Literally Figurative: Architectural Manifestation of the Written Word

Carrie Leneweaver

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Literally Figurative

Architectural Manifestation of the Written Word

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# Table of Contents

**Chapter 1: Once Upon a Time** ........................................ 3
  - Introduction ................................................. 5
  - Contention .................................................. 6

**Chapter 2: Rising Action (The Ideas)** .......................... 7
  - Architecture and Literature .............................. 9
    - Precedent: Library of Babel ......................... 13
  - Architecture and Communication .................... 17
    - Precedent: Invisible Cities ......................... 21
  - Semiotics and Visual Symbolism ...................... 25
    - Precedent: Notre Dame du Haut .................. 33
  - Sequence and Experience .............................. 39
    - Precedent: Danteum ................................ 45

**Chapter 3: Climax (The Project)** ............................. 53
  - Inspiration - *Le Petit Prince* ....................... 57
    - Antoine de Saint-Exupery ....................... 67
  - Libraries and Knowledge ............................ 71
    - Program ............................................... 77
  - Lyon, France ............................................ 85
    - Site .................................................. 101

**Chapter 4: Happily Ever After** ............................ 121
  - Thesis Project Images ................................. 123
  - Glossary ............................................... 141
  - Bibliography ......................................... 143
Chapter One

Once Upon a Time....
One could argue that the most notable pieces of timeless literature are complex beings, full of nuance and deeper meaning that gradually unfold before the eyes of the skilled reader. The same is true of architecture. Works with complex connotations may not always be understood by the casual observer, yet still have the power to sway them to feel or think in a certain way. In the words of Le Corbusier: “In a complete and successful work there are hidden masses of implications, a veritable world which reveals itself to those whom it may concern – which means: to those who deserve it” (Schumacher, p.12).

We use language to describe our surroundings and how we experience space, but how does one go about using built form to describe a work of literature? Either way, there is always some element that gets lost in translation. Architecture does not have the full capabilities of language, just as language falls short of completely describing the essence of spatial experience. However, as each medium has its own inherent implications and limitations, they can work together to give deeper and more complete understanding of each other. In a study of visual communication, semiotics, and culture, Donald Preziosi states, “Linguistic and non-linguistic (e.g. visual) symbol systems offer complimentary perspectives on the world. A worldview of a people comprises sets of interactively related ensembles, no one of which paints a complete picture. Moreover, each is unthinkable without the other” (104).
Chapter Two

Rising Action
(the ideas)
Architecture and Literature

There are two different models that illustrate how architecture and literature often interact: the first is an architecture which physically recreates a narrative, while the second is literature which uses an architectural setting as the basis for a larger metaphor. In both of these models, it is the organizational structure (or lack thereof) which is often the basis for a connection between words and built form. On his design for the Danteum, Giuseppe Terragni wrote, “Architectural monument and literary work can adhere to a singular scheme without losing, in this union, any of each work’s essential qualities only if both possess a structure and a harmonic rule that can allow them to confront each other” (Schumacker, p. 98). For him, this structure presented itself in the number scheme used throughout the Divine Comedy to organize the cantos and also to represent heaven, perfection, and the holy trinity. In other works, this structure could be found in the narrative sequence, the organization of chapters and sections, or any other overarching trend that influences or is influenced by the text.

Space as described in literature gains power through its ability to influence the emotions of the reader. On texts designed as labyrinths, Monika Schmitz-Emans observed: “The spatial design of books robs the reader of the freedom, which he has when reading conventionally presented texts. He is enrolled himself, whether he likes it or not, by the suggestion of the book-space - be it by being trapped on different levels of reality, by being drawn into the story, by being addressed by the text or by finding images of oneself within the text.... The labyrinth book has a “choreogaphic” dimension: it manipulates the reader by influencing the maze” (26). The power of space, in both literature and architecture, lies in its ability to influence the emotions and perceptions of the observer.
One of the dangers of associating architecture and literature is literal translation from one medium to the other. When one becomes preoccupied with recreating every part of a given story or setting, it loses some of its impact by becoming preoccupied with the superficial elements. Although these elements are important parts of the work as a whole, the deeper meaning behind a story is pushed farther into the background. Instead of simply acting as a stage setting for a predetermined set of events, architecture should embrace the themes and metaphors within a work and express them in its own abstract terms. It should not just recreate a story, but engage its occupants to create a personal experience.

**Situational Irony**
...acting or saying something that is opposite of reality; something that is not actually as it appears

**Hyperbole**
...an extreme exaggeration used for emphasis

**Allusion**
...reference to another, earlier body of work

**Points of View**
...the way that the narrative is conveyed; the “vantage point” of the reader/observer

**Flashback**
...interruption of the chronological sequence by an earlier event or occurrence

"The danger of falling into “rhetoricism,” as Terragni termed it, was obvious. It was necessary, then, “to reexamine the problem with our minds liberated from the preoccupation of literally following the text of the Magnificent Account.” A more abstract setting was necessary...”
- Thomas L. Schumacher, p.29

German Architecture Museum
O.M. Ungers
(Source: European Architectural History Network online)
Literature as Architecture:

**Library of Babel**

Jorge Luis Borges

1941

Jorge Luis Borges uses the setting of an infinite labyrinthine library in his short story, *The Library of Babel*, as a metaphor for life and the universe. He begins by describing:

“The universe (which others call the Library) is composed of an indefinite and perhaps infinite number of hexagonal galleries, with vast air shafts between... From any of the hexagons one can see, interminably, the upper and lower floors. The distribution of the galleries is invariable”

- The Library of Babel, page 51

This geometric and spatial organization establishes a labyrinth: this enforces the main themes of infinity and organized disorder. The architecture described in the text is a new embodiment of the universe, and strengthens Borges’ themes by presenting them in an abstract yet physical way.

The architecture of the library also sets up the structure of the text. Sophia Psarra observed, “From the inside the Library is incomprehensible, based on a linear route and identical galleries. But as a whole, it is intelligible at an instant. In two dimensions it is experienced gradually. In the third dimension of staircases and shafts it provides glimpses to the large scale” (104). A labyrinth is typically a singular path meant to structure an experience which will focus the mind; the library employs the same kind of layout. Singular paths and interlocking chambers form the library (and thus symbolically, the universe) as a whole. Similarly, the story is written as a linear sequence of one man’s path through life, with intermittent commentary on aspects of human nature, religion, the meaning of life, and society as a whole.

Like a labyrinth, the text creates sometimes disturbing sensations by reminding the reader of the narrowness of his own path in contrast to the incomprehensible vastness of the library. In this way, Borges synthesizes the literature and the architecture - in how they structure experience. Words and built form use their own language and techniques to imply similar themes, and this allows them to relate and create a singular more meaningful experience for the observer.
THE UNIVERSE

The Literary Organization

The Architectural Organization
Humans understand visual stimuli before they understand language; however, the understanding of words which describe space have formed differently between cultures (Bowerman 394). When translated into another language, words tend to lose some of their original meaning and context. Similarly, interpretations of visual phenomena are very much intertwined with cultural connotations and past personal experience. Visual and linguistic stimuli offer different ways of understanding, which interrelate to shape a complete picture of the world around us. It is hard to separate one from the other while still retaining the idea of the whole.

Craig Owens describes the inseparable relationship between words and visual elements: “Words are often treated as purely visual phenomena, while visual images are offered as a script to be deciphered” (Antstey, et al. 123).

We use images to explain words (i.e. political power as represented through impressive civic buildings) and also words to explain images (i.e. interpretations of abstract works of art). The two may not equate in every sense, but we must apply one to the other to be able to comprehend the full meaning of what we are observing.

Above: Classification of three different static spatial conditions (Source: Bowerman, 394)
Bernard Tschumi argues the opposite in *Architecture and Disjunction* that, “Architecture when equated with language can only be read as a series of fragments that make up an architectural reality” (94). I agree that certain aspects of space lose meaning when words attempt to explain them; however, I believe that architecture and language can be used and understood in a symbiotic manner to form a more complete picture of the world around us.

But the question remains: just how can architecture communicate? Umberto Eco argues that architecture communicates through the expression of its function, as that function always signifies something more than itself (Broadbent Bunt Jencks 13). For example, “The spoon promotes a certain way of eating and signifies that way of eating, just as the cave promotes the act of shelter and signifies the existence of the possible function; and other objects signify even when they are not being used” (Broadbent Bunt Jencks 14). In this sense, it is the frank and essential character of the object that retains meaning, and it can assume other properties when paired with other symbols or in different context.
Italo Calvino uses an architectural setting as a framework for larger life commentary in his book Invisible Cities. He creates a series of literary vignettes of cities as a way to comment on human nature, the problems inherent in language, and the temporality of cities in relation to events which occur within them. Although the descriptions and stories in each chapter are very different, they are tied together by their titles and the overarching story of Marco Polo.

Similar to Borges’ techniques in The Library of Babel, Calvino uses a similar organization in his described architecture as in his story. The text is a network of cities described by Marco Polo; the architecture is a network of isolated events or conditions occurring simultaneously within the city of Venice. Both attempt to establish an understanding of the whole through the isolation of its parts.

“In one of the chapters titled “Cities and Signs,” Calvino writes, “The city must never be confused with the words that describe it. And yet between the one and the other there is a connection… Falsehood is never in words; it is in things” (p. 61). He recognizes the disjunction between architectural and written representation, and uses it as a way to create an architecture experience which also frames social and political commentary. By themselves, the words and the architecture would not be able to create the same understanding that occurs when the two are used together.

“You take delight not in a city’s seven or seventy wonders, but in the answer it gives to a question of yours. Or the question it asks you, forcing you to answer, like Thebes through the mouth of the Sphinx.” - Invisible Cities, p. 44
Memory
Desire
Signs
Thin Cities
Trading Cities
Eyes
Names
The Dead
The Sky
Continuous Cities
Hidden Cities

The Literary Organization

The Architectural Organization
Semiotics and Visual Symbolism

Just as an author uses literary devices such as foreshadowing, flashback, and metaphor, what are the techniques used by an architect to manipulate space, time, and cultural understanding? Rudolf Arnheim argues that architecture gains meaning not through conventional symbolism, but rather through experience and the feeling of a space. He writes, “The most powerful symbols derive from the most elementary perceptual sensations because they refer to the basic human experiences on which all others depend” (209). People interpret art, architecture, or literature differently based on their own experience and the connotations which certain words or shapes hold in their minds. A dynamic object (or text) thus contains multiple simultaneous readings and interpretations, making a more personal experience which varies depending on the observer. Spatial quality and structured experience are more effective ways of creating these effects, as opposed to literal and obvious symbols and recreations. Metaphor in architecture need not be apparent at an instant, but rather gradually reveal itself throughout the experience of the space.

However, cultural bias also plays a large role in visual understanding. Certain spatial characteristics are more likely to evoke a reaction based on their intrinsic reference to more primitive conditions. Marc-Antoine Laugier argued that architectural origins are deeply tied in with nature and necessity, and that columns actually represented the structure of trees (Mallgrave 144). In this way, basic architectural elements and spatial proportions can subconsciously recall images of primitive needs and solutions: a space with intimate dimensions could recall the notions of shelter, refuge, and escape associated with a cave. Basic feelings associated with architectural elements and spatial proportions are widely transcendent, though there are also connotations associated with cultures. Political regimes frequently exploit this, erecting new structures with organizational, ornamental, and other similarities to those of the Roman Empire or religious entities to which they wish to relate.

If consciously addressed, a building’s physical, social, and cultural context can infuse it with new and complex meanings. According to David Kolb, architectural metaphor occurs when, “systems interact in an operation by...”

Top: Marc-Antoine Laugier’s primitive hut
(Source: Essai sur l’Architecture. 2nd ed. 1755)
which new elements and rules can be created through deviant use of the old” (118). History and precedent in architecture lay the basis for such metaphor by providing a framework which the architect can manipulate to create new conflicts and connections. When a familiar element is transferred into a new context, it brings with it existing sets of ideas and relationships which can then be altered in the reapplication. Metaphors and symbols are inherently and inextricably embedded within their context, and this provides much of the basis for comparison or commentary.

Although creativity and aesthetics are an important aspect of design, theories of semiotics and visual semantics can be exploited to establish a desired effect. Gestalt psychologists such as Max Wertheimer and Gustav Kohler viewed the mind with a holistic approach, and devised a set of principles regarding perception (Soegaard). These laws analyzed how the human mind relates groups of objects based on proximity, similarity, symmetry, closure, and figure-ground relationships. As seen in the diagrams

Cave

Intimate dimensions

Religion

Monumentality

Forest

Repetition of Free-standing Vertical Elements

Culturally Distinct Traits

Recalls given aspects of the referenced group

Shelter
Refuge
Escape
Coziness
Awe
Admiration
Humbleness
Humility
Nature
Trees
Disorientation
Influential
Absolute Power
Prestige

This Page: Reichstag
(Source: berlin.de)
Opposite: Five Orders
on pages 31 and 32, a single image can be either seen as a whole or broken down into its parts for a variety of different readings. Visual emergence occurs when these relationships and assumptions simplify an otherwise complex whole by making its individual systems more apparent (Gero & Jun 3). Although human interpretation of visual stimuli can widely vary, these principles provide a basis for the designer to begin shaping perception in a somewhat uniform fashion.

A similar way to create a powerful visual effect is through binary opposition. Contrasting elements, such as light and dark, constriction and extension, or presence and absence, set up a series of extreme comparisons. It is the implied space and meaning between these extremes which the mind interprets and assigns meaning.

Although many objects can be interpreted to have meaning on some level, Umberto Eco makes a point that architecture, “is experienced inattentively... not, that is, in the way in which one is meant to experience works of art and other more demanding messages, which call for concentration, absorption, wholehearted interest in interpreting the message” (Broadbent Bunt Jencks 42). Rarely does a person walk into a building with the intention of interpreting a deeper meaning from their experience. Thus, an architecture of meaning must be subtle in how it affects emotion and experience, but also outright when calling attention to matters of most importance.

“If architecture can be said to have a poetic meaning we must recognize that what it says is not independent of what it is. Architecture is not an experience that words translate later. Like the poem itself, it is its figure as presence, which constitutes the means and end of the experience”

### Proximity
The visual effect that results in the grouping of a cluster of similar objects into one form.
- **Mercato Santa Caterina**
  - Enrique Miralles / Benedetta Tagliabue
  - Barcelona, Spain

### Similarity
The visual effect that results in the grouping and association of like objects.
- **Banco Popolare**
  - Carlo Scarpa
  - Verona, Italy

### Closure
The visual effect that causes the mind to complete or close off open objects.
- **Barcelona Pavilion**
  - Mies van der Rohe
  - Barcelona, Spain

### Figure-Ground
The visual effect caused by objects that take background or foreground position—and the reversal of this.
- **Church of the Light**
  - Toyo Ito
  - Osaka, Japan

### Symmetry
The perception of objects formed around a center to create one cohesive object.
- **Villa Rotunda**
  - Andrea Palladio
  - Vicenza, Italy
Poetics of Form and Space:

Notre Dame du Haut
Le Corbusier
1954
Ronchamp, France

Although this project does not correlate with a specific text, it was designed within the framework of the Catholic faith. As a pilgrimage church, it is a relatively small yet poignant space meant to be a point of significance to visitors along their journey.

The sculptural and modern form of the church has been interpreted in many ways, as practically every element can be found to express some degree of deeper meaning. For example, the double-sided altar is often interpreted to resemble Janus, the two-faced Roman god of beginnings and endings (O’Toole 140). According to the Oeuvre Complete, “The requirements of religion have had little effect on the design. The form was an answer to a psycho-physiology of the feelings” (Boesiger 72). However, certain features of the classic church can be seen in the final design, such as the cross axis, side arcades, and altar. By playing off of these familiar features, Le Corbusier integrated the landscape and spiritual context to create a building dense with meaning.

In regards to the roof, Michael O’Toole wrote: “Just as a poem foregrounds the semantic, syntactic or phonetic essence of the words of everyday language to ‘make them strange’ and to enable us to experience them anew, so a building—a poem in stone—may foreground such a piece of taken-for-granted experience as the fact that roofs extend into eaves” (140). The roof serves a fundamental purpose of enclosure, but its poetic nature stems from its billowing exterior form and the way that it controls light on the interior. The narrow gap between the roof and the walls provides a sense of floating and lightness, referencing the transcendence of religion and of heaven. This combined with the “stars” punched in the altar wall and other strategic lighting effects creates a highly controlled and spiritually powerful interior.
Chapter 2: Rising Action (The Ideas)

The Universe

1. Memory
2. Desire
3. Signs
4. Thin Cities
5. Trading Cities
6. Eyes
7. Names
8. The Dead
9. The Sky
10. Continuous Cities
11. Hidden Cities

33 cantos
3 rings (x 3)
7 terraces
7 spheres
Paradiso
Purgatorio
Inferno

Introduction

1 canto

Architecture and Literature

Library of Babel
Invisible Cities

Architecture and Communication

Semiotics and Built Form
Sequence and Experience

"Architectural monument and literary work can adhere to a singular scheme without losing, in this union, any of each work's essential qualities only if both possess a structure and a harmonic rule that can allow them to confront each other."
- Giuseppe Terragni
The Relazione

"Words are often treated as purely visual phenomena, while visual images are offered as a script to be deciphered."
- Craig Owens

Architecture and Authorship

"Linguistic and non-linguistic (e.g. visual) symbol systems offer complimentary perspectives on the world. A world view of a people comprises sets of interactively related ensembles, no one of which paints a complete picture. Moreover, each is unthinkable without the other."
- Donald Preziosi

Architecture, Language, and Meaning

"... through the balanced proportion of its walls, ramps, stairs, ceilings, the play of its ever-changing light from the sun above, can give... the sensation of contemplative isolation, of removal from the external world..."
- Giuseppe Terragni
The Relazione
If the structuring of an architectural experience is an important element in the way a building expresses meaning, how does one manipulate sequence to create a desired effect? The architect must take the user into consideration. Should the sequence facilitate interaction or isolation? How should the observer engage or pass by certain elements? Is the circulation an important part of the concept to be exaggerated and celebrated, or understated and concealed? Hierarchy and relationships between spaces and programs are also of utmost importance along circulation routes.

A sequence on axis, similar to enfilade in French hotel design, uses vanishing perspective, visual repetition, and alignment to establish an impressive procession through a series of spaces.

Other works employ an axial sequence in more complex ways. For example, Villa Giulia in Rome establishes a straight visual axis which is contrasted by the actual paths of circulation through the varied levels of villa and garden.

The Guggenheim Museum by Frank Lloyd Wright and the Kunsthall by OMA are examples of buildings which morph the axial sequence into a spiral through the building sectionally rather than with a straight linear approach. In the Guggenheim, this spiral occurs around a central void, so that at any time the observer can easily reference where he has come from and understand the building as a whole. In the Kunsthall, the circulatory ramps are less obvious and centrifugal, rather responding to site cues and directing the observer through a series of galleries.

A sequence need not be a singular route through a building. Bernard Tschumi’s theories on event as a driver
of program are revealed in his design for Parc de la Villette in Paris, France. Flexibly programmed pavilions are organized throughout the park on a point grid for regularity, allowing for radically varied events to occur simultaneously. The main sequences through the park are conceived of as “Cinegramme Folie” – promenade as a film strip – where “the linearity of sequences orders events, movements, and spaces in a progression that either combines or parallels divergent concerns” (Tschumi Cinegramme Folie 12).

Sequence and circulation is important in any building design, but it can also be an important tool when attempting to communicate ideas through architecture. So much depends on the viewpoint...
of the observer in relation to their surroundings. Donald Preziosi observed:

"Everything about an architectonic formation is meaningful in some way, but not everything is meaningful in the same way... Distinctions and disjunctions in formation exist to cue the perception of differences in meaning" (4).

He goes on to describe the temporal experience of architecture, and how an experience gradually unfolds and changes over time. Time and movement, whether controlled or at random, can change the context and understanding of an architectural element. Like in a religious pilgrimage, the diversity of experience combined with awareness of a greater meaning can lead one to new self realizations. In this context, mental preparation and awareness is perhaps one of the most important aspects in creating a meaningful experience (Barrie 39). A structured sequence that utilizes its physical, political, and social context can profoundly change the reading of a space from approach to exit.

Opposite Page: Chapel of Notre Dame de Beauvoir, pilgrimage and approach
(Source: http://www.beyond.fr)
Architecture as Literature:

The Danteum

Giuseppe Terragni
1942
Rome, Italy (Unbuilt)

The Danteum, an unbuilt project by Giuseppe Terragni, is an example of how architecture can mirror a work of literature through experience. As a library for the works of the poet Dante, the design is based off of *The Divine Comedy*. Terragni uses the structure of the text and its emotional effects to translate the story into a physical form.

Not only did Terragni abstract the text of *The Divine Comedy* to design a series of spaces; he also used the building’s physical and political context to embed new meanings and associations. By starting the sequence with a visual connection to the Coliseum and ending the sequence in the space of the Impero for the Fascist regime, Terragni aimed to associate the religious undertones of *The Divine Comedy* with past and modern Italian politics.

*The Divine Comedy* was composed very strategically; Dante used the numbers

“Intended as a symbol of Dante’s political aspiration for Italy, the Danteum was to resemble any number of nationalistic monuments, glorifying the arts before politics, but ultimately tying together the two.”

-Schumacher, p.20
The Literary Organization

- **Paradiso**: 33 cantos
- **Purgatorio**: 33 cantos
- **Inferno**: 33 cantos
- **Introduction**: 1 canto

The Architectural Organization

- **Paradiso**: 7 spheres
- **Purgatorio**: 7 terraces
- **Inferno**: 3 rings (x 3)
1, 3, 7 and 10 throughout the structure of both the poem’s cantos as well as his described imagery in reference to God, the Holy Trinity, heaven and perfection. The story follows a spiral trajectory from the “dark wood” of life, through inferno, purgatory, and paradise. Similarly, Terragni organized the major spaces of the teum in an upward spiral, creating a specific sequence which would evoke different reactions and emotions from the observer. Terragni also used the golden section, a symbolic geometric form of perfection, and the numbers 1, 3, 5, 7, and 10 in proportioning his spaces.

“\textit{A more abstract setting was necessary; one that “... through the balanced proportion of its walls, ramps, stairs, ceilings, the play of its ever-changing light from the sun above, can give... the sensation of contemplative isolation, of removal from the external world...”}\n
- Giuseppe Terragni

\textit{Quoted in Thomas Schumacher, The Danteum, p.29}

Simply mirroring the organization of \textit{The Divine Comedy} was not enough to create an adequate representation of the text. Each section of the poem was meant to evoke a different feeling: inferno was one of torment and suffering, purgatory was one of relief and ascent, and paradise was perfection, peace and introspection. Terragni used cues from the text in designing each one of his spaces, and details which would have an effect on the observer. For example, in the space representing paradise, a ten by ten grid of transparent columns and structure frames the sky to emphasize lightness and represent heaven. On the other hand, small cracks of light, split pediments, and a congested spiral of columns create a sense of tension and discomfort in the space representing the inferno.
Narrowed entry behind wall sets up the sequence - passage and experience of the individual.

Court not counted as a space in regards to the story, but prepares the observer for the journey.

Columns create a spiral and congestion of columns, reminiscent of the rings of the inferno.

Terraces show ascent, evoking the image of purgatory as a mountain. The number of terraces (7) is based on a symbolic number, alluding to heaven.

Glass columns on a 10x10 grid have an apparent order based on a number which symbolizes perfection.

Room of the Impero accessed through Paradise - tall narrow space imposing and impressive.

Approach / Entry

“I cannot say clearly how I entered there, So drowsy with sleep had I grown at that hour when first I wandered off from the true way.”
- Inferno I, 10-12

Court

“Midway through the journey of our life I found myself in a dark wood, for the straight way was lost.”
- Inferno I, 1-3

Inferno

“Through me you enter the Woeful City, through me you enter Eternal Grief.”
- Inferno III, 1-2

Purgatory

“He opened his arms and then spread his wings and said, ‘Come: the steps are at hand here, and henceforth the climb is easy.”
- Purgatorio II, 91-93

Paradise

“All things have an order among themselves, and this is the form that makes the universe like God.”
- Paradiso I, 103-104

Impero

“It is not a museum, not a palace, not a theater, but a Temple we wish to construct.”
- Giuseppe Terragni, The Relazione
Chapter Three

Climax (the project)
How can architecture continue where language leaves off?

The text will be the driving force behind the design – to determine site, program, and even provide a basic source of form and meaning. I do not wish to create an obvious and literal retelling of the story; rather, it will be a framework to build upon the ideas presented in the text. Although there are many universal themes, I want to focus on a couple of major ones: narrow-mindedness, and introspection through exploration. Saint-Exupery wrote about personal experiences; he was an aviator as well as a writer, and emphasized the importance of the journey rather than just the destination (Des Vallieres, 10). Although these are not originally and explicitly architectural ideas, I believe that they can be applied in built form through the construction of sequence and experience.

To test my thesis, I propose designing a library based on the life of author Antoine de Saint-Exupery and his allegorical story: The Little Prince.
Le Petit Prince (The Little Prince)
Antoine de Saint-Exupery
Published: 1943

The Little Prince (originally written in French as Le Petit Prince) is written to appear similar to a children’s book, but the ideas and themes behind the story are quite mature. It contains multiple layers of stories and accounts which weave in and out of each other:

1 - Broad Time Span: Narrator as a young boy, and older man
2 - Specific Event: Narrator crashes plane in desert
3 - Third Person Account: Life and Journey of the Little Prince

The organization could best be described as a set of tiers: the first covers the beginning and end of the book and the narrator’s life, encapsulating the most time spanned. The middle tier moves on to describe a specific event: the 8 days following a plane crash in the middle of the desert. And the last tier consists of a 3rd person retelling of the little prince’s journey. This portion covers a year’s worth of time, but also comprises the main bulk and focus of the story.

Although only 133 pages of images and words, the text itself is dense with symbols and motifs. Deeper readings are possible for every character and event: this includes water as a symbol of life and spiritual fulfillment, the stars as symbols of mystery and desire, and trains as symbols of the futility and frantic nature of human effort.

To try to create an architectural manifestation which incorporates every aspect of The Little Prince in this respect would be jumbled and unclear. Visual symbols are capable of dual readings, but not in the same way as symbols incorporated into a story.

Instead, the overall narrative organization and primary themes can provide a framework and basis of meaning where architectural design can begin to take shape.

Top: Events build upon one another to establish a framework
Middle: Cover for French edition of Le Petit Prince, 1943 (Source: http://www.amazon.com)
Bottom: Interpenetration of events
Narrative Structure and Organization
Narrow-Mindedness

Children and Adults

Imagination and Ignorance

Throughout the story, the narrator glorifies the perception of the child – innocent and imaginative – as opposed to those of adults who are continually worried about “matters of consequence.” The adults that the little prince meets are so embroiled in their own lives and matters that they have lost sight of their goals and the beauty of life’s journey. The narrator retains some of his imagination, but admits, “Unfortunately, I don’t know how to see sheep through the walls of boxes. Maybe I’m a little like the grown-ups. I have had to grow old” (22). However, his experiences with the little prince slowly help him to regain the unhindered and worldly perception of a child.

“Words are the source of misunderstandings.”
- The Fox

My drawing wasn’t a picture of a hat. It was a picture of a boa constrictor eating an elephant.

Architectural Implications

Perception and Viewing

The author includes a series of illustrations throughout the story which do not just visually represent the text, but further the ideas and storyline. This not only gives the feel and look of a children’s story, but hints at the limitations inherent in language as a communicator.

Above: Two sheep drawn by the narrator for the little prince (Source: Saint-Exupéry, p. 6)
Opposite Page, Top: Drawings by the narrator which show the power of imagination and interpretation. (Source: Saint-Exupéry, p.1)
The Journey

Ways of Gaining Knowledge

The entire text is preoccupied with the idea of the journey rather than the destination. Both of the main characters, the narrator and the little prince, have their own individual journeys and goals even while they spend time together. The narrator does not describe where he has come from or where he aims to go; he does not even describe the plane crash, but rather focuses on his time in the desert and the story of the little prince. The different stories within the entirety of the text all recount movement and process, but never a physical resolution. Even when the little prince supposedly returns home, there is an element of uncertainty and mystery on the part of the narrator. This lack of a proper resolution puts the emphasis on the characters’ processes throughout the story and their search for personal truths.

“What makes the desert beautiful,” said the little prince, “is that somewhere it hides a well.”
The characters in the story begin very much alone: the narrator can not seem to find an adult with which he can have a meaningful conversation, and the little prince abandons his home and his flower for his journey. They gain new insights on relationships and human nature through their encounters with other people. Gradually they begin to make more meaningful ties (i.e. the little prince tames the fox; the narrator and the little prince become close friends) which have more significant impacts on their lives and personal thoughts.

“It is only with the heart that one can see rightly; what is essential is invisible to the eye.”

-The Fox
Antoine de Saint-Exupery was not only an author - his main career and passion actually revolved around aviation and adventure. He was, “a pilot, poet, philosopher, journalist, inventor... The originality of his writing is rooted in the fact that his writings were modeled on his life” (des Vallieres 10). Unlike many other authors of his time, Saint-Exupery actually wrote about his experiences as a pilot for the French Aeropostale in award winning books such as Courrier Sud (Southern Mail) and Vol de Nuit (Night Flight). *The Little Prince* is the most fictional of his works, and yet he still weaves aspects of his own life and experience into it. The story takes place after the narrator crashes his plane in the desert – something that had actually happened to Saint-Exupery in the Sahara desert 8 years prior to writing the story (des Vallieres 12).

*The Little Prince* emphasizes the importance of the journey in gaining knowledge, and this is a theme that also permeated Saint-Exupery's personal and professional life. Although he was born and raised in Lyon, France, he lived his adult life constantly in transit. He lived and worked around the world, in places such as Paris, Orly, Casablanca, Cape Juby, Buenos Aires, and New York.

His missions in the Air Force and routes working for the Aeropostale also led him to a variety of foreign places. He remained constantly in transit and adventure, even in death: although his body was never officially found, he disappeared mysteriously during a reconnaissance mission in the Mediterranean (des Vallieres 207).
Saint-Exupery is seen as a national hero in his native France, for more than his professional contributions to literature and aviation. Hope Glidden, a professor of French Literature at Syracuse University, explains why he was so widely admired:

“He was something like the perfect citizen... he had his own philosophical views and was not quite existential, but kept his boyish childlike quality and essence. He was charming, very good-looking, involved somewhat in politics, and these were all qualities that were admired by the bourgeoisie and the whole of France.”

At the time, Saint-Exupery was admired in just about every area of his endeavors, and the fact that he died while on military duty made him more popular and revered. Most biographies and books written on him still portray him in this favorable light, and glorify his life and actions.
Program

Libraries and Knowledge

Both Saint-Exupery’s life and story
*The Little Prince* revolve around the importance of the journey and open-minded views of the world; these themes have an inherent connection with the library typology, as they regard problems with and ways of attaining knowledge. Throughout history, libraries have been embedded with ideas about how to mediate between the collective society, the individual, and books as a record or source of knowledge. Throughout *The Little Prince*, the characters on their own solitary journeys achieve new appreciations and realizations through their interactions with each other. For example, in his encounter with the king, little prince learned:

“It is much more difficult to judge oneself than to judge others. If you succeed in judging yourself rightly, then you are indeed a man of true wisdom” (Exupery, 52).

There is an emphasis on the individual and seeking knowledge for self-benefit; however, it is through the journey and experience with another being that brought the little prince to these personal
realizations. In this context, how can a library cater to the needs of the individual and structure a very personal experience, while still fostering relationships and locating them within the larger collective?

The library can establish an interface of interaction (or non-interaction) between its occupants. Books are historically associated with knowledge, power, and isolation; however, there is a shift in today’s society to a focus on technology. Technology fosters interaction and interconnection, but often in less physical and traditionally meaningful ways. Umberto Eco wrote about libraries:

“And then the final problem: we need to decide whether we wish to protect books or let people read them. I’m not saying that we need to let people read them without protecting them, but neither should we protect them without letting people read them. Nor am I saying we should seek some middle ground. One of the two ideals must prevail, then we can try to take account of reality in order to defend the secondary ideal.”

(Candida Hofer Libraries 13)
Evolution of Library Form

Knowledge and the Individual

King's Library
Etienne-Louis Boullée, 1786
Paris, France (Unbuilt)
- Tiers of bookshelves line edges of bookcase form
- Hold regions of collection history
- Emphasis on collective, no individual space.

Munster City Library
Bolles + Wilson, 1993
Munster, Germany
- No central collective reading space
- Circulation at center divides bookstore from media program

Stockholm Public Library
Gunnar Asplund, 1928
Stockholm, Sweden
- Ideal centralized space - bookshelves travel entire area of the collection

Exeter Library
Louis Kahn, 1972

Zones progress outward from a central collective atrium space, to bookshelves (knowledge), to personal reading nooks (individual)
Individual / Communal Relationships

- Emphasis on the individual and learning as personal enrichment
  - Information (books and other media) available and accessible
- Introspection and the individual
  - Spaces for personal study
  - New / changing understanding of context
- Knowledge through relationships and interactions with others
  - Public spaces foster one-on-one and small group interactions

In relation to the ideas of *The Little Prince* and Antoine de Saint-Exupery:

Zones progress outward from a central collective atrium space, to book shelves (knowledge), to personal reading nooks (individual)
Antoine de Saint-Exupery Library

Programmatic Organization

| Public (Social) | Main Entrance | 140 m² (approx. 450 sf) |
|                | Circulation Desk | 75 m² (approx. 250 sf) |
|                | Display | 15 m² (approx. 50 sf) |
|                | Cafe | 150 m² (approx. 500 sf) |
|                | Exhibition Gallery | 300 m² (approx. 980 sf) |
|                | Saint-Exupery Changing | 250 m² (approx. 820 sf) |
|                | Event/Educational | 140 m² (approx. 450 sf) |

Total Social Public = 1070 m²

| Collection | Adult Bookstacks | 800 m² (approx. 2600 sf; 45,000 documents) |
|            | Audio/Visual Material | 200 m² (approx. 700 sf) |
|            | Children's Bookstacks | 400 m² (approx. 1300 sf; 20,000 documents) |

Total Collections = 1400 m²

| Public (Indiv.) | Catalog Lookup Stations | 15m² (approx. 50 sf) |
|                | Individual Study | 20 @ 4.5 m² (approx. 15 sf) |
|                | Conference Rooms | 2 @ 45 m² (approx. 150 sf) |

Total Individual Public = 195 m²

| Private | Librarian Offices | 5 @ 30 m² (approx. 100 sf) |
|         | Receiving Area | 75 m² (approx. 250 sf) |
|         | Special Collections | 200 m² (approx. 700 sf) |
|         | Staff Lounge | 75 m² (approx. 250 sf) |

Total Private = 500 m²

| Service | Bathrooms | 6 @ 75 m² (approx. 270 sf) - 2 or 3 stalls |
|         | Storage | 200 m² (approx 325 sf) |

Total Service = 650 m²

Subtotal: 3815 m²

| Mechanical and Circulation | @ 20% = 763 m² |

Total Program Area: 4578 m²
Narrative Structure and Organization

Programmatic Organization

Day 1

Entrance — Exhibition — Offices — Staff Lounge — Staff BR — Special Collections

Adult Books — Conference — Audio/Visual

Cafe & Terrace — Children’s Area — Event / Educational

Day 8
Saint-Exupery, *The Little Prince*, & Lyon, France

Antoine de Saint-Exupery and his story *The Little Prince* have this in common: both remain unattached to any one physical location, and instead embrace the transitions between destinations. Saint-Exupery was constantly traveling and flying throughout the 44 years of his life; similarly, his characters are on their own never ending journeys throughout *The Little Prince*. The allegorical themes posed are also universal, as they apply to human nature and mankind as a whole. However, as much as both book and author attempt to detach themselves from the physical world, they have a great deal of cultural significance in France. All of Saint-Exupery’s writings were originally in French and then translated into other languages. Some of the original practical intent of the words may have been lost in translation, but the effect remains the same. Also, in France *Le Petit Prince* is widely read by both children and adults, as it contains themes and elements which...
have significance to all age groups. Sixty-eight years after its original publication, *The Little Prince* continues to rank number one as the bestselling book in France of all time and number ten worldwide, having sold over 80 million copies in over 190 different languages (Smith).

Even people who may have not read his books are aware of his celebrity; his face appears on French 0.46 Euro stamps, as well as the old 50 Franc bill. In 2010, Google France celebrated Saint-Exupery’s 110th birthday by incorporating the little prince and airplanes into their logo.

A relationship between architecture and literature has the most impact when the observer is aware of both, and thus a project based on *The Little Prince* would have the most meaning and inherent associations embedded in French culture.

*Top:* Antoine de Saint-Exupery makes an appearance on the 50 Franc bill, as well as French 0.46 Euro stamps. *(Source: Google Images)*  
*Bottom:* Google France celebrated the 110th birthday of Saint-Exupery’s birthday in June 2010. *(Source: Google Images)*
As the birthplace and hometown of Antoine de Saint-Exupery, Lyon has embraced and celebrated his successes more than any other place in France. There are many features in the city which bear his name: Lyon Saint-Exupery Airport, designed by Santiago Calatrava, was intended to embody his love of flight, and a winding road in the 9th arrondissement also references the famous author. His little prince gets plenty of publicity as well. He is featured on “La Fresque des Lyonnais” – one of the “trompe l’œil” lifelike, large scale murals prevalent throughout the city which highlights famous and important people from Lyon.

Left and Above: Appearance of The Little Prince on “La Fresque des Lyonnais” - a mural depicting famous and important people from Lyon's past.

Right: The train station addition to Lyon Saint-Exupery Airport, designed by Santiago Calatrava, was meant to embrace and depict Saint-Exupery's passion for flight. (Source: http://www.calatrava.com)
History and Development

Lyon is the capital of the Rhone-Alps region, located in east-central France.

Population
City: 480,660
Greater Metropolitan Area: 1,757,180

Industry and Commerce
Banking
Chemical, Pharmaceutical, and Technology Industries
Interpol Headquarters
Historically known for silk weaving during Renaissance

Climate
Oceanic / Subtropical
Cool and dry winter; Hot summer

Organization
9 Arrondissements, or districts
Local governments and identities

Opposite Page: Map of modern-day Lyon
(Source: Institut Geographique National)
Lyon was founded as the Roman colony called Lugdunum in 43 BC (Site Officiel de la Ville de Lyon). Main development began on the “presqu’île”—a peninsula formed at the meeting of the Rhone and Saone Rivers, while the religious and cultural elements were erected on the Fourviere hill on the west bank of the Saone. Because of its strategic location as a communicative hub between the three Gauls, Lugdunum became the designated capitol (Site Officiel de la Ville de Lyon). After the downfall of Rome, the church named Lyon the seat of the Primate of Gaul in an effort to settle upheavals and unrest. Smaller colonies and forts that had formed along the roads leading away from the center eventually began to expand and create a larger connected city area.

Another hill to the north, the Croix Rousse, began as the city’s Renaissance working class neighborhood and center of trade and commerce. Lyon’s largest industry at the time was silk weaving, and this is where the majority of silk workshops were located (Site Officiel de la Ville de Lyon). This industry

*Top: Vieux-Lyon, the city’s medieval quarter
Middle: Ruins of Roman amphitheater can still be seen on the Fourviere hill (Source: WikiTravel.org)
Bottom: View of Lyon in the 1866 (Source: Wikipedia)
Opposite Bottom: 19th century Carte de l’état-major (Source: Institut Geographique National)*
gave rise to the most distinctive architectural feature of Lyon: the “traboules.” These are pathways which literally cut through buildings and city blocks to create straighter and easier pathways for the movement of merchandise from one end to the other (Site Officiel de la Ville de Lyon).

After the French Revolution, Lyon embraced its industrial identity and began urban renewal programs similar to those of Haussmann in Paris (Site Officiel de la Ville de Lyon). During World War II it acted as the center of French resistance efforts. Today, Lyon has embraced urban development and modernization to become the second biggest metropolitan area in France.

As a city, Lyon tends to foster juxtapositions between starkly contrasting elements. The two rivers which converge at the tip of the presqu’île are the main dividers and enablers of these conditions. The winding Saone (which assumes a feminine label) and the wider, more powerful Rhone (the masculine counterpart a masculine name) have been romanticized in art and literature.

Top: Notre-Dame du Fourviere, the city’s cathedral high up on the hill
Middle: one of the city’s traboules
as they illustrate the difference and convergence of the gender stereotypes (Glidden). Likewise in city planning, the banks of the Saone tend to house the main historical, cultural, and religious zones of Lyon, while the Rhone features more modern developments to its east bank. The Presqu’île, Fourvière, Croix Rousse, and Vieux Lyon districts to the west and center of the city have been designated UNESCO world heritage sites in which the city proudly showcases architecture from Roman, Medieval, and Renaissance periods of its development. In stark contrast to this close association with the city’s founding history, the Lyon Part Dieu district to the east is known for commerce: many scientific, pharmaceutical, and technology oriented companies have established headquarters in this area near the train station, shopping mall, and main public library (Site Officiel de la Ville de Lyon).
Lyon has and is currently undergoing extensive changes through urban planning initiatives.

- Tony Garnier was an influential figure in Lyon city planning in the early 20th century. His utopian plans for “Une Cité Industrielle” were based on Lyon and greatly impacted the city. (Source: Garnier, Tony. Une Cité Industrielle, p.)

- A new conference and civic center was built in 2006 by Renzo Piano in 2006 at the top of Parc Tete d’Or (Source: Renzo Piano Building Workshop online)

- The tip of the presqu’île, formerly home to military and industrial districts, is in the process of being re-zoned. Projects including a new museum by Coop Himmelblau and the “Orange Cube” by Jakob + Macfarlane aim to establish the “Confluence” as a new modern cultural center. (Source: http://www.la-confluences.fr ; ArchDaily)
Site Characteristics

Site is an important consideration for a building which strives to create a dialogue with literature. Many allegorical architectural projects stay in the realm of the general and abstract, allowing the observer to engage and fill in the blanks with their own imagination and associations (Antstey, et al. 105). However, as in the case of Terragni’s Danteum, the site can embed the architecture with new layers of associations and importance that in turn inform the literature.

As a story, The Little Prince takes place in the desert and in outer space. Both are non-specific and inherently isolated, allowing the characters and their thoughts to take the forefront. For the intentions of this project, however, an entirely isolated project would not foster the desired social interactions. Following are important site considerations derived from the themes of the text:

Opposite Page: Saint-Exupery’s drawing for the cover of Le Petit Prince depicting the prince’s home planet
The Journey

Journey is already a phenomena explored in architecture - movement and events are always addressed in some way or another. However, in this case the journey is not just movement through the project. In terms of *The Little Prince*, a journey should construct an experience as to facilitate knowledge gain. Emphasis on the individual and introspection is paramount, but it is really through interaction that people come to new realizations about life, relationship, and their desires.

A single route or sequence through the site would not achieve this effect. Multiple intertwined routes and points of entry can achieve a variety of experience, as well as cater to the preferences and desires of the individual. Sequences should offer a variety of views, perspectives, interactions, and conditions.

Narrow-mindedness

An architectural translation of “narrow-mindedness” should strategically manipulate the views and perceptions of the observer to see things in a particular way. Thus, an important quality that must be present in the site is the possibility of a variety of changing views - both internally, and of the surroundings.

How the building relates to its urban environment is also important. An introverted building - one which ignores its context and emphasizes internal features, can act as an escape from society. By distancing itself, not in proximity but in relationships, a building can alter perceptions and attitudes towards the city.

Therefore, a site on the border between urban and natural elements would provide the most contrast and opportunities to offer new perspectives and relationships.
Boulevard Antoine de Saint-Exupery is a short, winding road located in the 9th arrondissement within view of the Saone River. It provides access from a dense urban area up to a group of residential towers at the top of the hill. It begins at a parking lot in front of a church, and forks off into three other roads at the top.

Transportation
Major neighboring transportation infrastructure:
- Boulevard Croix Rousse
- Croix Rousse Tunnel
- Vaise Metro Stop
- Pont Georges Clemenceau
- Pont du Marechal Koenig

Topography
Between the Fourviere and Croix Rousse Hills, the site is elevated with views of the surrounding hills.

Urban Density vs. Natural Elements
The site lies at a shift between the dense urban fabric of the city and the less developed areas on top of the hill.
Top: Landmarks along the Boulevard de Saint-Exupery

Bottom: Site section, 1:2500
Because of its elevated position, the site provides extensive views of the Saone River (east) and the outskirts of the city (west).
In these possible program orientations, the progression through three distinct zones constantly shifts the emphasis between the individual and community.

I. All-encompassing; addresses both the life of Saint-Exupery and necessary service spaces.

“So I lived my life alone, without anyone that I could really talk to, until I had an accident with my plane in the Desert of Sahara, six years ago.” - p.3

II. Oriented to the individual, with book stacks, conference rooms, and spaces for private study.

“It is a little lonely in the desert…”
“It is also lonely among men.” - p.84

III. Most public, meant for assembly and interaction.

“What does that mean – tame?”
“It is an act too often neglected,” said the fox.
“It means to establish ties.” - p.96

Progression across site

Draws users upward from the “narrow-mindedness” of the city to the “open-mindedness” of new public spaces with elevated views towards the landscape
- Multiple points of entry:
  1. Public square
  2. Street
  3. Top of wall
- Maintain existing foot paths

Utilization of wall

Visible but not directly accessible from the square, the zones are oriented to emphasize different aspects of the natural and man-made context
- Upward - communal
- Downward - individual
- Existing wall incorporated as a wayfinder and connection between the three zones

Urban concentration

A stronger public presence on the corner of the square then draws users up and through to the most public program, elevated at the top of the site.
- Individual-oriented program sandwiched between public spaces and entries
In these possible program orientations, individual elements and special collections permeate two major sequences through the site. These tie the two together and serve as reminders of the overall concept.

“One only understands the things that one tames,” said the fox. “There is no shop anywhere where one can buy friendship, and so men have no friends anymore. If you want a friend, tame me…” - p.99

Assembly and most public spaces encourage small groups and one-on-one interactions

“It is much more difficult to judge oneself than to judge others. If you succeed in judging yourself rightly, then you are indeed a man of true wisdom” - p.52

Emphasis on individual amenities and learning as a source of personal fulfilment

“No one is ever satisfied where he is,” said the switchman… “They are pursuing nothing at all… Only the children know what they are looking for.” - p.105

Key information, wayfinding elements, and special collections

Crossing Paths
Sequences branch off into divergent paths, meeting at a central significant point.

Nested Zones
Paths are nested within one another, allowing for direct passage from one point to the other, or overlaps between the different readings.

Bridging
Outer zones provide two different entries; special collections, conference rooms, and individual study spaces bridge between the public spaces and the collections.
Chapter Four

Happily Ever After...
Part 1
The Life of Saint-Exupery

“In the course of this life I have had a great many encounters with a great many people who have been concerned with matters of consequence. I have lived a great deal among grown-ups. I have been them intimately, close at hand. And that hasn't much improved my opinion of them. So I lived my life alone, without anyone that I could really talk to, until I had an accident with my plane in the Desert of the Sahara, six years ago.”
Part 2
The Crash in the Sahara

“No one is ever satisfied where he is,” said the switchman... ‘They are pursuing nothing at all... Only the children know what they are looking for.”
Part 3
The Little Prince

“It is much more difficult to judge oneself than to judge others. If you succeed in judging yourself rightly, then you are indeed a man of true wisdom.”
Plan 2: Bookstacks, Reading Space, Balcony

Plan 1.5: Bookstacks

Plan 1: Bookstacks and Reading Space

Plaza Level: Entry, Exhibition, Cafe

Plan -2: Loading and Mechanical

Plan -1: Special Collections
**Glossary**

- **Binary Opposition** - a pair of contrasting signs or elements. Examples of this include: light/dark, tall/short, etc.
- **Closure** - The visual effect caused by objects that take background or foreground position - and the reversal of this
- **Enfilade** - a suite of rooms with doors that align on axis
- **Figure-ground** - The perception of objects formed around a center to create one cohesive object.
- **Gestalt Principles of Perception** - holistic theories of how the mind interprets visual stimuli
- **Metaphor (visual/literal)** - an element which inherently references another seemingly unrelated element or concept, and thus assumes new meaning within the context (not necessarily the same as a symbol)
- **Narrative** - Sequential storytelling
- **Organizational Structure in Literature** - rules and guidelines by which a story is presented - i.e. linear or non-linear storytelling, syntactical relationships, chapters, etc.
- **Proximity** - The visual effect that results in the grouping of a cluster of similar objects into one form.
- **Semantic** - relation between signs and things to which they refer (see signified / signifier)
- **Semiotic** - functions of signs and symbols; the overall study of their meaning
- **Signified** - the inferred meaning of a symbol
- **Signifier** - the apparent sign, which stands for another element
- **Similarity** - The visual effect that results in the grouping and association of like objects.
- **Symbol (visual/literal)** - an element which stands for another unstated element or concept
- **Symmetry** - The visual effect that causes the mind to complete or close off open objects.
- **Visual Emergence** - simplification of a complex form to the sum of its parts


