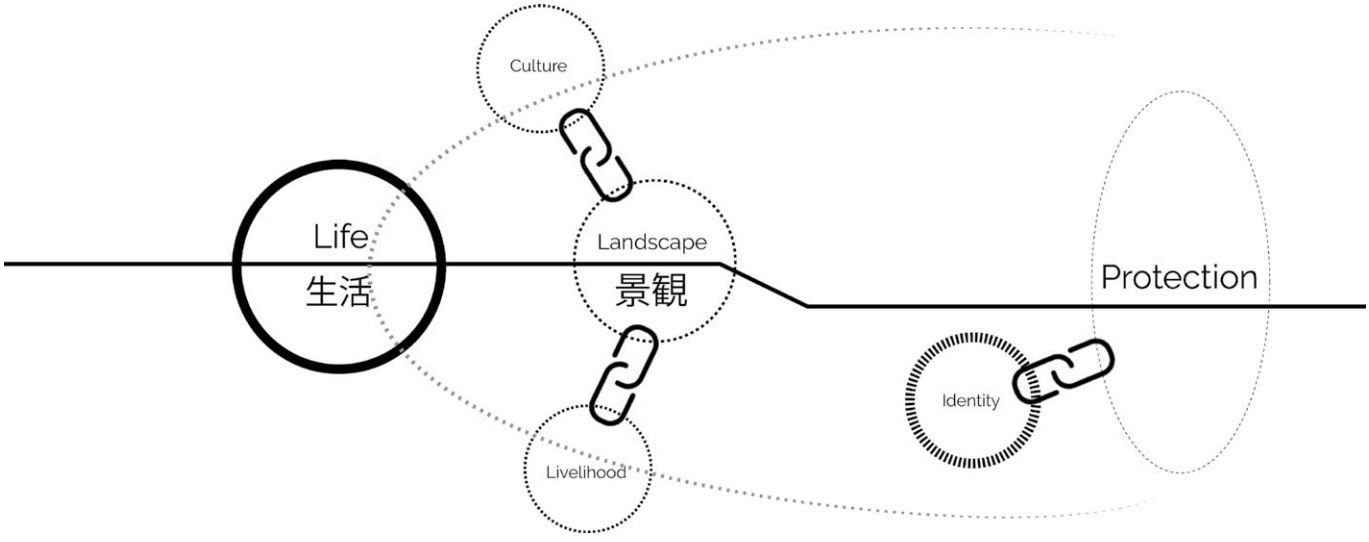

Proposed

Picture No. 76 Conclusion models - theoretical models replicable in other sites (Author,2019)

8.2 Reflection

Relation between solution and the societal impact-

The Tohoku region has numerous bays like Otsuchi and the central government has implemented an identical set of solutions irrespective of the thing that separates each of these bays, namely of which is the people, their lives and economy and the landscape of the bay.
When they were not considered, the value of identity was lost. All these towns were considered as identical places and the defence the same. There was no thought into economy besides the functional placement of it.
The other major problem these areas face is an issue of shrinkage. Most of the youngsters from these town think of moving out and going to cities like Tokyo and Sendai where there is more work and life. This had led to cities like Otsuchi having an average population of around 60.
It is only design that investigates this while creating protection that can solve these issues.

Instead of having individual defence structures for each town which blocks them from each other, there was a solution seen in this project that holds a theoretical model which bases itself on the citizen of the towns. Local reconstruction meant designing for the opportunities that citizens could have. As a way of integrating the sea with the town, this model as a structure for disaster struck society ,could be an option of working methods in which this theoretical framework could be tested and is thus a direct impact on such a society facing similar issues.

Also, the design must look into how processes can create economies and the local landscape has a way of nurturing that. This is a method for making society understand how good design can not only protect their lives but also generate a livelihood for them if done well. As a catalyst, landscape architectonic design can be the means to generate processes that deal with sustainable usage of land and water to create lifestyles.
So as an exemplary project in terms of design scales and the theory that can be used, the project acts as a way to show disaster struck design planning on a theory of zonal protection compared to linear based protection. It sets a societal academic example of what such a planning alternative could be like spatially.

Relation between graduation project topic, the studio topic, master track and master programme -

This is of a twofold importance.

Firstly, it has to deal with landscape architecture working with a variety of multidisciplinary fields.
It creates a value field for landscape architecture in a co-working method with other engineering fields like hydraulic eng., water management, geotechnical and transport planning. Such projects on field would be managed only by the collaboration between these fields and they act as a method for the various other disciplines to understand the role of design in such cities and sites.

Landscape architecture has slowly started to define its role in such trans-disciplinary projects through projects such as Afsluitdijk landscape edges, Room for the river projects and more. With more such room coming in for landscape infrastructure projects this academic work acts as a continuation of enforcement of an understanding of the role of landscape architecture in the multidisciplinary field.
I believe that the future of landscape lies in these collaborations with more such projects having to deal with such sustainability issues for the planet.

The other is for setting it apart from the engineering fields by showing how space is about more than strict values and numbers but about the lives of people, about their values, their interests and creating value through space.
The city is a place that has dealt with huge disaster and loss. A designer can not only provide protection through hard space but also create an atmosphere of memory and reflection, of dealing with loss and creating a peacefulness of mind for the future generation. A lot of this can be found in open space and being part of nature and landscape has to deal with both of these to create value for the citizens.

Relation between research and personal design process -

As a master's thesis in Landscape Architecture it was important for me to embrace an interest in a multidisciplinary field of working. I believe that the profession works hand in hand with a lot of different specifics to come up with hard spatial solutions for a landscape. A landscape can have many issues - a degrading ecology, water shortage, lack of public space or may deal with yearly impactful disasters and in this the designer can only seek to make not only the users but also the various professions involved in making the place better, understand the scope of the field.
We are now dealing with complex climatological and morphological issues that requires a large set of eyes to analyse and create solutions in the hope of the betterment of the place and in general the planet and working in a multidisciplinary network plays a huge role in this future.

Having to do the same here for the thesis lets me pursue this idea wholeheartedly and try to see where it lands me a helping hand to continue this idea in the future somewhere.
It also helps me understand a new culture, new ideas and a site with vast opportunities but at the same time it comes with the same number of challenges.

This shaped my process of work and the way I took this design question forward.
The role of research in design was shaped through going through various scales, various modes of study and various tools, plus, the lenses of various fields.
By going back and forth between ideas and details back to ideas as a designer It made me understand not only the larger urban issues from a prefectural level to what materials can be used at what parts of the bay and at what slope various kind of plants work at the coastline.

I learned how to be flexible and work between ideas and hints of various things the site can offer, to go between various layers and understand user requirement at different aspects. For me design and spatial implication played the biggest role as a landscape architect finally and let me pursue how space can affect people in a landscape.

It also showed me new tools for working with virtual reality which played a big role in the design process and being able to experience the design at 1:1 while designing. It shows the future of the process of design where space is experienced while designing.
As a process still in work it gives me the opportunity to yet experience each of these separate layers of design put into one usable landscape. This brings about the complexity in design process.

Relation between research and technology for design-

The design process and research for me in this educational experience had a very new facet that I have embraced as a very positive tool for design. Virtual reality as a design tool was something I observed and implemented to realise a new method of research in design. The design becomes more than an optional reality, it envelopes a 3 dimensional reality that helps the designer place himself on a point in his design and realise the advantages and disadvantages of a particular space with respect to proportions, space, materiality and size.
It takes the next step from 3d models and visualizations to give an understanding of how a particular piece of material is positioned on ground, what are the faults and problems of doing this in a certain way and how it could be made better.
The software and technology I used allowed me to go back and forth between plans, 3d to virtual reality allowing me to create multiple options of design and analyse the problems in size and proportion (spatial aspects of the design)
I found it to be an invaluable and a very fun tool in creating spaces.

I could see this becoming an opportunity for not only landscape architects, designers and multidisciplinary teams but also the stakeholders in the design process. Individuals involved in the decision making and the citizens could be given an opportunity to see what an alternative option would look and feel like in reality compared to the sea wall that was currently built. To visualize is to empower the citizens to see the truth and the alternatives. The next step is making it into a reality.