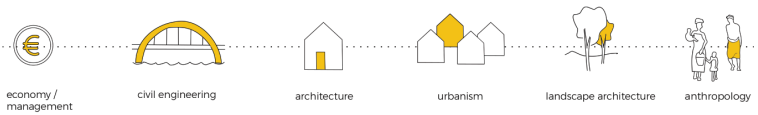
REFLECTION

This reflection finalizes this booklet. It dives into the role of the landscape architect within this project. It re-evaluates the chosen and applied research methodology, it reviews the way the project went through different disciplines and scales, it discusses the relation between intuition and ration, analyzes and values the drawing techniques and reflects on the design choices that were made and whether the research is societally relevant or raised moral issues.

Multiple disciplines - Firstly let's go to the role of a landscape architect. Landscape architecture touches upon many issues and disciplines and attempts to combine these. Landscape architecture is a discipline that requires the ability to understand a multiplicity of fields and can abstract information to only the essentials. By doing this, landscape architecture can touch upon and combine the most important elements in multiple fields creating a cohesive and functional solution to an issue.

In 1957 in the Journal of the Institute of Landscape Architects, Sylvia Crowe called landscape architecture "a bridge between science and art, a profession whose greatest task was to 'heal' the 'breach between science and humanism and between aesthetics and technology'" *(Crowe, 1957). In this project Landscape Architecture is just this, being the glue between the multiple fields of research.*

The three main fields of discipline in this research are civil engineering, anthropology and landscape architecture, like explained in the methodology. These fields can be placed on a spectrum. However the research showed that more disciplines belong to this spectrum. Disciplines like architecture, urbanism and even economics found their own relation to the project moving from artistic to human to scientific without losing the relevance of either one of the disciplines. For example the finding of creating a tidal inlet which is related to the more civil engineering research, offers a solution to the most life threatening issue of erosion destroying the villages of the Volta delta. Additionally, the anthropological research shows why this solution is necessary and valuable besides survival and how a new way of accepting erosion and living around a tidal inlet can fit within the current traditions and way of living. Landscape architecture connects these two sides as landscape architecture is not one or the other, it is both. It is like G. Jones says 'technical and objective, and poetic and highly individualized'. In



scales - own illustration

this case, technical and objective because of the coastal dynamic literature studies, and poetic and individualized because of the anthropological search for the indigenous way of life. Another way of approaching this is through Sijmons view of the landscape as object, organization and as story (Sijmons, 2002). In this thesis research, the landscape as object is understood through the coastal engineering analysis, soil types, vegetation types, building typologies etc. The landscape as organization relates to the flows, networks, time, processes and systems like settlement patterns, the economical drivers and stainability. Landscape as story is more related to the search for the right approach to express a traditional way of living in a new design. This results in anthropological and social research in the inhabitants and their livelihoods. But landscape as story also relates to the value of landscape architectural design as a driver for change and improvement. By designing space, creating the right place, people can connect their personal story to their environments. G Jones agrees when he mentions that "intrinsic landscapes and community values are closely aligned" *(Amidon, 2007).*

The multi-disciplinary approach didn't only show in the result of the project but in my personal development. Working in multiple disciplines impelled me to reach out to other students and dive into unknown territories expanding my knowledge.

Through the scales - Working with a multiplicity of disciplines comes with different scales, instantaneously being one of landscape architecture's characteristics. The profession aims to "promote the objective integration of cultural and natural values and connectivity at all scales"*, like G. Jones mentions (Amidon, 2007). This thesis project moved through 8 literal scales: the scale of Africa, Ghana, the Volta delta, the estuary, the inlet, the village, the community and the house. Through these scales the problem was assessed, the current situation analyzed and the possible solution found. To each scale belonged a certain set of research. Working this way brings a clear line in the research. The scales connect the large scale coastal research and the scope of the issues the Volta delta is facing, to the individual lives of the inhabitants. It connects the social issues and their spatial implications, history and the future. By working with so many scales, the research becomes rich and saturated. However the pitfall of this way of specifically defining scales is that more and more scales can be added in the process, down to the detail of the ropes holding together the woven palm leaves or the ants in the soil.*

Developing techniques - When working in these layers of disciplines and scales, a range of representational techniques can be applied. The techniques used for each separate layer and each discipline are sometimes opposites. For example scientific computational graphs from civil engineering to atmospheric hand-drawn sketches from architecture. Finding a way to combine these to where they can still connect was

a challenge. By searching for new techniques that worked for me as a researcher, these connections were found. In the first scales of the booklet I used the more schematic, process explaining images. As the scales became smaller and the disciplines moved on the spectrum, the research required a more sketchy approach. The first hand drawn sketches experiment with the composition of the findings the previous scales showed. It forced me to organize what I learned and to place this into a spatial arrangement. Further into the research also homes, people, food and utensils were sketched. By using my hands to move a pen to a paper, I could understand new things, new details of the Ghanaian culture. This way I wasn't just seeing pictures of for example the thatched vernacular homes, I was teaching my body to draw it and forcing my muscles to remember it. This is important in searching for possible design solutions as the mind and the hand can work together in expressing and applying what is learned.

Not only do the sketches reflect a connection to the scales, they also reflect a certain friction between fixed elements in the research and the more interpretable, perceptional elements. This contrast in different representation styles becomes interesting when you combine them. That is what happened in the section which was made inspired by the Atelier Bow Wow's technical architectural drawings (Tsukamoto and Kaijima, 2014). These drawings are usually very dry and informative, showing the layers of construction, walls and roofs. What is interesting in the Bow Wow sections is that the people and their activities are also represented in the sections. With my section, I tried to take this a step further. The on the one hand technical drawing, on the other hand represents a story or a way of living. By applying the 'rules' for these type of technical drawings to for example a person or an animal, a continuity is created but at the same time a tension, a mystery. This refers back to what G. Jones mentioned about landscape architecture being both poetic and individualized, and technical and objective. From the section a catalog of all elements is made. These elements can be recognized in the very first sketches. Things like bowls and people are inspired by the hand drawn sketches and transformed to Autocad pieces.

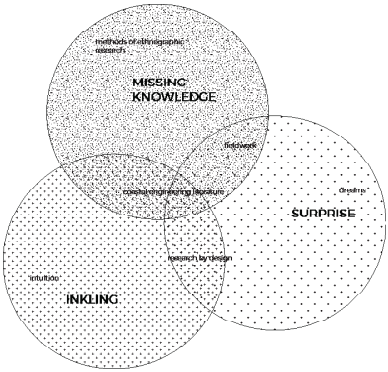
Also an animation was made to show the process in time. The video is made from parts of the section. This way the relations between elements of the design become clear and the section becomes more alive.

The last technique applied is the making of paper form models. This is what they used to call pop-ups back in the 19th century, but it seems more fitting in my case. The pop-ups frame certain elements of the section conveying a better understanding of the atmospheres and spaces. I used multiple folding techniques to show depth, time or composition.

The section, animation, pop-ups and catalogs together create a full picture. The section is the overview, the animation the relations, the po-ups the frames and the catalog the deconstruction.

<u>Intuition and ration</u> - In the beginning of the report a depletion model is explained. This model explains the ways information is depleted from three categories. The first one was the missing knowledge. This was simply when I needed to gain more knowledge on a certain subject. This I applied to most of the coastal engineering research. The domain was mainly sparked by ration and less by intuition. The second one was inkling or hunch. This was a more intuitive one as my intuition directed me into a certain path to explore. This refers to the compositional sketches that were made. The last one was the surprise. This was when out of nowhere; I found something I could use for my thesis. In my case this could even be a dream. These surprises were used as a starting point for research. For example when I dreamt about a dynamic landscape with small mounds of sand acting as protection, I searched if and how these mounds could function like a perforated barrier. This diagram illustrated how the interchanging of knowledge, intuition and surprise can result in an academic research.

After doing the project, I realized how important intuition is for a research. It is often seen as something that is not academic or scientific but within landscape architecture it is a very important tool. Intuition is the way of thinking that is focused on the obtaining of insights or principles that are immediately evident from which their truth or validity cannot directly be described by arguments (Groeneveld, 2006). It is a process that goes through deeper, unconscious layers. The heart of this process is in the intuitive moment of the intuitive experience. Groeneveld mentions that in this moment a synthesis between different kinds of information is formed. It is the moment when there is a connection to deeper and collective layers of consciousness (Groeneveld, 2006). This connectivity of layers of information through scales and disciplines is evident for a multi-disciplinary or multi-lensed profession like landscape architecture which also became clear when drawing by hand.



depletion model - own illustration

<u>The project</u> - Whether decisions were made intuitively or rationally, were they the right ones? This last paragraph reflects on the relevance of the project. It reflects on the moral issues the project is associated with and how they were

solved or not. Lastly, it rethinks if landscape architecture is equipped to tackle issues like these.

As a western student to design for an African culture is a challenge. During the process I was constantly looking for a balance between introducing something new and respecting traditions. I think it is important for a project like this to allow the inhabitants, the users to find their own way forwards, to let them find their own modernization with a just little push from the designer. This push should be affording and not restricting. In my project this push is the designing of an inspiring and functional meeting place and a space that affords for traditional economies like fishing and coconut farming to be combined. It was important to submerge myself into the culture. For this the trip to Ghana in October was essential. By being in the culture, feeling the temperature, seeing the villages, hearing the people not just the rational issue was understood, but also the reason why it was so important to help the current inhabitants.

In the current situation the inhabitants are threatened by the sea and its erosion but at the same time benefit from the fish in the see to provide for their livelihoods. From the start of this thesis I realized how important it was to change erosion from a threat to a benefit. While working I became to realize this is not just related to the characteristics of the landscape, but also to the attitude and believes of the people. A group of artists that also worked in the Volta delta in the village of Totopey also showed this. They created positive experiences involving the inhabitant with the erosional issues and the future of their village. They created football socks with a line of where the water would be in a certain amount of years. The kids with the socks would draw their own football court with a blue line which went around bumps or holes in the ground. This was very symbolic as it showed that there are other ways to approach a problem. In my design this is what the boathouse accomplishes. The boathouse is placed in the middle of the lowlands, attracting people to live around it while building it. When it is placed the boathouse itself has no function besides being a sheltered meeting place. Then the first compounds start to grow and a community starts to form. In this situation, the community is not scared of the water and the erosion; it is waiting for it to come. The community is waiting for the erosion to create a better well-being. The perspective on the issue is changed into something positive. The important switch is an example of how issues like these that seem too complex and final can be tackled.

This way of thinking shows how landscape architecture indeed, has an important role within issues like these. Landscape architecture as thinking and deliberating discipline like Sijmons says stands in the middle of society (Sijmons, 2002).

<u>Global relevance</u> - Globally this project finds it relevance in presenting a way to deal with the fight between man and nature. It shows how nature's dynamics don't have to be threatening, they can

actually benefit lifestyles. Besides this also matters of urbanization and population growth are reacted to. By re-focussing something that was previously something to move away from, closer to safer and steadier places like cities, become less necessary. By transforming a rural area to a steady place to live, the pressure on the cities becomes less. Within this rural area there will be less poverty because of the job opportunities the landscape offers (UN goal 1.). This will lead to less hunger and cleaner water and sanitation (UN goal 2. and 6.). Decent work and economic growth the landscape affords will attract more investors who could fund better health care (UN goal 3.), make cleaner energy possible (UN goal 7.), improve and increase the quality of education (UN goal 4.), which will inform inhabitants about a responsible consumption and production (UN goal 12.). By creating a time resistant landscape that can deal with dynamic of the future and can fit into the traditional lifestyle of the inhabitants at the same time creates a sustainable living environment (UN goal 11.).

Continuing - If there was more time I would have liked to test my findings on another location to see if they would also work there. This would strengthen the global relevance of my project. I would also like to make a physical model in color which would offset the black and white section creating an even more all-round impression.

What I learned - So, doing this project I learned a lot about Ghana, about coastal erosion, about Autocad and making pop-ups, but also about myself. I learned that I can trust my intuition and that I enjoy trusting it. Also I learned that from this intuition my hands can do the work and I can do valuable discoveries through this. I had a lot of fun moving on a spectrum of disciplines and scales and especially had fun trying out new techniques. I am proud of my project and would like to share it with institutions like DIMI to perhaps actually help the area by applying some of my findings.