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Graduation studio	
Name	Delta Interventions
Teachers	Taneha Kuzniecowa Bacchhin, Stefan de Koning
Argumentation of choice of the studio	Designing in the waterscape gives new and interesting ways to design, using this dynamic landscape as an advantage in the project stimulates the creative mind to come up with new solutions and possibilities. Combining this with the multidisciplinary aspect of the studio gives an extra dimension to the graduation process.
Graduation project	
Title of the graduation project	Bridging the gap
Goal	
Location	San Leandro bay, Oakland, CA, USA
The posed problem	
<p>The Oakland community adjacent to the San Leandro bay is underdeveloped. Poor population, low graduation rates and high crime rates. This is not something from today, after World war II due to people and jobs leaving Oakland plus planned racial segregation in the city, the area has been lacking behind in development. This in contrast with the booming silicon valley.</p> <p>Another problem are the house prices, these have been sky high last years, which do not match the income level in any means. Prices are much higher than the average of the USA. This takes a big cut out of peoples income.</p> <p>These weak demographics are a precursor of upcoming problems of an area which is prone to flooding. As shown with New Orleans the social vulnerable areas are the least resilient to flooding. The areas most exposed are those direct to the waterfront and along creeks. Small businesses and companies will be effected first, households will follow, if no precautions are taken.</p> <p>In this area at the waterfront the municipality has plans for new development. Stadiums, businesses, residential units and entertainment. This might bring new opportunities for the community, however there is a major disconnection between the development area and the community, caused by a high- and railway.</p> <p>Neighbourhood residents are separated from the Secondly the opportunities brought by the megalomaniac project may completely miss the adjacent communities. The high stakes it brings to the table and preferring the attraction of tech companies, won't bring any benefits to the surrounding neighbourhoods.</p> <p>Thirdly, while the project is directly located at the waterfront is doesn't address enough the sea level rise which will cause flooding in the near future. Especially with the scale of the project flood precautions could be easily integrated.</p> <p>Concluding the double disconnect of the surroundings and lack of flood response asks for an intervention.</p>	
Research question	
How can the community be connected to the waterfront and stadium project in such a way that the community can fully benefit from the developments and bay area, while also maintaining a safe level of flood risk.	
Design assignment	
<p>The design asks for an intervention which bridges the physical boundaries, next to this it should support the community in terms of job/education opportunities and give space for own initiatives.</p> <p>In a more practical description, the design will be a bridge typology crossing the railways and creek and sets up the crossing for the highway, towards the waterfront. The program will contain a community centre which provides room to set up own initiatives and gives support by job education. The bridge is located in such a way it can provide extra flood protection but also makes a green connection to the waterfront.</p>	
Process	
Method description	
<p>Literature study: Reviewing literature.</p> <p>Case study: Typology studies and comparing relevant architecture. Review design solutions in other deltas and areas.</p> <p>Site analyses: comparing/tracing/abstraction of maps, history, demographics, planned developments.</p> <p>Research by design: Sketching, 3D modelling, abstracting, analysing own design</p>	

Discussing and reflecting choices and ideas: Self monolog written or in doc. Tutoring.

Sketching: Hand, tracing
3D Modeling: Revit, sketchup, experimenting with parametric design
Digital drawings: rendering, photoshop
Diagrams: sketch, illustrator

Literature and general practical preference

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Steinführer, A. (2007). *Social vulnerability and the 2002 flood. Country Report Germany (Mulde river)*. Retrieved from

Rufat, S., Tate, E., Burton, C. G., & Maroof, A. S. (2015). Social vulnerability to floods: Review of case studies and implications for measurement. *International Journal of Disaster Risk Reduction*, 14, Part 4, 470-486. doi:<http://dx.doi.org/10.1016/j.ijdr.2015.09.013>

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Aspinall, P., Mavros, P., Coyne, R., & Roe, J. (2013). The urban brain: analysing outdoor physical activity with mobile EEG. *British Journal of Sports Medicine*. doi:10.1136/bjsports-2012-091877

Mallach, A., & Brachman, L. (2013). *Regenerating America's legacy cities*. Lincoln Institute of Land Policy.

Reflection

Relevance

Dealing with the vulnerability to flood risk in a spatial and social way can contribute as a precedent for future projects in the bay and other delta's, also finding ways to design a catalysator for the area might inspire new projects to boost the area.

Time planning

