Stories & Hypnaedificatiō

by

Adam Hatch

*A thesis submitted to the Faculty of Graduate and Post Doctoral
Affairs in partial fulfillment of the requirements for the degree of*

*Master
of
Architecture*

*Carleton University
Ottawa, Ontario, Canada*

© 2014 Adam Hatch

Abstract

Architects are not simply designers, and so it should follow that architecting is not designing. Through *Buildingtelling*, a method of conceiving buildings through details, architects can address the threefold condition of building that extends beyond design and into architecture. In *Hypnaedificātiō*, the dual text of this thesis, the act of Architecting is further interrogated through the story of the making of a *Library for Thinking* in a Norwegian garden of Eros.

In memory of Lawrence Hong

Thank you Winnipeg for making me who I am. Special thanks to my advisor, Federica Goffi, for guiding me in my thesis. Thanks as well to my past mentors Terri Fuglem, Patrick Harrop and Lisa Landrum, as well as to my dear parents for their support.

Table of Contents

<i>iii</i>	<i>Abstract</i>
<i>vi</i>	<i>List of Illustrations</i>
<i>1</i>	<i>Stories</i>
<i>2</i>	<i>Introduction</i>
<i>3</i>	<i>Chapter One: The Architectural Condition</i>
<i>12</i>	<i>Chapter Two: Buildingtelling</i>
<i>18</i>	<i>Conclusion</i>
<i>17</i>	<i>Hypnaedificatiō</i>
<i>18</i>	<i>Letter to Marcel</i>
<i>19</i>	<i>Part I</i>
<i>35</i>	<i>Part II</i>
<i>53</i>	<i>Epilogue</i>
<i>54</i>	<i>Notes on the Text</i>
<i>62</i>	<i>Appendix A – Vigeland Park</i>
<i>72</i>	<i>Appendix B – The Library</i>
<i>86</i>	<i>Appendix C – The Boudoir</i>
<i>92</i>	<i>Bibliography</i>

List of Illustrations

Stories

<i>Figure 1 - Viollet-le-Duc's proposal for a covered market</i>	Page 5
<i>Figure 2 - Three precast concrete Façades by Breuer; from left to right, IBM La Gaude, 1960, Flaine, 1962, Department of Housing and Urban Development Headquarters, 1964</i>	Page 6
<i>Figure 3 - Example of Aalto's freehand lines used when beginning the Kirkko ja Seurakuntakeskus</i>	Page 13

Hypnaedificatiō

<i>The comparison of Poliphilo in the woods to Errwynn in the sycamore grove (Godwin pg 14)</i>	Page 22
<i>In my dream the Library appeared like the Basilica of Santa Maria Novella in Firenze</i>	Page 25
<i>Miscipher Emerging from Under the Table</i>	Page 31
<i>The Fallen Pillar</i>	Page 34
<i>Interior Elevation looking Northwest from the Reading Room to the Wheel of Life</i>	Page 40
<i>Section through Meal Room</i>	Page 41
<i>Detail of Glass Square in Floor</i>	Page 44
<i>Interior Elevation of Southeast wall of the Reading Room</i>	Page 46

<i>Cabinet of Curiosity</i>	Page 47
<i>La Perfezione (Gallaccini pg 83)</i>	Page 48
<i>Sophia's Boudoir</i>	Page 50
<i>Thermal Baths</i>	Page 52

Notes on the Text

<i>Vaults and the Eye; the Mistake and the Solution (Gallaccini pg 33)</i>	Page 57
<i>Roman Baths at Bath</i>	Page 60

Appendix A – Vigeland Park

<i>Location of Vigeland Park in Oslo & Line Indicating Main Axis of Park</i>	Page 63
<i>Plan and Section Down Main Axis of Park</i>	Page 64
<i>Main Gate</i>	Page 65
<i>Tree Lined allées</i>	Page 65
<i>View to Bridge from Across the Pond</i>	Page 66
<i>The Fountain, with the Monolith Visible in the Background</i>	Page 66
<i>Stairs Leading up the series of Terraces</i>	Page 67
<i>The Monolith Plateau</i>	Page 67
<i>View From the Monolith Plateau to the Open Plain</i>	Page 68
<i>Wheel of Life</i>	Page 68
<i>The Monolith as seen from the Open Plain at Sunset</i>	Page 79
<i>Bronze Sculpture on the Bridge</i>	Page 70
<i>The Fountain as seen from the Second Terrace</i>	Page 70
<i>The Bridge at Sunset with the Monolith in the Background</i>	Page 71

Appendix B – The Library

<i>Site Plan (Before Library)</i>	Page 72
<i>Site Photographs</i>	Page 73
<i>Process Drawings</i>	Page 74
<i>Site Plan (With Proposal for Library)</i>	Page 75
<i>Lower Level Floor Plan 1:250</i>	Page 76
<i>Main Level Floor Plan 1:250</i>	Page 77
<i>Second Level Floor Plan 1:250</i>	Page 78
<i>Third Level Floor Plan 1:250</i>	Page 79
<i>Section A-A</i>	Page 80
<i>Site Section Through to Monolith</i>	Page 81
<i>Southeast Elevation 1:250</i>	Page 82
<i>Northeast Elevation 1:250</i>	Page 83
<i>Northwest Elevation 1:250</i>	Page 84
<i>Southwest Elevation 1:250</i>	Page 85

Appendix C – The Boudoir

<i>Initial Sketch of Boudoir</i>	Page 86
<i>Sketch Models of the Boudoir</i>	Page 87
<i>Sketches of the Boudoir</i>	Page 88
<i>Sketch Model of Cabinet Door</i>	Page 89
<i>Plan of Boudoir 1:10</i>	Page 90
<i>Section Through Boudoir 1:10</i>	Page 91

— *Stories* —

Introduction

What is *Architecting* if it is not designing? The condition of building is one that demands more than just the consideration of outward appearance when conceiving buildings, and so architects distinguish themselves from designers through their actions in responding to the beyond-visual needs of buildings; *Architecting* is a manifold making. But how is an architect to do this? History, as viewed through episodes,¹ can demonstrate how architects of past epochs have performed the noble duty of Architecting, and provide some guidance to the cause of searching for a method of Architecting that addresses the condition of building, as well as technical and cognitive concerns surrounding the practice of architecture. A method of conceiving buildings based on details and performed through storytelling, a method concerned with a deeper understanding of Beauty that penetrates resistance and usefulness along with aesthetics, is needed so that an architect can be the protagonist² to lead a team of specialists in the telling of architecture and distinguish the heroic Architect from the ignoble designer.

1. The term *episodes* comes from a course taken at the University of Manitoba that referred to history as a series of “episodes”

2. Architects as related to Protagonists comes from Lisa Landrum, especially her article cited in this thesis

The Architectural Condition

Before a method of thinking-out or making architecture can be addressed, we first must understand what it is that we wish to make; architecture. In a discipline that dances so voraciously between art and science, an all encompassing definition of what architecture *is* proves to be a very difficult task. Are the fantastic drawings by Piranesi or Boullée to be considered architecture, or are they only architectural? Is a detail to be called architecture, or is it just a part of architecture? Is a city in itself architecture, or simply comprised of architectures? Perhaps it is best, then, to state that the specific aim of the proceeding method is towards the thinking-of and making of *to-be-built* buildings (the entire building being the unit of architecture under consideration) and to examine not what a to-be-built building *is*, but rather what it *has*.

It is necessary, though, to state what is meant by a to-be-built building. This term suggests that there is a serious intent, not just a wish, to build the scheme being developed and, as such, the realities of gravity, codes, construction and all other considerations not necessarily present in theoretical works must be dealt with. In brief, a to-be-built building implies that the building is going to be built, and not just that it could be built. So then, what do to-be-built buildings all have?

There is a triad that describes the basic needs of every building, and the oldest surviving elucidation of this triad is found in the Latin words Vitruvius used in *De Architectura* to describe its three pillars; *Firmitas*, *Utilitas* and *Venustas*.¹ *Firmitas* refers not only to *strength*, as Granger has translated it,² but also to the *lastingness*

of a building, or as Schofield has translated the term, its *durability*,³ throughout his treatise Vitruvius is giving advice on how to make a building last “forever.”⁴ In turn *Utilitas* has been translated by Schofield as meaning *utility*,⁵ but this word has also been translated as *convenience* by Morgan,⁶ and can be thought of as the *usability* of, in this case, a building.⁷ The last pillar of the triad, *Venustas*, is the most troubling. Often qualified by translators, including Schofield, as meaning *beauty*,⁸ this word does not deserve⁹ such an oversimplification, as the concept it describes has been less vaguely translated by Granger as *grace*.¹⁰ In addition, Stephen Fai has pointed out that *Venustas* means *of Venus*, and evokes manifold qualities of the Roman goddess, and not exclusively beauty.¹¹ Though it is not necessarily incorrect to characterize the notion of *Venustas* as beauty, a more accurate qualification is to think of the concept described by *Venustas* as specifically referring to the ornamentation, or perhaps even aesthetic of a building.¹²

Though invoked by Vitruvius in a treatise that aimed to set out the principles of a diverse discipline by codifying rules for building that were attached to a particular *style*, which for our purposes can be thought of as a method of building with its own set of values, the Vitruvian triad¹³ transcends architectural style through succeeding architects of a diverse collection of epochs that have dealt with *Firmitas*, *Utilitas* and *Venustas* in their own way through their thoughts and buildings; so let us view some of these episodes in the history of architecture.

Leon Battista Alberti, a humanist scholar trained as an academic and not as an architect, was one of the first to decipher Vitruvius’ treatise after its wisdom had been hidden in monasteries during the middle ages,¹⁴ as then-contemporary builders “were not equipped to deal with the transposing of a difficult and forgotten language and profession into modern terms.”¹⁵ Alberti’s intent was not to translate or comment on Vitruvius,¹⁶ as the Florentine lamented that the Roman wrote in such an unrefined way that he may as well not have written at all, such that the duty fell to Alberti to draw upon varied sources, from

writings to ruins, in order to save the discipline of architecture.¹⁷ In *De Re Aedificatoria*, a book that is considered to be the first modern treatise on architecture and to have set the standard for following treatises and architectural thought,¹⁸ Alberti suggested that the Vitruvian triad comprises “the conditions that apply to every form of construction.”¹⁹ That Alberti, by many accounts a brilliant thinker,²⁰ was unable or unwilling to change the pillars of the triad – though he did use different words, such as *Aptum* instead of *Utilitas*²¹ – is significant when held against his complaint towards *De Architectura*, and noting that Alberti introduced his own six elements of architecture that differed from Vitruvius’.²² On top of this, Alberti structured his treatise around the three pillars of the triad, dealing with issues related to *Firmitas* in books I-III, matters of *Utilitas* in books IV and V, and affairs of *Venustas* in books VI to IX.²³

In Andrea Palladio’s *I Quattro Libri dell’Architettura*, the first chapter of the first book begins by discussing the triad, using *Commodita*, or convenience, to describe *Utilitas*.²⁴ The triad is not just mentioned in passing though, it is present in thought throughout Palladio’s treatise; when discussing the distribution of rooms, for example, the recommendation is made that rooms be placed equally on either side of the central hall and in correspondence to each other so that their walls can support the load of the roof evenly.²⁵ Palladio’s conception of *Venustas*, invoked in part by symmetry, was not independent of *Firmitas*, and these two pillars are woven into his discussion of the distribution of rooms, a topic related to *Utilitas*; the pillars of the triad are interdependent, no pillar can stand on its own, nor can any be removed.

The interdependent triad is not only present in architecture that adheres to Classical dogma; in lecture XII of his *Entretiens sur l’architecture*, Eugène Emmanuel Viollet-le-Duc is arguing not only that an architect needs to have a knowledge of building in order to be more than simply “a designer – an arranger of outward forms,”²⁶ but that a design and its construction are not exclusive of each other.²⁷ For Viollet-le-Duc, different materials

and technologies call for different forms, and the materials and technologies available to architects of his time were not to be used to recreate Greek and Roman forms, but to create a new aesthetic that was generated from the capabilities of the then-new material of iron.²⁸ “If we would invent that *architecture of our own times* which is so loudly called for, we must certainly seek it no longer by mingling all the styles of the past, but by relying on novel principles of structure;”²⁹ in other words, form and ornament are related to material and structure. The third pillar of the triad, the convenient use of buildings, is also present in Viollet-le-Duc’s discussion; in his design for an assembly hall over a covered market, the French architect and pedagogue explains how oblique iron support columns set at sixty degrees are not only a rational use of structure that creates a new aesthetic generated by the capabilities of cast iron, but also dispenses the need for an “inconvenient row of columns along the side of the street,”³⁰ and creates a more convenient space for the market to perform its function.³¹

Figure 1. Viollet-le-Duc's proposal for a covered market

In his 1892 article *Ornament in Architecture*, Louis Sullivan suggested that the mass-composition and decorative system of a structure are inseparable,³² anticipating the American's famous assertion that "form ever follows function."³³ Explicitly addressing two pillars of the triad, function and form, Sullivan's *The Tall Office Building Artistically Considered* from 1896 goes on to discuss the technological advancements of steel structure as a part of the tall office building; the structure allows for the stacking of functions, whose needs must be considered and then reflected in the layout and ornamentation of the building.³⁴ For Sullivan this meant that the offices, stacked on top of each other like cells in a honeycomb,³⁵ each having the same unchanging function would each have the same unchanging form, unlike the lower two storeys which would have a special character, and the attic which would again differ in ornament.³⁶

Even in the Modern movement architects were displaying an awareness of the interdependency of the triad; Marcel Breuer's experimentation with precast concrete facades serves as a salient example of how all three pillars come together in an architectural language. Breuer's deep, sculptural panels delight the eye with their play of sun and shadow,³⁷ but also accommodate mechanical elements,³⁸ bear loads,³⁹ and act as an integrated sunshade,⁴⁰ unlike the Bauhaus master's previous "decorative" sunshades.⁴¹

Figure 2. Three precast concrete Façades by Breuer; from left to right, *IBM La Gaude*, 1960, *Flaine*, 1962, *Department of Housing and Urban Development Headquarters*, 1964

The interdependent triad of *Firmitas*, *Utilitas* and *Venustas* has come a long way since Vitruvius, and has been interpreted and balanced differently during various episodes in the history of architecture. Together, the triad forms the core of what all buildings possess, and thus the triad forms the condition of building. As such, the triad is what architects must deal with when making the scheme of a building, and the triad will be interpreted and balanced in a manner particular to each individual architect and epoch. We do not view *Firmitas* as Vitruvius did, though, however the concept behind this word remains relevant to buildings, so let us think of this concept as *Resistance*; a building must resist, among other things, gravity, fire (long enough for those inside to escape at least), weather and time. We do not view *Utilitas* as Vitruvius did, yet again the concept behind this word remains relevant to buildings, so let us think of this concept as *Usefulness*; proper dimensions, among other considerations, must be given so that any intended activities may be sensibly performed and a building should be useful in serving its purpose, whatever that purpose may be. But what can be said of *Venustas*?

Claude Perrault points out in his famous preface that things we view as Positively beautiful are often only so because tradition has made them become accepted as beautiful,⁴² and that if there were rules governing the proportions of architecture, which many Classical architects believed was what created beauty in buildings, then architects would be able to agree on these rules in the same way that musicians can all agree on a consonance.⁴³ So how shall we think of *Venustas*?

This is why it becomes paramount that *Venustas* not be thought of as beauty, because there is no irrefutable way to determine if something is beautiful. Let us not attempt to create rules on an unrule-able subject, but instead appreciate the sincere aesthetic actions of architects as long as they do not come at the expense of resistance and usefulness. Rather than be *of Venus*, let the visually-oriented actions of architects and the third pillar of the triad be known as *Aesthetic*.

If *Venustas* is Aesthetic, and as such simply the appearance of the building whether it suits popular taste or not, then Beauty is what can unify the triad into a single, interdependent threefold. This notion of Beauty, however, is not *of Venus*; it is simultaneously *of Resistance*, *of Usefulness* and *of Aesthetic*. In *De Re Aedificatoria*, Alberti's idea of Beauty is expounded as "that reasoned harmony between the parts within a body, so that nothing may be added, taken away, or altered, but for the worse."⁴⁴ This differs from Alberti's view of ornament which "has the character of something attached or additional,"⁴⁵ and departs from Vitruvius' thoughts that "beauty will be achieved when the appearance of a building is pleasing and elegant and the commensurability of its components is correctly related to the system of modules."⁴⁶ Alberti's description of Beauty has the need to be penetrated by concerns for Resistance and Usefulness in addition to Aesthetic when calling something Beautiful.⁴⁷ It is for the worse that a building should collapse because its structure was lacking, so when a structure is resistant it can be called Beautiful. Perrault argues that Beauty is not found in inconvenience,⁴⁸ so when the dimensions of a building make it useful in performing its function it can be called Beautiful. As for the aesthetic, this pillar has no rules to judge its fulfillment, so let us appreciate the sincere aesthetic actions by architects as *contributing* to a beauty that is more than skin deep. Thus, the triad is unified into the threefold notion of Beauty that forms the condition of building.

There is one final point to be made on architecture before addressing architecting, and that is that buildings must be made for the present, but with an openness to the future, as change has become a substantial part of the contemporary Western world.⁴⁹ Architects must respond to the societal needs of their day while using the technologies available to them; architecture must be contemporary,⁵⁰ and if Beauty is the condition of building, then architects need to have *beautiful thoughts*.

1. As pointed out by Fai in Vitruvian Exercises
2. Granger
3. Schofield pg 19
4. For an example of this, see Vitruvius' description of the different kinds of walls - book II chapter VIII (pg 50-57 Schofield trans.)
5. Schofield pg 19
6. Morgan
7. Oxford Reference
8. Schofield pg 19
9. Florence Welch: "Poor language, it doesn't deserve such treatment!"
10. Granger
11. Fai (Vitruvian Exercises)
12. *Architectural Theory* pg 24
13. a term borrowed from *Architectural Theory* pg 6
14. Wiebenson: introduction/*Architectural Theory* pg 10
15. Wiebenson: introduction
16. *Architectural Theory* pg 10
17. Alberti: book VI introduction (pg 154 Rykwert et al trans.)
18. *Architectural Theory* pg 6, 8
19. Alberti: pg 155 (Rykwert et al trans.)
20. In the introduction to Leoni's translation of *De Re Aedificatoria*, the translator supplies many stories of Alberti's brilliance across a number of disciplines; for example, how Alberti impressed a council of illustrious men headed by Lorenzo de' Medici with his interpretation of Virgil's Aeneid
21. Westfall pg 67
22. Vitruvius' six principles are *ordinatio* (planning), *dispositio* (projection), *eurythmia* (harmony), *symmetria* (modularity) *decor* (appropriateness) and *distributio* (distribution) [pg 13 Schofield trans.]; whereas Alberti's six elements are locality, area, compartition, wall, roof and opening [pg 8 Rykwert et al trans.]
23. Alberti: pg 155 (Rykwert et al trans.)
24. Palladio pg 8
25. Palladio pg 64
26. Viollet-le-Duc pg 53
27. Ibid
28. Viollet-le-Duc pg 53-9
29. Viollet-le-Duc pg 59
30. Viollet-le-Duc pg 62-4
31. Ibid
32. Sullivan *Ornament in Architecture*
33. Sullivan *Tall Office*
34. Ibid
35. Ibid
36. Ibid
37. Marcel Breuer titled his own book *Sun and Shadow: The Philosophy of an Architect*
38. As in Breuer's Torin Headquarters, 1966 (Gatje pg 180)

39. As in Breuer's Department of Housing and Urban Development Headquarters, 1964 (Gatje pg 178)
40. As in Breuer's IBM La Gaude, 1960 (Gatje pg 178)
41. Gatje pg 171-180
42. Perrault pg 51
43. Perrault pg 48
44. Alberti: pg 156 (Rykwert et al trans.)
45. Ibid
46. Schofield pg 19 (as pointed out by Westfall pg 67-8)
47. Westfall pg 67-8
48. Perrault pg 172
49. Fabun
50. Viollet-le-Duc suggests in lecture XII of his *Entretiens* that history is a knowledge to be built upon: "an architecture is *created* only by a rigorously inflexible compliance with modern requirements, while the knowledge already acquired is made use of, or at least not disregarded. (Viollet-le-Duc pg 59); Aalto's biographer Schildt points out that Aalto viewed history as a stock of solutions amassed by earlier generations (*Aalto in his own words* pg 33)

Sources of Images

Figure 1: Farrant et al.

Figure 2: Gatje pg 178

The title of this chapter is inspired by Hannah Arendt's *The Human Condition*

Buildingtelling

An architect is not a designer. Though visual design is a glorious part of architecting, it is not the only component, as the condition of building rests simultaneously upon all three pillars discussed in the preceding chapter. What separates an architect from a designer is this: architects consider resistance, usefulness *and* aesthetic in their thinking of buildings, in whatever balance they deem appropriate, though in ignorance of no pillar; designers, and here we refer only to those who design buildings and not those who design industrial objects, furniture or otherwise, view aesthetic as their exclusive concern, and the other two pillars of the triad are only necessary evils.¹ In searching for a method of tridactically² thinking out buildings, and thus architecting and not designing, there are both technical and cognitive affairs that need to be attended to.

The main technical concern when architecting is drawing, as this is the way in which architects think out their ideas. However, before drawing for the purpose of creating architecture can begin, a thought about the architectural project must be had. The degree to which this pure architecture in the mind will be thought-out will vary; as Frank Lloyd Wright wrote in 1928, “conceive the building in the imagination, not on paper but in the mind, thoroughly - before touching paper,”³ whereas Alvar Aalto often began projects only with the main detail of the building, and worked out his incomplete ideas through drawing.⁴

In drawing, the pure building from the mind will be confronted with increased accuracy, and changes will ensue. In *De Re Aedificatoria*, Alberti confesses:

“I have often conceived of projects in the mind that seemed quite commendable at the time; but when I translated them into drawings, I found several errors in the very parts that delighted me most, and quite serious ones; again, when I return to drawings, and measure the dimensions, I recognize and lament my carelessness; finally, when I pass from the drawings to the model, I sometimes notice further mistakes in the individual parts, even over the numbers.”⁵

Drawing is the intermediary step when architects translate their thoughts into buildings, and in translation from mind to paper by drawing lines around a thought,⁶ that thought transforms and may lose some of its qualities as, similar to different tongues, the language of the mind does not perfectly align with the language of drawing.⁷

Different types of drawings serve different purposes to architects, and the standard practice of using drawings as a set of instructions for builders began with Raphael who, “as he had numerous other commissions, needed to devise a system that would ensure the continuance of the work if he was absent.”⁸ Different architects think in different ways, and though there are no rules regarding how to draw when developing architecture, whether orthogonally or perspectively or otherwise, there is a warning to be observed, and that is the warning that Heidegger gives in *The Question Concerning Technology*. Humans must question their technology so as not to become its standing reserve, that is to say that the technological object must be what is standing by waiting to be used by the human and not vice versa; humans should not be a standing reserve waiting to be used by technology.⁹ A brief examination of how this pertains to architecting can be demonstrated by viewing a Finnish episode in the history of architecture and architecting.

When Alvar Aalto began his career as an architect in 1923,¹⁰ his projects were thought out using romantic renderings and mappings of ornamentation. By the end of his career, Aalto had changed his method of drawing-for-architecting to beginning with a rough sketch that was to be refined by draftspeople with measured, orthogonal drawings. It was that beginning sketch, though, that gave Aalto’s buildings his signature, for the Finnish

master did not rely on drawing tools to create these initial drawings but rather he performed them freehand. By not relying on drawing tools to create forms, Aalto did not become the standing reserve of the technology he used, and his lines, whether or not they are indeed inspired by the Finnish landscape,¹¹ belong to him and not the pencil used to draw them. The same principle can apply to architects today in a practice that heavily uses computer assisted drafting tools; the powerful tool of the computer is to be used by the architect and not the other way around. Regardless of whether using the technology of pencil or that of computer, drawing must be done with the hand, which is guided by the mind, and exploiting the capabilities of whatsoever technology is being used, but not being dictated by the capabilities of the technology itself.

Figure 3. Example of Aalto's freehand lines used when beginning the *Kirkko ja Seurakuntakeskus*

Beyond these technical and technological concerns, there is a cognitive concern regarding architecting that serves as our last stop before expounding a method of architecting that satisfies all that has been said thus far, and this last concern is Knowledge. Knowledge is not the same as information; it is an embodied consciousness that allows humans to dwell rather than simply survive.¹² Architecture is the embodiment of Knowledge, not information, and “in order to posit a symbolic order, the architect needs to have his or her own *storia*, the history-theory which is not a method but rather a new *mythos*, an understanding of the meaning of the architect’s actions “here and now” in relation to the totality of culture.”¹³

The best way for architects to gain Knowledge is through drawing, as “the right hemisphere of the brain, the side that is devoted to spatial, holistic and synthetic cognition, is also devoted to the cognitive processes involved in the act of drawing,”¹⁴ which means that drawing helps one to see and learn.¹⁵ Drawing analytically, not artistically, as a tool for gaining Knowledge has a long history in architecture; medieval apprentices went on tours of Europe to study and draw existing architecture and bring their gained knowledge back to their guild and add to the guildbook; during the Renaissance, personal sketchbooks supplanted the collective guildbooks when architects and amateurs¹⁶ journeyed to draw the ruins of antiquity, as Alberti and others claimed they did;¹⁷ and in the pedagogy of the Ecole des Beaux Arts, students were required to study and draw historical architecture and then synthesize the knowledge gained from this exercise into a new architectural project.¹⁸ This tradition has faded in contemporary architectural education, however it did continue into the Modern movement in architecture through architects such as Aalto, Louis Kahn and Le Corbusier.¹⁹

If having Knowledge is a key part of architecting, then how is this Knowledge used? “Our personal *storia* becomes the normative intellectual framework for ‘making,’”²⁰ and thus architecting is storytelling,²¹ or, in the case of the method we are seeking, architecting is

buildingtelling. Just as in telling a story, in telling a building, details become of utmost importance. Using details to generate a building²² begins with the parts and not the whole; working outward from within,²³ the building begins to form itself and is not the imposition of an object on a site but rather the response of details to a place and story. In telling a building through details there is a scale of detailiality; a chandelier is a detail in a room, but the chandelier has its own details of glass, frame and hanging apparatus, which in turn have their own details of production, finishing, connection and materiality. In addition to this, the room that the chandelier hangs in is a detail of the building, which is a detail of the site, which serves as a detail of the city, and the scale of the detail can be examined almost infinitely in either direction. In ascertaining what a detail is, then, it becomes more fruitful to think of details as joints,²⁴ and that “details can be ‘material joints,’ as in the case of a capital, which is the connection between a column shaft and an architrave, or they can be ‘formal joints,’ as in the case of a porch, which is the connection between an interior and an exterior space.”²⁵

In the buildingtelling method of architecting, a building begins with the most important detail and is woven into a complete fabric by the connection of formal details through material details, all modulated and moderated by the initial detail.²⁶ By initiating a path of details, an architect is constantly confronted with how one detail connects to another, and, being woven in this manner, a building told through details confronts all three pillars of the condition of building, as joining materials and spaces requires considerations *of Resistance, of Usefulness* and *of Aesthetic*. Details, therefore, are units of Beauty.

1. Jones pg 269 (recall Viollet-le-Duc's suggestion that a designer is an arranger of outward forms)
2. Just as in a didactic tale there is an ulterior motive, the tridactic nature of the triad is that each pillar simultaneously has the other two as ulterior motives
3. Hewitt pg 3
4. Ibid, in addition to my own research conducted at the Aalto archives in Helsinki from January-April of 2013
5. Alberti pg 317
6. Rykwert *Translation* pg 2
7. Ibid
8. Powell et Leatherbarrow pg 19
9. Heidegger
10. Heporauta
11. As suggested by Schildt, "The wavy lines which characterized his architectural idiom were obviously related to the winding shorelines and meandering terrain contours on the maps of his father the surveyor." (*Aalto in his own words* pg 21)
12. *Knowledge* pg 57
13. Ibid
14. Crowe et Hurtt pg 7
15. Ibid
16. *Architects and Amateurs* is the title of a section in Wiebenson
17. Alberti: pg 154-5 (Rykwert et al trans.)
18. Historical information on the history of travelling and drawing from Crowe et Hurtt
19. Crowe et Hurtt
20. *Knowledge* pg 58
21. As Frascari also suggests in *Places for Thinking* pg 12, and in describing the plot of the tale of a building unfolding through details in *The Tell-the-Tale Detail*
22. *The Tell-the-Tale Detail*
23. Ibid
24. Ibid
25. Ibid
26. Ibid

Sources of Images

Figure 3: Image courtesy of the Aalto Archives in Jyväskylä

Conclusion

In performing the art of building, the threefold condition of building is the reality that architects respond to as more than just visual designers. The interpretation of the interdependent triad of Resistance, Usefulness and Aesthetic is personal to each architect, but each pillar must be addressed through architecting if this process is to be more than simply designing. Episodes in the history of architecture can reveal some principles, though not rules, behind the architectural creation of edifices, and there is a method of architecting that addresses the condition of building through the technical and cognitive affair of drawing with Knowledge; buildingtelling. But why does any of this matter?

In a practice that awards formal, programmatic, structural or other innovation as successful at birth,¹ the perceived goal of contemporary architecture has become defined by the ability to create a momentary sex appeal through building.² A dream building soon becomes a nightmare, though, as time tests the exquisite corpse and all too often the only innovation that lasts is that of finding new ways to leak.³ It is not logical to hark back to a system wherein architects take on all the roles of structural engineer, mechanical engineer, electrical engineer, interior designer, landscape designer and every other specialist involved in the production of a building, but it is critical that architects act with an awareness that the manifold needs of buildings extend far beyond program and form. Buildingtelling is one method, not the universal rule, that architects can use to generate buildings that are Beautiful in the penetrative sense, and thus is a method that contemporary practice needs.

1. Brand pg 55

2. Ibid

3. Brand: pg 58

—Hypnaedificātiō—

Dear Marcel,

I am writing to recount to you a strange affair. Love for my art and science has brought a strange sleep on me of late, which has revealed to me many things worthy of knowledge and memory. You will find this account to be faithful, but I must caution you not to read this as though it were a collection of axiomatic statements assembled into an explicit truth. Paul, the convert, was brought to see the errors of his way, and so too have I been shown my own misdeeds and injustices; please forgive them and remember the joy of errors.

Yours Truly,

Errwynn

— *Part I* —

The comparison of Poliphilo in the woods to Errwynn in the sycamore grove (Godwin pg 14)

Sweet was the air; the night was of Venus. I stumbled through the sycamore grove, digesting the lovely sight of the hand-painted trunks. Drunk with beauty, I leaned against the torus of a slender laurel tree and sighed, as every lover does. I waited there for the earth to take me, but instead the moon struck me with the sun's light and revealed before me eight glowing pink windows set into a door set into the side of the hill on which I was set. The sultry summer air around me could only feel cold when held against such soft, warm light, and I was a prisoner to its rose-coloured thrall. I began towards the opening with an eager pace, and as I pushed open the door I realized that there was indeed no floor inside this royal mount, and that is when I fell.

* * *

12 A lucid phantasm found me on a bridge lined with a cast of cast figures
caught in the drama of love in life. Though I longed to examine each of those
around me, the bitter night forced the need for warmth upon me, and so I made
my way to the end of the bridge and continued upon its path, noticing that I was
in a strange garden surrounded by a dark forest. It was not long before I came
to the foot of a great fountain, magnificently lit by the moon, whose sweet light
hesitated as it touched the rough stone skin of the six Atlas' holding up a large,
shallow dish. The grace with which these men stood before my eyes moved me,
for their dutiful guard against gravity brought great beauty into this garden;
surely the author of this work had a concerned soul, mind and hand. Behind this
prodigious configuration there was a series of steps, and as much as I longed to
bathe in the waters of this fountain, I had no cryogenic desires, so I took flight.

I passed each lantern on this stairway with care, as there was no handrail;
24 such a thing would be ugly after all, and why live in an ugly world when you can
25 die in a beautiful one? This petty concern for my safety occupied my attention as I
climbed each step, to the point that when I reached the final landing I was nearly
thrown to the ground in awe at the sight in front of me. A sublime obelisk loomed
before my eyes; my own humanity was disclosed to me through its beauty and terror.
How shall I describe it to you? The struggle of humankind had been carved in stone,
30 into a giant monolith that held one hundred and twenty-one bodies clamouring for
each other, embracing their fellow person in love and empathy, holding at the top a
32 small child. Around this tower of dread and splendour were scattered more scenes
in stone, and though impossible, they showed deeper love than the life which they
imitate. The slow crescendo that had brought me here from the dear pont was now
trumpetitious and frightful, but I dared not swoon at the movement of my soul.

With solemn grace I passed through the familial scenes around me, moving onward as the night grew colder. I reached the opposite side of the plain in which the obelisk stood, and through the gate I saw the imposing facade of a majestic building. I pushed open the gate and set forth toward the door of whatever curious edifice sat in front of me. As I reached the portico of the building I passed through the slender columns, and without pause I knocked on the large wooden door ...

* * *

43 I waited nervously, as I knew not whose garden I tread in, but it was not long before I heard slow footsteps stirring from within. As the steady beat reached nearer to me I became entranced by its rhythm until the meter ended abruptly and the door opened. A woman with a bag slung over her shoulder faced me:

“Who are you?” she asked, to which I replied,

“I am Errwynn, a lover of architecture,” and the woman welcomed me into the cloak room that served as a vestibule and told me that her name was Sophia. She took my jacket and said:

50 “You look like you have been lost in the garden of Eros, but now you have
51 reached the library of knowledge. Here is a place to think, not just a collection of
information with places to read. I am the curator of the knowledge, and this is where
53 I dwell.” With these words the woman opened the door to the main hall and guided
me through the library. She took me past hand-carved bookcases, each with beautiful
joint-work and motifs of playful youth and lustful adolescents chasing each other
through the rows of volumes. High above the main aisle there was a broad walkway
enclosed in white marble inset with gems and precious stones, and supported by the

cast iron columns that graced the sides of the path below; Sophia told me that this was the cabinet of curiosity and that it housed objects of wonder and rare books.

As we reached the end of the bookshelves we came to a bridge of alabaster over a sunken room. This room, Sophia informed me, was the registry where she would catalogue new knowledge. In the polished stone of the bridge I saw the reflection of a small room of pink glass suspended above us by iron rods. What could be so precious as to dwell in this rose beauty?

“That is my boudoir, where I lament over the loss of knowledge,” Sophia confessed to me. Across the bridge over the registry lay a magnificent reading room with a semicircular wall of high windows binding it to the rest of the library. I stood on this bridge, with the curator, and traced the library with my eyes, looking at it as though I were drawing it. I committed its details to my memory so that I may draw for you, Marcel, how the library looked, as you will understand more through my drawings.

Suddenly there was a crash of glass as one of the windows of the cabinet of curiosity burst apart and four masked figures rapelled to the floor of the great hall, one of them carrying a very old tome. I turned to Sophia and saw a look of odium rapidly brew on her face before turning again to look at the four figures. Upon seeing us the miscreants took flight, and were pursued by the curator and I as she yelled profanities at the thieves.

Down the main hall we chased them, and through the vestibule and into a stairwell the four ran. Through stairwells and halls I followed Sophia as the walls around us changed from smooth, polished revetment to rough stone, suggesting that we were in the crypt of the library. The thieves were faster than the curator and I, and as we entered a cavern carved out of the granite that the library sat on, I could see them in the distance passing through a large gate and shutting it behind them.

Sophia and I paused at the gate as I turned to my dear guide and confessed that I feared what might lay ahead.

“You must not be afraid,” said the curator to me, and I placed my trust in her as together we threw open the gate and entered the darkness.

* * *

No pleasant thought entered my mind as I entered the cave, yet before us lay a pleasant path leading down an allée lined with ruined pavilions, each different in appearance from the previous. There were what appeared to be primitive chanties, amongst which someone had shoved a sculpture of a man with his hands pitched
91 over his head. The ruins formed a marvellous medley; some perpetuated Classical
92 ornamentation, while other evolved it; some pavilions stripped themselves of ornament, while some were built of glass; one was even topped by a golden sphere.

Before long, Sophia and I found ourselves at the end of the allée and at the bank of a marsh. Sophia reached into her bag and pulled out two masks and a horn.

“Put this on” she said as she handed me a mask. I placed the disguise over my face and tied it around my head as Sophia blew into the horn.

“Wh-” I began to ask before the curator silenced me, and I turned to see a gondola approaching. Was it the dreaded Charon? It was not, for around the oarsman’s eyes were no wheels of flame, only black rectangular frames.

Sophia and I stepped into the ferryman’s vessel, and he guided us through the boggy waters as I placed my head in the lap of my guide and drifted into sleep.

* * *

“To your feet! We are arriving ...” said Sophia, and I looked up as we passed beneath a pink fluorescent sign that read “Venustas.”

Sophia made her payment to the ferryman, and we disembarked from the gondola. Before us stood a marvellous cave, echoing with music and the bustle of a festival. Masked figures filled streets covered by rows of banners and lights, and we began to make our way through the crowd.

“Where are we?” I asked my guide.

“These are the ritual grounds of the Cult of Venustas” she replied. I stared at her dumbfoundedly, as I knew not of this cult. “Their leader, Miscipher, considers himself an architect, and conducts an orgy of building wherein every participant aims to satisfy their own goals in assembling parts into an incohesive *frankenbauen* without a common goal. As Miscipher ignores all things that are not form, the results are buildings filled with mistakes-”

117 “But every building has mistakes,” I interrupted, “the whole discipline of
architecture is built upon mistakes.”

119 “Yes, but these mistakes are ones that should not be made; leaking roofs,
120 blindingly reflective facades, excessive heat gain. The knowledge exists to avoid these
121 mistakes, but Miscipher just does not care as he believes that the role of the architect
122 is exclusively to form the program of a building from a concept. Be careful now, we
 are almost at the public square where the ceremony takes place,” and with that we
 rounded a corner and emerged into a crowded piazza at the foot of a small cliff.
 In the centre of this plaza was a large pneumatic machine behind a wooden stage,
126 and atop the cliff there was a crystalline building enclosed by a white Cartesian
127 scaffold. On the stage there was a tall, slender man wearing a goat-horned mask and
 standing next to a plinth on which there was a veil covering a rectangular object.

* * *

 “Join me, my fellow builders,” began the svelte man on the stage, “for
 tonight we have a most marvellous artefact for our festivities; the Hypnerotomachia
 Poliphili!” The crowd filled with gasps and cheers as the man on stage unveiled the
 stolen tome with a dramatic whisking away of the white veil. “We begin our ritual
 at midnight,” said the man, exiting the stage and leaving the crowd in an uproar.

 “What’s going on?” I asked my guide.

 “The man before you is Miscipher, and he will be initiating the orgy of
 building at midnight when he feeds the Hypnerotomachia to the machine of
 reductions that you see behind the stage. The machine will reduce the erotic text to
 an oversimplified concept, from which a design will be contrived in accordance with
 the theme.”

“That sounds terrible,” I quivered.

“Well it’s not all that bad,” said a voice from behind us, and I turned around to see Miscipher and the four thieves from the library pointing small pistols at us. “I think you’ll enjoy it,” he said as his henchmen took us by the wrists and lead us through the crowd to the base of the cliff and up a path lined with drunken revellers.

* * *

Oh what a strange night this was, as Miscipher’s men lead us not to a prison cell but instead to a table set with a feast for sixteen people. The henchmen sat us down on opposite sides next to the head of the table, with two men standing behind each of our chairs.

“You’re the first to arrive,” remarked Miscipher as he left the room, “how gauche.”

Yet surely, one by one, the rest of the guests appeared and took their seats, and when the last guest had stumbled in and taken his place the great doors of the feast hall closed, and the room fell silent.

“Tonight,” echoed a voice above the table as Miscipher descended from the ceiling on a green glass chandelier, “we have two very special guests in our presence.” As the chandelier reached the surface of the table the leader of the cult delicately stepped off of it and the masterful work of glass rose back to the ceiling, filling the room with its green light. “Hiya Sophia,” Miscipher said to the curator, crouching on the table in front of her with a toothy grin. He then turned to me to ask, “and who might you be?” I introduced myself to the madman as I had to the sweet librarian,

“I am Errwynn, a lover of architecture.”

“Architecture?” repeated Miscipher, his grin growing wider, “what is it that you love about architecture?”

“I love lovely spaces, places in which to live beautifully and fall in love,” I responded as if in a dream.

“Architecture is not about people, it’s about buildings,” interrupted Miscipher.

169 “No it’s not!” yelled a woman from down the table, “it’s about fostering a
space in which humans can speak and act; these are the highest aims of humankind
171 and thus the role of architecture is to facilitate them!” With this statement the
entire table burst into chaos, every guest shouting at one another, trying to assert
something about the nature of architecture and the goal of architects.

174 “The real architecture only exists in the drawings!” I heard one man yell.

175 “I don’t know why people hire architects and then tell them what to do!”
shouted another.

“You’re right, how dare a client paying millions of dollars for a building have any expectations!” replied yet another guest with a sardonic tone, or was it?

A pitcher of wine shattered as it was thrown against the wall; the mad meal was in full force.

“Your roof leaks!” I heard Sophia scream in the face of an old man.

182 “That’s how you can tell it’s a roof!” he yelled back angrily.

The mania continued as the meal-goers began flinging plates and utensils at one another until a golden serving platter was slung across the room, slicing the cable bearing the chandelier, which then crashed through the table, bringing the room to a standstill. An ancient-looking man who had been launching peas at the other guests during the argument climbed onto the table;

189 “These are the mistakes in Architecture:” he began authoritatively, “before
fabricating, in elevating the site, in poor choice of makers, poor choice of time.”

“Enough!” shouted Miscipher as he poked up through the newly appointed aperture in the table, under which he had gotten into a scrap with one of his guests during the course of the madness, and he pushed the old man off the table and into a large punch bowl. “We will settle this in a play, to be performed in the square at midnight. What is the role of the architect is the dispute that this play shall solve, and our dear Errwynn shall lead us in its performance!” With this exclamation Miscipher stormed out of the room. As he left, he slammed the door so hard that the wall holding it collapsed, leaving only the door standing in its frame. Fading in the distance I heard the cult leader yelling at one of his servants, “I don’t care if the wall fell down, there’s not an architect I know that doesn’t have problems with important walls!”

Miscipher Emerging from Under the Table

Having been given such a small amount of time, I was pleased with the set I had managed to put together. I stood beside the stage in the main square; the cult had begun its orgy. All around me, specialists from every aspect of building were entwined, each concerned for themselves and awaiting a concept around which to build.

“The time has come” Sophia whispered to me, and I ascended the steps of the stage; the play began.

210 “Aletheia,” I started, “why on earth are you evading our architects?” I approached the door of the stage set I had put together, shouting “open up Aletheia!” as I knocked on the door, and in doing so knocked over the door, revealing that there was nobody behind it. The crowd found this disclosure of there being no truth to be astonishing, and the audience gasped at the audacity.

215 “Come you engineers and interior designers, landscape architects and specialists, come you contractors and builders, come quickly all you involved in the act of building!” I called out, “Let us rescue the condition of building from the cavernous prison that non-existent Aletheia has cast it into.”

217 With this entreatment a chorus of 24 masked dancers surged onto the stage, gyrating in disorder. I called Sophia near to me, and, together, we ‘re-directed the excited chorus from chaotic dancing to synchronized rhythms of work so that they might hoist the trapped goddess from a pit beneath the trapdoor of the stage.’

221 As the chorus exerted themselves under my direction toward their common goal, three pillars flanked by the figures of Practice and Theory emerged from below the stage. The first pillar was stout and strong, the second was very commodious in its dimensions, and the third was slender and carved with elegant imagery.

I took the three pillars from the retrieved plinth and restored them to centre stage, only to see Miscipher enter uninvited from stage left.

“Ass!” he cried, thrusting the stout pillar off the stage. This upset the balance of the actress portraying Theory, and she fell into her companion Practice, stepping on the latter mistress’ toes. Miscipher took Theory over his shoulder, away from her counterpart and to the machine of reductions. Holding Theory hostage, Miscipher stood on the platform of the terrible machine and pulled the Hypnerotomachia from the breast of his costume. “Architecture is art!” he proclaimed. “Buildings cannot come of themselves, they need a concept,” Miscipher shouted, throwing Theory to the ground and opening the mouth of his pneumatic machine, “so a concept we must procure.”

The leader of the cult raised his arms to plunge the Hypnerotomachia into the machine of reductions, only to witness Sophia launch herself from the chorus, grab the erotic volume from his hands and kick him into the macabre contraption instead.

The machine whirred and buzzed, air shot out of tubes and the whole crowd stared in shock as their leader was devoured. Sophia and I fled with the rescued Hypnerotomachia, pushing through a cult whose thrall was about to be broken. As we reached the edge of the square I looked back to see what had become of the dreaded Miscipher. After the machine finished chewing up what remained of the cult leader, it spat out a single magniloquent pixel devoid of all colour; as black as the architecture of hell.

* * *

Never could I have prepared myself for what happened next. After Miscipher was fed to the machine of reductions, the cult of Venustas turned to anarchy. As Sophia and I rode back across the marsh, I saw the cultists begin to feed the machine with every object at hand; chairs, windows, even each other. This became too complex for the device, and it erupted in a dazzling explosion that rocked everything around me. In the distance I saw the ceiling of the cave collapsing, taking with it the building that had stood on top of it; the library of Knowledge. Gone were the books, gone were the shelves, gone were the walls and foundations.

“What will we do?” I asked Sophia.

“We will re-build”

*

The Fallen Pillar

— *Part II* —

Long hours passed as Sophia, the oarsman and I left the underground chamber of the cult of Venustas. When we finally emerged into the garden through a gate near the fountain, I saw the garden in daylight for the first time; I saw that it was surrounded by a magnificent city with great fjords in the distance. The ferryman, who had assisted Sophia and I in escaping from the ritual grounds, had left behind his gondola after that final crossing, and gone to work in the harbour of the great city. Soon after the opening of the new library I met up with him on the waterfront near city hall.

“Hello Theo” I said as I saw the ferryman standing on a dock.

“Errwynn!” he let out excitedly as he walked over to greet me. “I’ve heard that your library has opened, will you take me there?”

“Of course, my dear friend” I replied, and we began upon our way to the garden.

15 “I’ve seen pictures of your building in the newspaper; why is it that you didn’t simply rebuild the library that stood there before?” asked Theo.

18 “It crossed my mind, but even if the same form were to be executed using the same materials and techniques, would it still be the same building? I struggled with questions like this, but in the end Sophia and I chose to build a new library with a collection on art, architecture and engineering.”

“What inspired this?”

25 “After the sinkhole that swallowed the previous library was filled in, the artist who had created the rest of the park continued his work over the site of the library. He placed a sundial at the intersection of several paths, and a large sculpture titled Wheel of Life at the top of a hill. I can show you after our tour how the garden looked before the new library.”

“The path through the park is familiar,” I continued, “one enters the garden
 off the street through one of five iron gates, and walks down a path between two rows
 of trees to the hundred metre long bridge lined with fifty-eight bronze sculptures
 depicting scenes between man and woman, as well as parent and child. To the left of
 this bridge there is a path down to the children’s playground, and after crossing the
 31 bridge one passes through a small rose garden to reach the fountain; this fountain,
 which you may not know, was the original generator of the entire park that you now
 33 see along this 850 metre axis. The six colossal stone men holding up the shallow
 dish of the fountain are surrounded by a square basin, on whose corners are twenty
 romantic bronze sculptures showing the stages of life set in trees. The cycle of life
 theme is repeated in the 60 bronze reliefs set into the wall of the basin, and the
 black and white granite around the fountain forms a labyrinth in the pavement.
 Proceeding past the fountain there are two sets of stairs leading up through a series
 of terraces until one reaches the plateau of the monolith, which can be entered
 through another set of iron gates of the artist’s design. On this plateau the monolith
 of 121 figures sits atop a plinth covered by 36 granite sculptures depicting relations
 through the stages of life; these figures are not emaciated like the earlier bronze
 ones, but robust and rounded. The problem is that after passing through a garden
 of humanity’s love and struggles, climaxed by the sublime monolith, one is faced at
 the end of the journey with steps leading down to the open plain where the sundial
 and Wheel of Life now sit. This plain is a sad denouement after the life-shatteringly
 47 awesome monolith.”

“I have walked this path myself, and as well have felt that there ought to be
 something more after the obelisk,” Theo added.

“Furthermore,” I went on to say, “the plain can be crossed into from the street
 behind it through a small geometric garden, and has no sense of entry compared to

the gates at the main entrance to the park. In placing the library in the way that I have, at what used to be the end of the park procession, the park has gained a second face.”

55 “I am excited to see how you have done this,” Theo said, “I once read a similar complaint in a newspaper article; a Finnish man was writing about how his home town had built a monumental stone staircase that lead to nothing, so he
58 proposed building a cultural sauna at the top of it. What a grand idea. This garden and its community certainly would benefit from a collection on art, architecture and engineering.”

* * *

Once Theo and I reached the garden, we walked up the new stairway I had drawn up for the library. The stairs rose three risers at a time along a gentle tree-lined plinth, with ramps and places for resting crisscrossing the path.

“How marvellous that you have made the entrance into this park more gentle and accommodating. What made you do this? And where are the old walls that used to form the end of the park?”

“The old walls only served to form a picturesque barrier, surmountable only by stair,” I told him, “so I had them taken down, and their stones used to pave these new ramps. The stones that once prevented some from entering at this point now serve as their very means to do so. Whosoever is unable to use stairs shall not have to use a secondary entrance to access the library.”

We reached the top of the stairs and found ourselves in a small plaza set into the corner of the library. Theo stared up at the copper-clad light diffusers jutting out from the whitewashed wall in front of him.

“Shall we?” I asked the beholding Theo. Without words he looked to me before returning his eyes to the library as we entered the ceramic clad corner.

* * *

Vestibules, as well as thick walls, are important elements of buildings in cities with cold winters, and we entered the library through a rather spacious and thick-walled vestibule in which there was a small bench and a shelf covered with pamphlets of happenings in the city. Once inside, we turned right and walked past the circulation desk. Theo admired the space that held all the requisite services of a library; the circulation desk, the reference librarian’s counter, stations to browse the library’s catalogue and the reserve books. Sitting behind the desk we saw Sophia, who ran up to us and greeted us warmly. She insisted on joining our tour, but at my suggestion we let Theo lead the way.

to explore the rows of bookshelves turn to page 42

to see what is behind the curtain turn to page 41

to walk over to the sculpture turn the page

Eager to see the Wheel of Life, Theo rushed over to the base of its pedestal. He turned around and looked down the stairs, his eyes racing across the reading room below, and up the far wall to glimpse out the window, seeing the monolith on its plateau. He took a few steps forward and then looked back, seeing the sculpture set against the lavender backdrop of the large curtain.

“Why did you put the sculpture here?” he asked.

“It was not I that put it there, but the sculptor himself! I set the floor at this level so that the sculpture would be placed back in its original position in the park; the same height and location. The library is simply built around it.”

“How wonderful,” Theo thought out loud.

“Where shall we go next?” I asked him.

Interior Elevation looking Northwest from the Reading Room to the Wheel of Life

to explore the rows of bookshelves turn to page 42
to see what is behind the curtain turn the page
to go to the second floor (no return) turn to page 43
to go to the lower floor (no return) turn to page 44

Slowly, Theo pushed away the lavender curtain to find that there was a room with a glass floor lit gently from below. This room had a table that could host sixteen guests for a meal, and held the same proportions as the one from Miscipher's feast; though he might have been a bad builder, not everything about him was bad. Sophia showed us into the adjacent kitchen where she had some bread and cheese, and so we sat down for a brief snack. After we had shared several stories over the table, Theo suggested that we move on so that he could see the rest of the library.

Section through the Meal Room

to explore the rows of bookshelves turn the page
to walk over to the sculpture turn to page 40
to go to the second floor (no return) turn to page 43
to go to the lower floor (no return) turn to page 44

Passing through the rows of bookshelves, Theo noticed that there were several doors and two reading nooks placed in between the bookcases. Upon seeing his reaction to these, I told him that the bookshelves were not spaced so that two people could pass side by side in between them, but so that some of the necessary spaces of the building, as well as some places to read and think, could be accessed from between them.

“In deciding on the order of the library,” I explained, “the building was divided into the clear, rational library where the books are arranged following the Dewey decimal system, and the murky, dreaming library where the librarian orders the books according to her or his own logic. The rational portion of the library is where we stand now, and the dreaming portion is in the main reading room. As someone once suggested to me, there is no perfect way in which to order in a library, as libraries are chaotic labyrinths of disorder, and every different system of ordering books makes unexpected and joyful connections. This library, beyond its ordering into rational and dreaming, is also divided by art, architecture and engineering. The art section is confined to part of the basement, whereas the architecture and engineering books are found mixed throughout the rest of the library, undivided; this statement through the organization of the building suggests that architecture is closer to engineering than to art.

“What about these glass squares in the floor?” Theo asked.

“You’ll see a bit later on what those are for,” I told him, and we moved along with our tour.

to see what is behind the curtain turn to page 41

to walk over to the sculpture turn to page 40

to go to the second floor (no return) turn the page

to go to the lower floor (no return) turn to page 44

Kind Sophia lead us up the stairs, passing more bookshelves on the landing before we arrived on the second floor. When we reached this level Theo made his way to the alcove filled with drawings stored in cabinets. There were large windows letting light into this space, and after pulling several drawings out of the cabinets to examine, Theo walked over to the railing to look at the wall across the open space; a wall covered by large openings that let diffused light in through coloured glass panes.

Right after admiring the atmosphere of the open library, Sophia smiled at me and winked before wandering into the rows of bookshelves. I drew Theo's attention as she slipped away, and, after explaining that this floor was filled with periodicals, I asked Theo to call for Sophia. In the wake of no answer, Theo and I walked past the rows of bookshelves to the opposite side of the floor to see that Sophia had disappeared!

I smiled at Theo and pointed to a book that he might hand me. As he pulled the book, the case that it was housed in clicked, and I gave it a push to reveal a secret entrance. We passed through and met Sophia laughing with joy on the other side.

"This is where I might take over momentarily," Sophia said as she closed the door to the passage and lead us up some stairs that passed through the reading room. "When the old library was destroyed I lost my boudoir, the place I used to go to think and to lament over the loss of knowledge. In his new plan for the library, Errwynn gave me a new boudoir..." Sophia paused as we reached the floor above the reading room, and made our way over to an opening leading down some stairs into the open volume of the reading room before entering the chandelier; the home of her new boudoir. "Go ahead Theo."

Entering the basement, Theo at once saw that the glass squares from the main level let light into the basement level, and also revealed the underfloor path to those walking above it. I asked him which path we would take through this level.

Detail of Glass Square in Floor

to walk to the reading room through the cabinet of curiosity turn to page 47

to walk to the reading room through the book stacks turn to page 48

“Really Errwynn? How Peculiar,” Theo said to me as we descended the stairs and entered Sophia’s boudoir. The walls were panelled with wood and covered with small cabinet doors inset with glass that was lit from behind. I explained to Theo that the chandelier lit both the room inside it and the one it hung in, and so the walls had the lights inside them. I opened up one of the cabinet doors to show Theo how the bulbs could be changed by Sophia when they burn out. We didn’t stay long in the boudoir, as it was filled with Sophia’s personal library, so we thanked her for showing us this space that was her own and, at her request, left her there to continue our tour, but not before showing Theo the trapdoor in the boudoir that housed a rope ladder that Sophia could descend on should there be a fire and her other route is blocked. As we left I told Theo,

“The drawing of the library followed a storytelling-like method in the thinking out of the building; the entire building began from one detail, the boudoir. This formal detail has its own material details, as the boudoir was placed into the chandelier that would hang in the reading room, thus becoming a detail of that room, which was a detail of the building, which as a whole is only a detail of the garden it sits in. After thinking out the boudoir and placing it on the site, the rest of the building became a collection of details formed around the original starting point, weaving a fabric of formal joints connected by material joints.”

“Some people like to be around other people to do their thinking, and the grand reading room is the place that counters the small reading nooks placed throughout the library. Unlike the desks and chairs in the rest of the library, those in the reading room, including the circulation desk, can be moved into new arrangements at will,” I told Theo, who was looking at the whitewashed walls rising from the bookshelves on either side of the reading room which housed a myriad of small square windows, each with a different colour painted around its frame. The wall at the end of the room hosted a large window in its centre bay, from which one could see the monolith if they stood on the bridge over the staircase that takes one down into the reading room, and peered out the window; surrounding the window were sheets of stone cut so thin as to be translucent and let a warm light in.

Interior Elevation of Southeast wall of the Reading Room

to walk back through the cabinet of curiosity turn the page
to walk back through the book stacks turn to page 48

Stepping into the cabinet of curiosity, Theo likened it to a gallery space.

“Yes,” I replied, “but Sophia is its curator, so she can make it into whatever she likes.
It’s a flexible space.”

Cabinet of Curiosity

if you are on your way to the reading room turn to page 46

if you are coming from the reading room and *have* been to the second floor turn to page 51

if you are coming from the reading room and *have not* been to the second floor, turn to page 49

On our way through the bookshelves of the lower level we passed by another reading nook and two open areas, each with a large desk for several people to work at. A keen bibliophile, Theo pulled an Italian architectural treatise from the one of the shelves and found in it the most delightful frontispiece featuring the figure of Perfection using a compass to draw a circle.

La Perfezione (Gallaccini pg 83)

if you are on your way to the reading room turn to page 46
if you are coming from the reading room and *have* been to the second floor turn to page 51
if you are coming from the reading room and *have not* been to the second floor, turn the page

We took the elevator to the second level, and Theo immediately made his way to an alcove filled with drawings stored in cabinets. There were large windows letting light into this space diffused through vine covered trellises outside. After pulling several drawings out of the cabinets to examine, Theo walked over to the railing to look at the wall across the open space; a wall covered by large openings that let diffused light in through coloured glass panes.

Right after admiring the atmosphere of the open library, Sophia smiled at me and winked before wandering into the rows of bookshelves. I drew Theo's attention as she slipped away, and, after explaining that this floor was filled with periodicals, I asked Theo to call for Sophia. In the wake of no answer, Theo and I walked past the rows of bookshelves to the opposite side of the floor to see that Sophia had disappeared!

I smiled at Theo and pointed to a book that he might hand me. As he pulled the book, the case that it was housed in clicked and I gave it a push to reveal a secret entrance. We passed through and met Sophia on the other side.

"This is where I might take over momentarily," Sophia said as she closed the door to the passage and lead us up some stairs that passed through the reading room. "When the old library was destroyed I lost my boudoir, the place I used to go to think and to lament over the loss of knowledge. In his new plan for the library, Errwynn gave me a new boudoir..." Sophia paused as we reached the floor above the reading room, and made our way over to an opening leading down some stairs into the open volume of the reading room before entering the chandelier; the home of her new boudoir. "Go ahead Theo."

We descended the stairs and entered Sophia's boudoir. Once inside, Sophia confessed to us a terrible secret; when she had kicked Miscipher into the machine of reductions she felt a prick in her leg. On the ride to safety in Theo's gondola, she looked to see what had caused the sensation, only to find that Miscipher had stung her with a poisoned needle. Over the course of the construction of the library Sophia had noticed her memory fading, and soon she would have to leave her post.

"Please, Theo," I said holding back tears, and he understood that it was his time to leave. I lamented over my dear guide, who had shown me so much and helped me overcome Miscipher, knowing that Knowledge would soon be lost.

Sophia's Boudoir

turn to page 53

Curious and eager, Theo asked me about the hallway whose ceiling was covered in stars. I recalled that neither Theo nor I had said anything as we passed by it, so I lead him back to the place of which he spoke and showed him to the door at its end. I opened the door with my key and Theo followed the short path leading to his right. There was a shelf of towels at the end of this path, as well as a bin to discard used towels. We each picked up a towel and continued to a room with several skylights of translucent blue glass and some lockers and benches.

“Leave your clothes here,” I told Theo, and we placed all of our clothing in two of the sixteen lockers. We turned a corner and Theo was drawn back by the final and greatest place for thinking that this library held; the thermal baths. Stripped of their clothes, several thinkers were exchanging knowledge in the nooks, inspired by Roman baths I had seen at Bath. In the centre of the pool was a thermal mass, and Theo and I stepped into the water to go lay on the mass and stare up at the ceiling.

Lit from the same light that illuminated the glass floor of the meal room above, the ceiling of the thermal bath had thousands of small perforations in it that appeared as though they were stars in the sky, perfect for thinking.

* * *

Keeping this as the end of our tour, Theo and I spent some time exchanging stories and thinking to ourselves in the baths of the library. After an hour had passed we left the pool and went to wash up. I turned to my companion and said:

“Along with being a collection of books housed by a collection of details, the library hosts several different types of knowledge. Books alone are not the sole source of knowledge, and so the library has spaces that facilitate other knowledges; the meal room is the arena of storytelling over food, and these baths are where cultural and empirical knowledge is passed from old to young. In addition to these, you have seen that there are also multiple personal nooks in the library where one may sit and read alone, and a cabinet of curiosity that offers a visual engagement that may be strolled through leisurely. The aim of all these measures is to provide places for thinking. After all, in what other library can you think in the shower?”

*

* * *

* * * * *

* * * * *

* * * * *

Alas, Marcel, you have witnessed my
Hypnaedificātiō. Dreaming has such
wonderful powers; it can build such
strange stories. All that you have
just seen is the cause of my love and
strife, please take it with you and
read it for your enjoyment. My hope
is to tell you many more buildings.

* * * * *

* * * * *

* * * * *

* * *

*

Hypnaedificātiō – Building in a Dream

Notes on the Text

Hypnaedificātiō's dream plot and name are inspired by the *Hypnerotomachia Poliphili*; the guided descent into hell draws inspiration from Dante's *Inferno*. The dream is set in Vigeland Park in Oslo, Norway (see appendix A).

CAST:

Errwynn - the joy of mistakes

Sophia - knowledge

Miscipher - misunderstanding

Theo - the one who beholds (as understood by the concept of *Theōria* as beholding in Lisa Landrum's *Performing Theōria* pg 31)

Letter to Marcel

line 3 "many things worthy of knowledge and memory" (Godwin pg 1)

Notes on Part One

line 12 A theme in Vigeland's sculptures has been described by Koefoed as exploring

"the drama of love in all life's stages" (Koefoed pg 9)

lines 24-25 This question is asked with an ironic tone

lines 30-32 Wikborg pg 29

line 43 Poliphili suggests in his *Hypnerotomachia* that architects should be slow; "Yes, I say slow, so that haste will not lead him into blunders" (Godwin pg 43)

line 50 "Eros is the main motif in Vigeland's early art" (Koefoed pg 10)

"The erotic instinct is magnificent, supreme!" -Gustav Vigeland (Koefoed pg 10)

line 51 Frascari - *Places for Thinking*

Notes on Part One *continued*

line 53 Knowledge and Dwelling are linked by Perez-Gomez (*Knowledge* pg 57)

line 70 The relationship between looking and drawing is expounded in Crowe et Hurtt, as well as in Rykwert's *Translation and/or Representation*

line 71 *you will understand more through my drawings* as Filarete suggests to the Lord's son numerous times in his treatise

line 93 See Filarete's account of the origins of architecture: "Just as [Adam] instinctively put his hands over his head, so was he able to break branches and in the same way cut them in pieces bit by bit and then stick them into the earth and make a shelter... I believe that Adam was the first" (pg 10 Spencer trans.)

line 101 Dante's description of Charon: "the steersman of that marsh of ruined souls, who wore a wheel of flame around each eye" (pg 45 Ciardi trans.)

lines 117-119 Alberti suggests that:

"the arts were born of Chance and Observation, fostered by Use and Experiment, and matured by Knowledge and Reason. Thus medicine, they say, was developed by a million people over a thousand years; sailing too, as almost every other art, advanced by minute steps." (pg 157 Rykwert et al trans.)

The nature of mistakes in architecture is a fruitful subject. What constitutes an architectural mistake is not readily agreed upon though. Aalto wrote that he would often correct "mistakes" as he rode through the countryside, though these "mistakes" related only to the appearance of buildings (Schildt pg 22). Scarpa wrote about how an architect must have wit to understand all that is happening and avoid mistakes, such as he did not when trying to create a transparent corner window;

"When I overlap the glasses I see the corner anyway, especially if the glass is thick. One may as well put in the frame. Then, besides this, if it is a clear day one may see the reflection. Look, when I saw the reflection I hated myself. I did not think of it. These are the mistakes which one makes in thinking, acting and making..." (Fracari *The Tell-the-Tale Detail*)

Instead of discussing the mistakes that are made by architects as sinful, the ritual grounds and members of the cult serve to point out some of the humour and irony of architecture, such as Jacques Tati did in *Playtime*.

Notes on Part One *continued*

lines 120–121 Though perhaps some cases are extreme, as in Viñoly's "Walkie Talkie" in London that melts cars (Ajudua), solar gain, glare and water are basic concerns when building, yet too much architecture ignores these concerns in favour of visual design (Brand - chapter titled *Magazine Architecture*)

lines 121–122 See Iman Ansari's interview with Peter Eisenman, especially Eisenman's view regarding the role of the architect (Ansari)

lines 126–127 The headquarters of the cult is a combination of Libeskind's addition to the ROM, famous for its ability to create deadly icicles (Hume), and Eisenman's mistake-riddled Wexner Centre for the arts; "the skylight leaks. The glass curtain wall lets in too much light, threatening to damage delicate artwork. The interior temperature swings by as much 40 degrees some days." (Pogrebin)

lines 169–171 This dinner guest is Hannah Arendt. In *The Human Condition*, Arendt describes how political action and speech are the among the highest aims of humans, and that the *polis* is the arena that hosts the potential for the *Space of Appearance* in which humans can speak and act; the *polis* is a built space, but not the Space of Appearance itself. (Arendt) So, as they constitute the physical arena of the Space of Appearance, buildings must host the potential for humans to speak and act politically.

line 174 A quote from Peter Eisenman (Ansari)

line 175 A quote from Frank Gehry (Dushkes)

line 182 A quote from Frank Lloyd Wright (Brand pg 58)

line 189 Teofilo Gallaccini wrote a treatise devoted to errors and mistakes in architecture, and these examples are some of his classifications of types of mistakes that are made by the architect. Federica Goffi has translated an example of one of Gallaccini's notions of an architectural mistake:

Notes on Part One *continued*

“Therefore, architects make mistakes in proportioning the parts of the work, when measurements and proportions do not correspond amongst each other. Like when the parts of a wall above do not have the proper dimension in relation to the lower parts of the wall, that means, that when they are larger than the parts that are near the foundations, or are thin, and when the height of a space is not proportionate to the width. As in, for example, when the height of the spring of a vault is not proportioned to the width [of the room], as it can be seen in many noble fabrics and particularly in the church of St. Peter’s in Rome, where the spring line of the vault is not proportioned to the width [of the room] due to the projection of the cornice, making the vault appear too low: this is because they did not give it the required dimension conformed to what would be necessary based on the measure of the projection of the cornice; our eye removes a large part of it from our vision, making it appear low. This is a mistake born out of not having a cognition of perspective; therefore we will offer some examples to avoid such mistakes.” (Gallaccini pg 32 Trans. Goffi)

Gallaccini provides this drawing to illustrate his point on this “mistake” in building and its solution (Gallaccini pg 33):

Notes on Part One *continued*

lines 198–200 An adapted version of a quote from Eisenman; the original: “There’s not an architect I know that doesn’t have problems with important buildings.” (Pogrebin)

lines 210–227 The play lead by Errwynn follows an adapted plot of Aristophanes’ *Peace*

line 210 See Trygaeus’ opening line in *Peace*: “Zeus, what on earth are you trying to do to our people?” (Aristophanes trans. Sommerstein pg 9)

lines 215–218 See Trygaeus’ call:

“Now, men of Greece, now’s a fine chance for us to be rid of broils and battles and to haul out Peace, so dear to us all, before some other pestle can interfere! You peasants and merchants and carpenters and craftsmen and immigrants and foreigners and islanders, come hither, all ye people, as quickly as you can, bringing shovels and crowbars and ropes; for now is our chance to have a pull at the Good Spirit’s cup!” (Aristophanes trans. Sommerstein pg 31/33)

lines 217–221 Lisa Landrum points out that the rescuing of Peace in Aristophanes’ play is a demonstration of *Architecting*:

“the chorus leader urges Trygaeus to actively “Architect,” since *architektonei* is given as an imperative verb. Following this performative demand from the chorus, Trygaeus begins more officially and collaboratively what he had himself - by his decisive opening action - already begun: *architecting* the recovery of Peace, which now involves directing, or rather re-directing, the excited chorus from chaotic dancing to synchronized rhythms of work so that, together, they may hoist Peace out from the pit.” (Landrum pg 29)

In addition to this, Filarete describes the construction of his city as a dance; the architect being its leader (Filarete trans. Spencer pg 41). These clues suggest further evidence of architects being more than designers in their need to lead and coordinate the making of buildings.

Notes on Part Two

Part two of *Hypnaedificatiō* sees the construction of the new library (see Appendix B). Frances Yates' *The Art of Memory* describes an ancient technique of remembering speeches that had the orator attach images to places:

“We have to think of the ancient orator as moving in imagination through his memory building *whilst* he is making his speech, drawing from the memorised places the images he has placed on them. The method ensures that the points are remembered in the right order, since the order is fixed by the sequence of places in the building.” (Yates pg 3)

Theo's journey through Errwynn's library, however, is not to be remembered in a fixed order; though the images remain attached to the places, the route through the building can alter, thus the story/building can be told in a different sequence but still with all the parts.

lines 15–18 During my visit to the Acropolis I was confronted with questions like this when

I learned that the Parthenon is slowly being disassembled and relocated to the new Acropolis museum while replications and restorations of the ruins are taking the actual ruins' place. The same fate is shared by the caryatids of the Erechtheion, as none of them live on the Acropolis since the remaining five now live in the Acropolis museum too. So is what is sitting on the Acropolis still the Parthenon? Or is the Parthenon what sits in the museum? Which Parthenon is the Parthenon?

line 25 See Appendix A for more information on the park.

lines 26–47 Historical information on Vigeland park comes from Koefoed and Wikborg

lines 31–33 See Appendix A for the story of the fountain

lines 55–58 In 1925 Aalto penned an article titled *Temple Baths on Jyväskylä Ridge* in which

he called the construction of a monumental stone stairway in his hometown a mistake, as the great staircase lead to nowhere. The mistake could be remedied, though, Aalto suggests, if the town were to build a cultural sauna at its top. (Schildt pg 18)

Notes on Part Two *continued*

page 43 In the opening of *The Library at Night*, Alberto Manguel mentions how:

“Libraries, whether my own or shared with a greater reading public, have always seemed to me pleasantly mad places, and for as long as I can remember I’ve been seduced by their labyrinthine logic” (page 4)

Manguel goes on in his chapter titled *The Library as Order* to discuss different methods of organising libraries, offering several delightful anecdotes on the librarians that gave varying degrees of order to libraries before Melvil Dewey. Overall, this chapter suggests that there is no perfect order, and that surprising connections can be made through what may seem like odd organisation.

page 46 See chapter two of *Stories* for an explanation of the method Errwynn used, and a description of Frascari’s notions of formal and material joints.

page 52 The Roman baths at Bath, the rust-coloured line indicates the old water level (photograph by Adam Hatch):

page 52 & 53 Frascari's *Places for Thinking* presents the need for places in the city that allow and stimulate the process of thinking, because thinking is an important part of our lives. Scarpa's practice of adding "Lost Footsteps" within the "functional requirements of the program" is one way to create places for thinking. (Frascari *Places for Thinking*) In Errwynn's library, the lost footsteps lead to a thermal bath where one can stare into the starry ceiling above and think. It is to be noted, as well, that the Library of Alexandria had "a room for communal meals." (Manguel pg 26)

Image Sources in Hypnaedificātiō:

page 22 Godwin pg 14

page 48 Gallaccini pg 83

page 57 Gallaccini pg 33

Appendix A - Vigeland Park

Vigeland Park, the setting of *Hypnaedificatiō*, is located in the Frogner neighbourhood of Oslo, Norway. Covering 80 acres, the park “is one of the world’s largest sculpture parks created by a single artist;”¹ Gustav Vigeland (1869-1943).

The park, which contains 214 sculptures, began as a rejected proposal for a public fountain in 1900. Vigeland redesigned the fountain and proposed it again in 1906 and the municipality of Oslo decided to commission the fountain to be placed in front of the Norwegian Parliament. Instead of carrying out the work as planned, Vigeland devised a new plan for the fountain, which he revealed in 1916, and was commissioned to be built on the palace grounds. Vigeland was given a new studio by the city of Oslo in 1921, on the condition that he bequeath all of his work to the city, and he again changed the proposal for the fountain, this time to be placed adjacent to his new studio, which initiated the creation of the park and sculpture garden that exists today.²

The garden was built in phases, as Vigeland envisioned and proposed them, and completed in the 1990s, according to Vigeland’s plans.³ The 850 metre axis of the garden begins at the main entrance with five iron gates and two gatehouses, executed from the 1920s to the 1940s. The next stop is a 100m long bridge lined with 58 bronze sculptures dating from 1926 to 1933 depicting scenes between man and woman, as well as parent and child. Next to the beginning of this bridge there is a path down to the children’s playground, with nine sculptures of children and babies completed in 1940. By crossing the bridge, the fountain is reached after passing through a small rose garden. After ascending several flights of stairs, one reaches the monolith plateau. The monolith itself dates from 1924, and contains 121 figures set into a single 180-ton block of stone that took 14 years to carve and was finished in 1943.⁴

1. Koefoed pg 7

2. Information in this paragraph comes from Wikborg

3. Koefoed pg 8

4. Information in this paragraph comes from Wikborg

Aerial Images in this appendix come from Bing Maps. All drawings and photographs are by Adam Hatch.

LOCATION OF VIGELAND PARK IN OSLO
& LINE INDICATING MAIN AXIS OF PARK

PLAN AND SECTION DOWN MAIN AXIS OF VIGELAND PARK

1. Main gate

2. Tree lined allées

3. View to the bridge from across the pond

4. The fountain, with the monolith visible in the background

5. Stairs leading up the series of terraces

6. The monolith plateau

7. View from the monolith to the open plain

8. Wheel of Life

The monolith as seen from the open plain at sunset

Bronze sculpture on the bridge

The fountain as seen from the second terrace

The bridge at sunset with the monolith in the background

Appendix B – The Library

The library is situated at the end of the Vigeland sculpture garden's procession, in the plain after the monolith plateau (pictured above in the model of the park at the Vigeland Museum)

Site

The building was thought out as a set of details, forming itself around the needs of the spaces and connecting formal details such as the cabinet of curiosity or thermal bath, through material details.

LOWER LEVEL FLOOR PLAN 1:250

MAIN LEVEL FLOOR PLAN 1:250

SECOND LEVEL FLOOR PLAN 1:250

THIRD LEVEL FLOOR PLAN 1:250

SECTION A-A

SITE SECTION THROUGH TO MONOLITH

SOUTHEAST ELEVATION 1:250

NORTHEAST ELEVATION 1:250

NORTHWEST ELEVATION 1:250

SOUTHWEST ELEVATION 1:250

Appendix C - The Boudoir

Initial Sketch of Boudoir

The initial detail from which the rest of the library was developed around is the boudoir. Set inside the chandelier of the reading room, the librarian accesses this space from above via an octagonal stair that wraps around a structural duct. The boudoir is also supported at each of its eight corners by thin steel rods, emphasizing the suspension of the space. The technical detail that the boudoir hinges upon is the series of small cabinet doors that allow the Librarian to change the light bulbs of the chandelier; the finish of the interior skin of the wall of the boudoir is red-stained oak, whereas the exterior skin of the chandelier is multi-coloured glass. In order for the wall filled with light to illuminate both the boudoir and reading room to their appropriate levels, the apertures inside the boudoir are reduced to the scale of the hand that reaches through them.

Sketch Models of the Boudoir

Sketches of the Boudoir

Tiered wall of chandelier

Wall section - pockets of light

The cabinet door on an oak panel
mounted to the chandelier's frame

Cabinet Door

Detail: glass aperture of cabinet door

Sketch Model of Cabinet Door

Plan of Boudoir 1:10

Section through Boudoir 1:10

Bibliography

- Aalto, Alvar, and Göran Schildt. *Alvar Aalto in His Own Words*. Keuruu: Otava, 1997. Print.
- Ajudua, Christine. "Underground London." *The New York Times*. The New York Times, 18 Jan. 2014. Web. 15 Feb. 2014. <<http://www.nytimes.com/2014/01/19/travel/underground-london.html?action=click&module=Search&ion=searchResults%230&version=&url=http%3A%2F%2Fquery.nytimes.com%2Fsearch%2Fsitesearch%2F%23%2F20%2Bfenchurch%2F>>.
- Alberti, Leon Battista. *The Architecture of Leon Battista Alberti in Ten Books; Of Painting in Three Books; and Of Statuary in One Book*. Trans. James Leoni. London, England: Thomas Edlin, 1726. Print.
- Alberti, Leon Battista. *On the Art of Building in Ten Books*. Trans. Joseph Rykwert, Neil Leach, and Robert Tavernor. Cambridge, MA: MIT, 1988. Print.
- Alighieri, Dante. *The Inferno*. Trans. John Ciardi. New York: New American Library, 2001. Print.
- Ansari, Iman. "Interview: Peter Eisenman." *The Architectural Review*. The Architectural Review, 26 Apr. 2013. Web. 15 Feb. 2014. <<http://www.architectural-review.com/view/interviews/interview-peter-eisenman/8646893.article>>.
- Arendt, Hannah. *The Human Condition*. Chicago: University of Chicago, 1958. Print.
- Aristophanes. *Peace*. Trans. Alan H. Sommerstein. Oxford: Aris & Phillips, 2005. Print.
- Averlino, Antonio Di Piero. *Filarete's Treatise on Architecture*. Trans. John R. Spencer. New Haven: Yale UP, 1965. Print.
- Biermann, Veronica, Barbara Borngasser Klein, Bernd Evers, Christian Freigang, Alexander Gronert, Christoph Jobst, Jarl Kremeier, Gilbert Lupfer, Jurgen Paul, Carsten Ruhl, Paul Sigel, Roswitha Stewering, Cristof Thoenes, and Jurgen Zimmer. *Architectural Theory from the Renaissance to the Present*. Cologne, Germany: Taschen, 2003. Print. 89 essays on 117 treatises from the beginning of written architectural theory until 2003. **Cited in the essay as *Architectural Theory***
- Brand, Stewart. *How Buildings Learn: What Happens After They're Built*. New York: Viking Penguin, 1994. Print.
- Breuer, Marcel. *Sun and Shadow: Philosophy of an Architect*. New York: Dodd Mead & Co., 1955. Print.

- Crowe, Norman A., and Steven W. Hurtt. "Visual Notes and the Acquisition of Architectural Knowledge." *Journal of Architectural Education* 39.3 (1986): 6-16. JSTOR. Web. 6 Oct. 2012.
- Dushkes, Laura F. *The Architect Says: Quotes, Quips, and Words of Wisdom*. New York: Princeton Architectural Press, 2012. Web.
- Fabun, Don. *The Dynamics of Change*. Englewood Cliffs, NJ: Prentice-Hall Inc., 1970. Print.
- Fai, Stephen. "Discussion" Vitruvian Exercises, Carleton University, Ottawa. 8 Oct. 2013. Lecture.
- Fascari, Marco. "De Beata Architectura, Places for Thinking" Lincoln. June 2010. Lecture.
- Fascari, Marco. "The Tell-the-Tale Detail" *Via 7: The Building of Architecture*. Paula Behrens et Anthony Fisher, ed. Cambridge: MIT Press, 1984. Print.
- Gallaccini, Teofilo. *Trattato Di Teofilo Gallaccini Sopra Gli Errori Degli Architetti Ora Per La Prima Volta Pubblicato*. Trans. Federica Goffi. Venice: Giambatista Pasquali, 1767.
- Gatje, Robert F. *Marcel Breuer: A Memoir*. New York: The Monacelli Press, 2000. Print.
- Godwin, Joscelyn, trans. *Hypnerotomachia Poliphili*. New York: Thames & Hudson, 1999. Print.
- Heidegger, Martin. "The Question Concerning Technology." *The Question Concerning Technology and Other Essays*. Trans. William Lovitt. New York: Harper & Row, 1977. 3-35. Print.
- Hatch, Adam. "Architecting!" Aalto Archival Research. Kulttuurisauna, Helsinki. 10 Apr. 2013. Lecture.
- Heporauta, Arne. *Alvar Aalto, Architect: 1898-1976*. Helsinki: Rakennustieto, 1998. Print.
- Hewitt, Mark. "Representational Forms and Modes of Conception: An Approach to the History of Architectural Drawing." *Journal of Architectural Education* 39.2 (1985): 2-9. JSTOR. Web. 6 Oct. 2012.
- Hume, Christopher. "Nature Makes Fools of Architects." *Thestar.com*. Toronto Star, 11 Mar. 2008. Web. 19 Mar. 2014. <http://www.thestar.com/opinion/columnists/2008/03/11/nature_makes_fools_of_architects.html>.
- Farrant, Penelope, Brigitte Hermann, Ian Latham, Maxine Pollack, Giada Ricci, Marie-Helene Roller, Philippe Sers, and Deborah Whitworth, comps. *Eugène Emmanuel Viollet-le-Duc 1814-1879*. London: Academy Editions, 1980. Print. Architectural Design Profile.
- Jones, Peter Lloyd. "Drawing for Designing." *Leonardo* 17.4 (1984): 269-76. JSTOR. Web. 6 Oct. 2012.
- Koefoed, Holger. *Gustav Vigeland: Art Souvenir*. Oslo: Gudrun, 2006. Print.
- Landrum, Lisa. "Performing Theoria: Architectural Acts in Aristophanes' Peace" Maria Feuerstein et Gray Read, eds. *Architecture as a Performing Art*. Burlington: Ashgate, 2013. Print.
- Manguel, Alberto. *The Library at Night*. Toronto: A.A. Knopf Canada, 2006. Print.
- Morwood, James, ed. *Oxford Reference*. Oxford University Press, n.d. Web. 28 Dec. 2013.

- Palladio, Andrea. *The Four Books of Architecture*. Trans. Robert Tavernor and Richard Schofield. Cambridge: MIT, 1997. CD.
- Perez-Gomez, Alberto. "Architecture as Embodied Knowledge." *Journal of Architectural Education* 40.2 (1987): 57-58. JSTOR. Web. 6 Oct. 2012.
- Perrault, Claude. *Ordonnance for the Five Kinds of Columns After the Method of the Ancients*. Trans. Indra Kagis McEwen. Santa Monica: Getty Centre for the History of Arts and the Humanities, 1993. Print.
- Pogrebin, Robin. "Extreme Makeover: Museum Edition." *The New York Times*. The New York Times, 17 Sept. 2005. Web. 15 Feb. 2014. <<http://www.nytimes.com/2005/09/18/arts/design/18pogr.html?pagewanted=all&action=click&module=Search&ion=searchResults%230&version=&url=http%3A%2F%2Fquery.nytimes.com%2Fsearch%2Fsite%2F%23%2Fpeter%2Beisenman%2Bleak%2F>>.
- Pogrebin, Robin, and Katie Zezima. "M.I.T. Sues Frank Gehry, Citing Flaws in Center He Designed." *The New York Times*. The New York Times, 06 Nov. 2007. Web. 15 Feb. 2014. <<http://www.nytimes.com/2007/11/07/us/07mit.html?ref=massachusettsinstituteoftechnology&r=0>>.
- Powell, Helen, and David Leatherbarrow. *Masterpieces of Architectural Drawing*. New York, NY: Abbeville, 1982. Print.
- Rykwert, Joseph. "Translation And/or Representation." Lecture. Mellon Lectures. Canadian Centre for Architecture, Montreal. 19 Apr. 2005. Canadian Centre for Architecture. Web. 20 Sept. 2013. <<http://www.cca.qc.ca/en/study-centre/mellon-senior-fellows>>.
- Sullivan, Louis. "Ornament in Architecture" Tim Benton et al, eds, *Architecture and Design 1890-1939: An International Anthology of Original Articles*. London: Crosby Lockwood Staples, 1975. 2-3. Print.
- Sullivan, Louis. "The Tall Office Building Artistically Considered" Tim Benton et al, eds, *Architecture and Design 1890-1939: An International Anthology of Original Articles*. London: Crosby Lockwood Staples, 1975. 11-13. Print.
- Viollet-le-Duc, Eugène Emmanuel. *Discourses on Architecture Vol. II*. Trans. Benjamin Bucknall, Architect. New York: Grove Press, 1959. Print.
- Vitruvius. *Vitruvius, On Architecture*. Trans. Frank Stephen Granger. Cambridge: Harvard UP, 1955. Print.
- Vitruvius. *Vitruvius: The Ten Books on Architecture*. Trans. M. H. Morgan. New York: Dover Publications, 1960. Print.
- Vitruvius. *On Architecture*. Trans. Richard Schofield. London, England: Penguin, 2009. Print.
- Welch, Florence. "All This and Heaven Too." Florence + the Machine. Island Records Group, 2011. CD.
- Westfall, Carroll William. "Society, Beauty, and the Humanist Architect in Alberti's De Re Aedificatoria." *Studies in the Renaissance* 16 (1969): 61-79. JSTOR. Web. 07 Oct. 2013.

Wiebenson, Dora, ed. *Architectural Theory and Practice from Alberti to Ledoux*. Chicago, IL: Architectural Publications, 1982. Print. A collection of essays from 47 contributors covering a wide range of architects and architectural thinkers.

Wikborg, Tone. *The Vigeland Park in Oslo*. Oslo: Normanns Kunstforlag, n.d. Print.

Yates, Frances A. *The Art of Memory*. Chicago: University of Chicago Press, 1966. Print.

*I dream that architects can look up to the cosmos to contemplate theory while simultaneously
looking downward at practical earthly matters; I dream that architects can
look both forward and backward in time; and I dream that
architects can look both outward and inward
to tell a building like a story,
and so I have built
in a dream.*

Written in the district of Hull in Gatineau, Quebec

© 2014 Adam Hatch