

Reflection, Master of Science Architecture, TU Delft
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Architectural Engineering Graduation Studio
Shared Heritage Lab, Semarang

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The general development of the project

In the MSc3 and MSc4 semesters of the graduation studio, there appear to be two important influences on the development of my project. The first important influence is the field study on Java. During this field study, experiences and activities caused important developments to accelerate which were needed to elaborate on important themes in the project. Amongst the most important ones of these experiences, the interviews with an architect and a doctor in a modern-day hospital in Jakarta, form the basis and legitimation of the project. Within the Shared Heritage Studio, the field study on Java was a clear point in the planning of the first semester. Prior to the field study, research was dominating my personal weekly planning. The goal of defining the scope and possible locations for the project had to be determined. Because of these preparations, locations could be reviewed and choices could be made. After the field research design research started, as by then all information was provided by the initial research and the field trip.

The second important influence on my graduation project has been the Thematic Research. In the studio of Architectural Engineering attention is paid to the technical background of a theme. By writing a thematic research the technical part of the architectural research is formed, and this helps the overall architectural research to become more grounded and in my case the project also became more realistic. By searching for the essence of the themes in the form of writing a paper, important steps were made for the whole project.

The main trajectory of the studio has helped me to keep connecting research with design. I appreciate the implementation of the thematic research in the studio as it helps to define important circumstances that the final design should be dealing with. Later in the project, any design step could be examined for its effectivity, by using the Thematic Research. The fact that the Thematic Research had to be written in a paper format, caused the process of focussing on the main issue to intensify. As a result, the design research became more focussed, and the project got its main direction.

The result

Looking back upon the general development of the project, the approach of doing literature research, while already focussing on a main theme *before* the field trip paid off. This becomes clear when looking at the collected information in Indonesia that is not provided by literature. With this information the project can function as addition to existing circumstances on Java.

From the Thematic Research climatic circumstances in medical design were extracted, which are needed to create naturally ventilated hospital design. Although the recommendations that are deriving from this research should be tested in practice, some of them seem promising. In the COVID-19 crisis a focus on natural ventilation could provide hospitals in tropical climates from relatively easy extension of inpatient wards. Furthermore, naturally ventilated hospital environments could help to reduce emissions and serve as a low-cost option for developing areas. Hopefully more research will help investigate these possibilities.