Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of Master of Architecture

August 2, 2017
Blacksburg, Virginia

Frank H. Weiner, Chair
Steven R. Thompson
Patrick A. Doan

keywords: graphic, alphabetic, translation, rotation, reflection, homogenous, composition, painting, pictorial, form, shape, number, proportion, order, elements, harmony, purity, absolute, idea, color, sky, scale, representation, part to whole

Ariel Lynne Shockley-Campbell
This document was prepared with Adobe InDesign and Adobe Photoshop.

authored from August 2016 to July 2017.

prepared and printed from May 2017 to August 2017.

The typefaces used in this document are Baskerville italic in 12 pt., Lohedev regular in 8 pt., 10 pt., and 12 pt., respectively.

This document is printed on Strathmore 400 Series printmaking paper.

Paper size is 18” x 24”.

Project advancement with the help of the following faculty members:

Frank Weiner
Steven Thompson
Patrick Doan
Hunter Pittman
Arian Korkuti
Dave Dugas

该项目的进步也得益于以下同仁的帮助：

Andrea Palladio
Aldo Rossi
Le Corbusier
Louis Kahn
Giuseppe Terragni
John Hejduk
Rem Koolhaas
Tadao Ando
James Turrell
Richard Serra
Yves Klein
Sophie Tauber Arp
Max Bill
Paul Klee
Donald Judd
Eduardo Chillida

Project advancement with the help of the following architects and artists:

Andrei Caldararu
John Zavitsanos
Louise Nevelson
Jean Tinguely
Robert Morris
 Reveala

Project advancement with the help of the following architects and artists:

Rachel Blau McEwen
Dr. Thomas J. Biggs
Nancy Holt
Sculptura Chiala
A series of fourteen architectural exercises were conducted over twelve months, beginning with a study of composition and ending with an exhibition. Composition, known to both painters and architects, assists in providing an order for five distinct architectural elements: a singular beam, color (blue), arches, a field of columns, and a perspectival stair. In this case, the composition is raised above all other things in order to see the potential of this model as an acropolis.
# TABLE OF CONTENTS

Title Page i.
Project Advancement ii.
Abstract iii.

Architectural Exercises 1
Series i 2-6
Series ii 7-12
Series iii 15-22
List of Images / Bibliography 23
 Derived from the signs of the alphabet, Letters, provide an alphabetic parallel to elements (architectural or otherwise) that inculcate a graphic model of writing and an orthographic order, insofar as to compose or express a word—in this case an object.

Rotation, translation, and reflection, known terms in mathematics, provide motion along the longitudinal axis of the project using congruent and similar shapes to construct a formal composition. The inquiry of composition allows the architect to study plans and arrangements of volumes elementally and pictorially through number, proportion, and the order of part to whole.

A series of fourteen architectural exercises were refined over a period of 12 months concluding in multiple projects. The exercises advanced through the practice of travel, reading, drawing, and making:

a. Ten geometries in the manner of Paul Klee
b. Depth to flatness
c. Pilgrim figures
d. Five objects
e. Transparency
f. In-betwixt
g. Elements
h. Color
i. Plan / Section / Elevation
j. Whiteness
k. Rotation
l. Sky
m. Dematerializing wood
n. Exhibition

Four rectangles encircle the center of the composition representing different scales, which relate back to the idea of a city.

The singular beam in the project is an absolute expression of a ceiling and a roof.

Blue, specifically ultramarine, coats the interior surface of the cube adding infinite depth to flatness linking the interior of the cube with the expanse of the sky above. The cube’s interior color allows the sky to come in and conversely color to spill out.

Arches, an iconic element of architecture, represent a monumental entry point into a city.

The field of columns demonstrates an understanding of proportion using the doric column, one of the three orders, as an exemplar.

The stair, “the queen of architecture”, treated as an object among other objects extends diagonally from the sky to the ground plane and provides a forced perspective contained within a rectilinear form.

a. Singular beam / Color: Blue
b. Arches
c. Field of Columns
d. Stairs
"The first principle of architecture for Rossi would be the possibility of achieving a form from a set of elements the relationship between the elements and the whole in which they are developed is the context of the architect's work."

-Rafael Moneo

Aldo Rossi: The Idea of Architecture and Modena Cemetery
"The difference between the drawings of the painter and those of the architect is this: the former takes pains to emphasize the relief of objects in paintings with shading and diminishing lines and angles; the architect rejects shading, but takes his projections from the ground plan and, without altering the lines and by maintaining the true angles, reveals the extent and shape of each elevation and side; he is one who desires his work to be judged not by deceptive appearances but according to certain calculated standards."

-Alberti

On Painting
LIST OF IMAGES

2. longitudinal elevation (series iii.) / original drawing: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead.

3. longitudinal section (series iii.) / original drawing: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and prismacolor verithin ultramarine blue, prismacolor premier cobalt blue.

4. transverse elevation (series ii.) / transverse section (series ii.) / original drawings: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead.

5. transverse elevation (series iii.) / transverse section (series iii.) / original drawings: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and prismacolor verithin ultramarine blue, prismacolor premier cobalt blue.

6. scale variants (series iii.) / original drawing: 24" x 36" at various scales / drawn on clearprint vellum using 4h lead; shaded with 2b lead and miscellaneous colored pencils.

7. composition (series ii.) / original drawing: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead.

8. section / element: stairs (series ii.) / elevation / element: stairs (series ii.) developed from forty-five degree plan rotation / original drawing: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead.

9. section / element: color (series ii.) / elevation / element: color (series ii.) developed from forty-five degree plan rotation / original drawing: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead.

10. section / element: column (series ii.) / elevation / element: column (series ii.) developed from forty-five degree plan rotation / original drawing: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead.

11. section / element: arch (series ii.) / elevation / element: arch (series ii.) developed from forty-five degree plan rotation / original drawing: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead.

12. worm-eye monomine (series iii.) / original drawing: 24" x 36" at 1:60 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and prismacolor verithin ultramarine blue, prismacolor premier cobalt blue.

13. sky with longitudinal elevation (series ii.) / original drawing: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and charcoal.

14. reflection of sky with longitudinal elevation (series ii.) / original drawing: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and charcoal.

15. test scene: sky with longitudinal elevation (series iii.) / original drawing: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and charcoal.

16. sky with longitudinal section (series iii.) / original drawing: 24" x 36" at 1:50 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and prismacolor verithin ultramarine blue, prismacolor premier cobalt blue and charcoal.

17. ground, sky with longitudinal section (series iii.) / original drawing: 24" x 36" at 1:50 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and prismacolor verithin ultramarine blue, prismacolor premier cobalt blue and charcoal.

18. sky with longitudinal section (series iii.) / original drawing: 24" x 36" at 1:50 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and prismacolor verithin ultramarine blue, prismacolor premier cobalt blue and charcoal.

19. sky with transverse elevation (series ii.) / original drawing: 24" x 36" at 1:60 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and prismacolor verithin ultramarine blue, prismacolor premier cobalt blue and charcoal.

20. sky with transverse elevation (series ii.) / original drawing: 24" x 36" at 1:60 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and charcoal.

21. sky with transverse elevation (series ii.) / original drawing: 24" x 36" at 1:60 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead.

22. four elevations: 2) sky with longitudinal elevation (series iii.) / original drawing: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and charcoal; 2) sky with transverse elevation (series ii.) / original drawing: 24" x 36" at 1:30 scale / drawn on clearprint vellum using 4h lead; shaded with 2b lead and charcoal.

* All images made by author.

BIBLIOGRAPHY


