

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Christina Sarra
Student number	5611318

Studio		
Name / Theme	Explore Lab Graduation AR3EX115	
Main mentor	Roel van de Pas	Design Tutor
Second mentor	Jan van de Voort	Building Technology Tutor
Argumentation of choice of the studio	My fascination with people's interactions and everyday practices with and along the sea developed into an urge to investigate communities whose beliefs, worldviews, and livelihoods source from their experiential knowledge of the marine landscapes they inhabit. Being a keen explorer who finds joy in navigating my research with self-determination and due to its independent and multidisciplinary nature, I opted for Explore Lab as a means of advancing my analytical research and design methods alongside tutors who specialize in various fields.	

Graduation project	
Title of the graduation project	Redefining Schooling: Co-crafting a community waterscape for the Bajau Laut
Goal	
Location:	Sabah, Malaysia
The posed problem,	In the contemporary world where the state is the default unit, statelessness is a fundamental problem. Being unprotected by the state implies that communities such as the Bajau Laut people are not politically represented and advocated for, making them vulnerable to the authority and decisions taken by influential stakeholders. The ecotourism industry in Sabah is an increasingly important asset for Malaysia's economy. While striving to conserve and manage the area's natural resources, foreign investors have managed to orchestrate decisions taken by environmental organizations. Due to their status, the Bajau Laut's involvement in development plans and natural resource management decisions concerning the very

	<p>marine landscapes they have been historically inhabiting is minimal, if any.</p> <p>Meanwhile, Malaysia’s educational system perceives education as a tool one should acquire in order to work in the industry. However, such idiosyncrasies are addressed to westernized standards of living in a capitalist framework and are not tolerant of traditional patterns of lifestyle and consumption, nor do they recognize -what is an integral part of being indigenous- the value of experiential learning.</p> <p>Being incompatible with Malaysia’s present educational standards, the Bajau Laut are deprived of the freedom of choice of lifestyle and occupation. Hence, their traditional ecological knowledge and potential are solely recognized via fishing activities, while a considerable number of Bajau Laut is being exploited in labor-intensive jobs.</p>
<p>research questions and</p>	<ol style="list-style-type: none"> 1) How much authority and involvement do the Bajau Laut have in natural resource conservation efforts and the ecotourism sector? 2) What types of cultural conventions and traditions are reflected in the way the Bajau Laut appropriate space? 3) What is the position of Alternative Learning Centers regarding indigenous peoples’ education and the importance of school as an establishment?
<p>design assignment in which these result.</p>	<p>Network of spaces and devices designed for experiential education</p>
<p>The research findings will provide insight into how promoting traditional ecological knowledge and cultural traditions and conventions could give the Bajau Laut the chance to a more self-determined lifestyle through ecotourism and education. By studying the 1) activities and types of accommodation promoted by tourist agencies and websites, 2) the traces and patterns of Bajau Laut’s usage of space, and 3) the activities and vision of Alternative Learning Centers, I aim to define and evaluate practices and activities that are unsustainable or that can be encouraged, hence establishing design criteria that will determine the types of interventions I will design. In addition, by documenting spatial conditions and typologies found in resorts and water villages, the research aims to generate a set of design tools that will inform my approach to design.</p> <p>The design project will propose a network of spaces and devices designed for experiential education. The types of interventions will be sourced from the three parameters investigated in the research paper. The design agenda proposed, organizes the nature of interventions into four categories:</p>	

- 1) Ecotourism-related spaces that promote activities traditionally held by the Bajau Laut (e.g, harpoon fishing, drying fish, food sharing, seaweed cultivation, homestay accommodation units with shared amenities)
- 2) Workshop spaces dedicated to handcrafts and small-scale retail of handmade goods and fresh produce. (e.g, basket weaving, jewelry making, soymilk production)
- 3) Play spaces for children and organized spaces for community gatherings
- 4) Necessary infrastructure to optimize the residents' quality of life and the interventions aforementioned (e.g, solid waste disposal areas, rainwater tank storage)

Finally, the design aims to put particular emphasis on categories 2) and 3), since the vision is to also experiment with materials in a 1:1 scale and provide detailed technical solutions for the architectural bodies proposed.

Process

Method description

Research: In order to categorize the parameters investigated, the notion of commons as interpreted by Tom Avermaete was utilized. The three categories introduced by Avermaete are presented as: "Res Communis", "Lex Communis" and "Praxis Communis".

Res Communis refers to the management of common pool resources. Hence this category explores natural resource management initiatives and the involvement of eco-tourism and the local communities. Via the use of platforms such as Trip Advisor, Google Maps, and TikTok, the research aimed to identify problematic and pleasing effects of the tourism industry in Sabah.

Lex Communis refers to a set of common codes and conventions regarding the built environment surrounding communities. This part of the research investigates the traditions and conventions of the Bajau Laut people and is intending to document how various architectural instruments and spatial conditions enable social encounters and daily practices in space. This common will be investigated via drawings capturing the public realm that unravels in water villages. The drawings will be derived from pictures and unedited videos found on platforms such as Facebook, YouTube, and TikTok. The drawings will be accompanied by narratives derived from observation and literature research.

Praxis Communis refers to the social dimensions of the commons and describes values such as mutual support, cooperation, and communication. Praxis Communis will investigate the approaches of Alternative Learning Centers on indigenous education and the pedagogical approaches adopted. For this part of the research, alongside literature research, an open-ended interview was conducted with the manager of an Alternative Learning Center in Semporna, Sabah. To document extracurricular activities and the centers' collaboration with other organizations, the official Facebook pages of Alternative Learning Centers and their posts contributed to gaining a better understanding of them. The findings were also interpreted into hand drawings.

Design: For the design part of the project, a design plan explaining the various stages of design -from P2 to P5- has been set. The first stage of the design (until P3) will experiment with interpreting the design tools into research findings into a synthesis of indoor and outdoor spaces which intends to encourage mingling between Bajau Laut adults, children, and tourists. Meanwhile, more detailed research on local building techniques will be conducted. The second stage of the design will focus on design in unit scale. During this stage, the relationship between afloat structures and water will be investigated by taking into consideration aspects like the change of landscape during tides, the sound,

and the experience of playing next to and in the water. Simultaneously, technical models on 1:1 scale will be constructed in order to experiment with materials, indigenous building techniques, and contemporary construction knowledge. The last stage of the project aims to produce detailed drawings and models that showcase the nature of the design and the construction philosophy behind the project.

Literature and general practical preference

Sather, Clifford. Essay. In *The Bajau Laut: Adaptation, History, and Fate in a Maritime Fishing Society of South-Eastern Sabah*, 13–97. Kuala Lumpur: Oxford University Press, 1997.

Ng, Keng Khoon, Farah Aliza Badaruddin, Mohd. Tajjudin, and Mohd. Rasdi. “Democracy, the State and Sustainability: In the Sea Nomadism of the Bajau Laut.” Essay. In *Bajautopia: Tales of Borneo's Sea Nomads: A Collection of Essays and Architectural Research*, 166–68. Petaling Jaya, Selangor: Strategic Information and Research Development Centre, 2022.

Acciaioli, Greg, Helen Brunt, and Julian Clifton. “Foreigners Everywhere, Nationals Nowhere: Exclusion, Irregularity, and Invisibility of Stateless Bajau Laut in Eastern Sabah, Malaysia.” *Journal of Immigrant & Refugee Studies* 15, no. 3 (2017): 232–49. <https://doi.org/10.1080/15562948.2017.1319526>.

Clifton, Julian, and Chris Majors. “Culture, Conservation, and Conflict: Perspectives on Marine Protection among the Bajau of Southeast Asia.” *Society & Natural Resources* 25, no. 7 (November 2011): 716–25. <https://doi.org/10.1080/08941920.2011.618487>.

Pink, Sarah. “Digital–Visual–Sensory–Design Anthropology: Ethnography, Imagination and Intervention.” *Arts and Humanities in Higher Education* 13, no. 4 (2014): 412–27. <https://doi.org/10.1177/1474022214542353>.

Abdullah, Saiful Arif, Amin Setyo Leksono, and Hong Sön-gi. *Conserving Biocultural Landscapes in Malaysia and Indonesia for Sustainable Development*. Singapore: Springer, 2022.

Loganathan, Tharani, Zhie X. Chan, Fikri Hassan, Zhen Ling Ong, and Hazreen Abdul Majid. “Undocumented: An Examination of Legal Identity and Education Provision for Children in Malaysia.” *PLOS ONE* 17, no. 2 (2022): 11–12. <https://doi.org/10.1371/journal.pone.0263404>.

Tsukamoto, Yoshiharu, and Momoyo Kaijima. *Architectural Ethnography: Atelier Bow-Wow*. Edited by Jennifer Sigler and Leah Whitman-Salkin. Cambridge, MA: Harvard University, Graduate School of Design, 2017.

Reflection

1. School, Tertiary Education, Employment. In modern societies, the trajectory of people’s lives is determined by the number of skills acquired through education. Being accredited for one’s knowledge holds a substantial value in the modern world, which often fails to recognise education sourced from experience, nature, and generational knowledge. Via architecture, designers have managed to create educational premises that encourage community formation, dialogue, restless curiosity and creativity. Being accredited for mastering a field, gives people the benefit of choice. The choice of a career, a life path, a purpose. On the other side of the coin, learning from tradition, personal experiences and reoccurring practices is a type of knowledge

that cannot be verified with certificates. What happens to those for whom our education system doesn't work? Not being educated the conventional way, deprives hundreds of indigenous communities of their right of choice regarding their future paths. Through architecture, designers can challenge conventional education by providing choices that will empower and inspire communities to learn, create and evolve via spaces that prioritize experience over accreditation. What types of architectural bodies could host such a vision? In the multidisciplinary context of the Architecture Track, one can explore and develop innovative ideas on phenomena that call for change.