Haute jardin
Exploring the pre-fabrication of landscapes through the process of making

by Megan Mathey
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Johan N. Prinsloo

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Dr. Arthur Barker

Submitted in fulfilment of part of the requirements for the degree Master of Landscape Architecture (Professional)

Department of Architecture, Faculty of Engineering, Built Environment and Information Technology, University of Pretoria, South Africa

November 2016

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In accordance with Regulation 4 (e) of the General Regulations (G57) for dissertations and theses, I declare that this dissertation, which I hereby submit for the degree Master of Landscape Architecture (Professional) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or other tertiary institution.

I further state that no part of my dissertation has already been, or is currently being, submitted for any such degree, diploma or other qualifications.

I further declare that this dissertation is substantially my own work. Where reference is made to the work of others, the extent to which work has been used is indicated and fully acknowledged in the text and list of references.

Megan Mathey

October 2016
Abstract

The hand thinks while it builds. Only by physically grappling with a material does one truly understand what it wants to become. In contemporary landscape architecture, there is typically a separation between the act of designing and the act of making, often causing a lack of practical knowledge of the capabilities of materials and their relationship to one another.

To construct expressively means to comprehend a material’s physical properties and how its process of production is revealed through repetition and exaggeration. This dissertation attempts to explore the pre-fabrication of landscapes through an iterative process of making by hand with the goal of uncovering material properties that would otherwise remain concealed. It starts with a material exploration on a detailed level, after which the resulting artefact is applied in the larger context of Pretoria. In addition, this exploration attempts to add to the very limited body of work concerning landscape architectural tectonic theories.

Uittreksel

Die hand dink wanneer dit bou. Slegs deur fisies met 'n materiaal te wroeg verstaan mens waarlik wat die materiaal wil word. In eietydse landskapargitektuur is daar tipies 'n verdeing tussen die daad van ontwerp en die daad van maak, wat dikwels lei tot 'n gebrek in praktiese kennis oor die geskiktheid van materiale asook hul verhouding tot mekaar.

Uitdruklike konstruksie dui op 'n begrip van 'n materiaal se fisiese eienskappe en die tentoonstelling van sy produksieproses deur repetisie en oordrywing. Hierdie skripsie poog om die voorafvervaardiging van landskappe te verken deur die herhalende proses van maak met die hand, met die doel om materiaals-eienskappe te ontdek wat andersins geskuil sou bly. Dit begin met 'n materiaalverkenning op 'n detail vlak, waarna die artefak toegepas word in die groter Pretoria konteks.

Verder poog hierdie verkenning om by te dra tot die beperkte kennis van tektoniese teorie in landskapargitektuur.
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Introduction

1.1. Background

If you think of Brick, you say to Brick: What do you want, Brick? and Brick says to you: I like an arch. And if you say to Brick: Look, arches are expensive, and I can use a concrete lintel over you. What do you think of that, Brick? Brick says: I like an arch. Louis Kahn

The nature of materials has an influence on the manner in which they are used in construction. As structural elements, bricks perform best as arches, while timber elements are most economically used perpendicular to one another, as seen in traditional Japanese architecture. This has spatial implications: arches and domes form a different spatial experience to the linearity of lintels, and timber decking results in a rectilinear geometry.

Construction details extend beyond nuts and bolts; they can reveal and memorialise construction methods, and this can lead the user to understand the built landscape and how it is made. For example, the triglyphs of Greek temples of the Doric order were made of stone, but were retained in the form of the wooden beams that would once have supported the roof (Tucci 2015:245; see figure 1). Can this influence the conventional design process that landscape architects follow?

Historically, architects were considered master builders, being both designers and constructors. In contemporary landscape architecture, there is typically a separation between the act of designing and the act of making, often causing a lack of practical knowledge of the capabilities of materials and their relationship to one another. This is perhaps the reason behind the recent increase in design-build workshops and -courses taken by students of spatial design; only by building does one truly understand construction.