Micro Library
Learning Center, Bandung, Indonesia

Main authors
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Project data
Project group: Architecture, building and civil engineering
Client: City of Bandung
Project background: Public commission
Planned start: December 2017

Summary and appraisal of the project by the jury
The jury was impressed by the project’s vision of a network of libraries across Indonesia. Especially compelling is the specificity of each individual project. Every building responds to the needs of the local community and the urban context. Here, the project opens on all sides to the park around it, inviting the community to enter and explore. This is a fresh approach to the library — typically, a rarified, closed environment. Unconventional materials — in this case, a mess ceiling and artificial grass floor — also make the project an exploration in unorthodox textures and construction techniques. By multiplying small, inviting reading spaces without replicating a single design gesture, the project constructs a territorial project reinforcing literacy and defining community.

Statements on the sustainability of the project by the author
Micro Library as a program to empower users: the power of small, attractive, and many
In 2012, we initiated the Micro library program, with a mission to make learning attractive and reachable for Indonesia and beyond. Through the economic forecast for Indonesia is optimistic, the current infrastructure does not support to improve its human Development Index. Education is considered a way to overcome the lack of facilities, libraries are far from being popular. The role of beautiful design can make libraries attractive again. Instead of positioning libraries in the city centers, why don’t we bring libraries closer to their homes? In 2016, two micro libraries have been built in Bandung. Four more are in planning, one is the Fibonacci Micro library. Each micro library is uniquely-designed to fit programmatic demands of each community and site’s potential.

From file to craft: bridging parametric-based design with local construction technique
The question is how to design and build within a simple manual labor-focused construction environment. Instead of from “file to factory”, a “file to craft” solution was sought. The parametric Grasshopper model uses standardized construction elements (the rib structure) in a flexible way to generate design variations in terms of the amount of ribs, number, orientation and layout of spiral rooms, building height, rib dimensions. The material, photovoltaic structural insulated panels are used. Here concrete is sprayed onto a form core clad in a metal mesh. In this case it gives the opportunity to build a lightweight construction which reduces the load on the foundation and thus material usage. Cast-in-situ method also solves logistic issue of transporting prefabricated ribs to the site.

New nature: modern urban ruin in the lush green park (landscape = furniture = structure)
Being situated within a park, having an all-over open pavilion where one can enter from any direction is contextual and relevant. We would like to perceive the pavilion as a fully integrated structure and being reclaimed by nature like an almost forgotten ruin. We question the modernist idea of functional separation of constructive elements and thus the columns made of ribs were designed with a bigger radius so as to house multiple programs. At the same time the ribs will function as integrated bookshelves for the library. In that sense the spiral array of the ribs is a hybrid of structure, functional requirements and fixed furniture. Green roof, moss ceiling and green carpet (artificial grass) enable the continuation of the park into the library, an experience of seamless green spaces.