existence and continuity

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ABSTRACT

History is a narrative of interdependent events or a series of events clustering about some idea which weaves them together. History gathers individually occurring events along the datum of such an idea and absorbs it into a realm of simultaneity. Similarly, this thesis attempts to amplify the co-existence of overlaying fragments of construction. Interventions within extant artifacts are another layer compounded toward a continuing history of building.

This investigation is a search for an architecture with a presence of permanence and historical continuity.
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Fontenelle, reconstructed from a Carolingian description.

Ideal Cistercian monastery, presented by Aubert and Dimier.

Plan of St. Gall, the drawing presents an ideal architectural scheme to guide Benedictine monastic planning.
Typology is concerned with the constant, elementary patterns that underlie a particular type. Over time, these patterns structure and define the essential aspects that form a perceptible category pointing to the nature of a thing. In architecture, general relations as function, idea, material, technology, context, and the organization of parts might lead to the construction of type. A particular type is constituted by both particular forms and ceremonies of engagement. Often, these forms are the institutions of civilization: library, school, house, church. They might be more fundamentally described as: a room for books, a place to learn, shelter, a house for worship. These institutions render a sense of order and purpose that is meaningful to a historic being. Type is also an idea to guide forces which have determined architectural form over hundreds of years. While inquiry of type uncovers basic existential structures, the individual work offers differentiations and accommodations to the variable circumstances of time, culture, function, construction, and economy. The type challenges the designer to discern the modalities within which it operates, determine its effective value, and respond accordingly.

In monastic architecture, the evolving form and essential components of the type achieve clarity through the Rule. The Rule of an Order establishes a way of life, and a way of worship, compiled in a written document. The architectural organization must correspond to this spiritual ideal. Wolfgang Braunfels indicates the inherent typologic constitution of the Rule: "The monastic ideal represents one of humanity's truly imposing designs for living. Strong natures have repeatedly striven to vest this idea with a form suited to their time and culture... Monasteries became interpretations of the Rule according to the changing spirit of the times." 1

The earliest noted correspondence of an architectural schema to the Rule of an Order is that of the Fontenelle Monastery of the early 9th Century developed in accordance with St. Benedict's Rule. The Rule does not stipulate any formal artifacts to accommodate the dictums, rather, as in St. Benedict's rule, it provides the pedagogic precepts of monastic life of which the Abbott is the guide. The Benedictine day is divided into hours of prayer, reading, work, eating, meditation, and sleep. The Rule scribes a binding rigor supporting simplicity, asceticism, and self sacrifice. By simple adherence to such fixed rituals, as Divine Office (prayer seven times a day), Laundy (foot washing ceremony), and the ringing of bells (a signal for indicating the time of the work of God), organizational relationships evolve. Fontenelle's chronicler describes the construction of three buildings of equal height: the refectory and cellar, the dorter, and the camera/caminata (a study room for the monks). The three structures lay to the south of the church which was oriented east-west.

Also of note is the presence of a "building for the conservation of books." 2 This simple description of the elementary plan provides us with a clear understanding of the germinating elements of the Benedictine cloister. The intention is to provide a complex for which everything is provided and nothing is superfluous.

It is the ideal plan of St. Gall, drawn around 820, which firmly establishes the cloister as a major organizing device, providing a paradigm of general spatial organization that was to be most influential for subsequent Benedictine monasteries. A square cloister, measuring 100 feet by 100 feet and only accessible to the monks, becomes the physical center of the monastic institution and forms the sole connection between its primary architectural elements. These monastic building elements round the cloister are the church to the north, the dorter, refectory, kitchens, and cellar. In the center space a fountain or cistern provides water for cleanliness, especially the washing of hands before meals. Secondary to and outside the cloister itself lie the Abbott's house, infirmary, novitate, and gardens. The tightly disciplined and unified monastery acted as school, mission center, agricultural concern, and administrative base. The placement of the various building types responds directly to a rational implementation of their function.

The architecture of the monastery strove to reflect the spirit of perfection, harmony, and piety of the Rule. The Carolingian scale used in the St. Gall Plan is adapted to the notion of module and establishes a proportional system that aspired to promote a spiritual aesthetic. Further, it was hoped that the site would be located by a stream near a town in a valley and open to the west. The idealized natural setting is to be sanctified by the ordered array of monastic architectural interventions. While St. Gall can be denoted as a "near utopian concept," 3 the Rule demonstrates clearly the independence of type as a formal directive. Hence, there will be inevitable transformations.

A significant point in the development of the modern monastery was secularization in both the mid 1600's and 1900's. New religious idealism focused on missionary and educational activities. Many monastic complexes no longer reflected their Rules, but superimposed ideals and agendas governed by outside influences. Yet, the most significant 20th Century monastic achievement would be one achieved through a typologic understanding and this belongs to Le Corbusier.

1 Braunfels, p. 9.
2 Ibid., p. 236.
3 Price, p. ix.
TRADITION

The monastery at La Tourette represents a critical transformation within the monastery type. Its transformations are the exemplary result of deciphering modern spiritual and physical needs. The architectural form strictly supports the typological framework of the Benedictine tradition. It comes as no surprise that in 1907 and 1911, at the ages of 20 and 24, Le Corbusier traveled through southern Europe and to the East, respectively. During these two journeys, he visited the Carthusian priory of Galluzzo, also known as the Charterhouse at Ema, outside Florence and the monasteries on Mount Athos, a Greek island. Moving beyond simple impressions, Le Corbusier's life and built work embodied and became structured by the essence of monasticism. "He went back to his early travel notes in evolving the principles behind the Immeuble Villas in the 1920's and the Unité d'Habitation of Marseilles in 1953. He became aware of the advantages deriving from solitary life in a community. The Charterhouse at Ema was a prototype using a principle that seemed to him ideal for structuring the life of the masses. This architect, like the founder of an Order, felt the urge to draw up rules and plans for living."4

Corbusier unveils the structures of the traditions of the past and proposes modern transformations. Braunfels says of La Tourette, "In this complex the innate rationalism, lucidity, and intellectual rigor of the Dominican Order and its French beginnings enter the present."5

Father Couturier, the Dominican priest who approached Le Corbusier in 1953 with the commission to design La Tourette, requested a monastery that provided for the Benedictine Rule, a Dominican ideal, and a seminary for the Order that accommodated theologian research. From the beginning, Couturier directed Corbusier's attention to Le Thoronet, a Cistercian Abbey in southern France. This monastery was held as the Dominican’s monastic ideal. The Cistercian Order was strict in its adherence to the Rule of St. Benedict and the diagram of Le Thoronet fits the Benedictine type. Communal facilities and a cloistered courtyard are attached to an oblong church. Unlike La Tourette, however, Le Thoronet has a communal dorter and a habitable courtyard reached from the cloister. Le Thoronet's courtyard fountain is often read as a significant element of influence directly translated into La Tourette's pyramidal oratory. The courtyard fountain is a typical element in the general monastic ideal and the oratory could seem equally likely to be read as a transformation within type. Essentially, the overall organization of La Tourette fuses and inverts the diagrams of Le Thoronet and Ema.

Corbusier's notebooks contain sketches of the Carthusian Charterhouse at Ema, including a detailed plan and section. Of Ema Corbusier said, "The uninterrupted ring of monks' cells formed the noblest silhouette in the landscape. Each cell overlooks the plain and opens, at a lower level, into a small, enclosed garden, I thought I had never seen such happy living arrangements. At the back of each cell a door and a pass-through window open onto an arched street, which gives access to communal facilities."5 The Charterhouse combined the hermit's existence with a communal life. Each contemplative monk lived and prayed by himself in his own cell and joined others only at daily Mass, Matins, and Vespers. Corbusier could undoubtedly see an elemental purity of form and expression in the repeated roofed masses and the rhythm of the colonnaded cloister that could transcend period or style.

Le Corbusier saw the cell as an ideal Twentieth Century solution to individual needs while juxtaposed with the rigor of communal life. The notion of individual cells, present in the Charter-Houses and Cenobitic monasteries, was developed in pursuit of the hermetic life. At Ema the cells are actually little houses with defined spaces for work, contemplation, and solitude; each unit provides a bedroom, workroom, oratory, bathroom, and garden, while still dependent on each other to comprise a community. These images and elements embodied a potential to make an architecture that would accommodate one and many.

The Island of Mount Athos was an autonomous republic containing twenty Greek Orthodox monasteries, mostly Cenobitic. The monasteries dramatically projected upward from the mountain tops with rows of cells horizontally cantilevered at great heights. They provided each monk with a private cell, yet the brethren would come together for meals and prayer. The environment supported such dualities as isolation and communality, religiosity and ritual, the sacred and the profane. Le Corbusier's description of one of the mountain top monasteries bears a striking similarity to La Tourette: "The monastery is a big quadrangle pierced by a door, the enclosing walls are here almost all the way to the top, where balconies cling and where loggias open at the fourth and fifth floors."6

This marriage of different shapes, identities, and associations are the result of a process similar to collage. Through understanding the essential order and structural relationships of these monastic prototypes, Corbusier did not imitate his sources directly but abstracted and transformed them to create something new.

4 Braunfels, p. 227.
5 Ibid., p. 226.
6 Guitton, p. 89.
7 Zakrić, p. 31.
EXISTENCE AND CONTINUITY

The beginning of the Twentieth Century marked a new conception of time and space relationships, determined by expressions in art, literature, and philosophy. The cubists, in particular the early colleagues, Picasso and Braque, imported everyday objects and materials taken out of their accepted contexts and placed them in new ones, altering their significance, which in turn set off sequences of new associations. This ambiguity, simultaneity, and interpenetration of events, in particular, the old and the new, lend the composition a structural strength and presence beyond time. In literature, T.S. Eliot uncovered relationships between present and past, temporal and timeless, and innovation and quotation, for a novelistic interpretation of memory, tradition, and history. Meaning becomes conveyed synchronically, not by a sequence of events, but by bundles of events, although these events occur at different places within the work.

As with art, literature, and philosophy, architectural principles can also parallel these thoughts. Architecture can be considered as the re-definition or revealing of complex interactions of multiple, diverse elements, as opposed to univocal or univalent form. Elements have a two-fold obligation: as fragment to origin, and as part to whole. Since it is within the assemblage that the conditions between elements are established, and their identity defined, it is especially the mediating, connecting, and boundary relationships which are of particular interest. Literally, an element within a particular circumstance could respond to geometry, transparency, texture, color, materiality, extant conditions, history, archetype, assembly. There is a ubiquity of a corresponding idea which is presented in varied places at varied moments.

Such ideas of continuity are manifest in the works of Carlo Scarpa and Karljoepf Schattner. Both architects strive to make history visible by the co-existence of overlaying fragments of construction. In other words, new interventions within extant structures are merely another discontinuous layer deposited on or inserted into a continuing history of building. Schattner refers to this condition as *Weiterbauwelt* which is "to continue to build." This implies that any built artifact is not a finished thing but allows for modification and continuity. Both the extant and that which is to come are important. These juxtapositions are not arbitrary, but rather mutually beneficial.

Inherent in establishing a dialectic between the past and present is a determination of value. Construction is both an additive and subtractive process; thus it is necessary to assess the already existing to ascertain what will comprise a fixed context. In the restoration of the Castelvecchio, Scarpa’s work “clarified and exposed the layers of history by selective excavation and creative demolition. He attempted to cut and then disentangle one epoch's construction from another so that the building itself becomes a giant exhibit revealing its growth and change in nature.” In environments which encourage the composite, several ideas inspire how the existing and the new might be juxtaposed.

In a syntax of relationships between the extant and the new, three formal conditions arise: independence, interdependence, and intermediation. Independence is evidenced by Scarpa’s pathway of planar concrete slabs which slip through a portal and seem to float above excavations (a). This maintains a discontinuity between the stair and the surrounding structures. Likewise, Schattner juxtaposes a massive wall embellished with ornate fluid mouldings with a planar, orthogonal cube containing a bathroom (b). In these examples, Scarpa and Schattner deliberately disconnect elements from different historic eras and new constructions are inserted into old structures leaving a void between the two. This independence is the vehicle by which the different intrinsic natures of each are communicated.

Interdependent relationships between the extant and the new exhibit overlapping unions where it is difficult to tell where one ends and the other begins. The new steel truss in Schattner’s Diocesi museum (d) is not merely adjacent to but supports the existing wood structural system. This extant structure is not passive but rather, orders the new. As in weaving, one element is the warp, the other the weft. It appears that one cannot exist without the other. Early in Scarpa’s design process at Castelvecchio, two decisions became inextricably interdependent, the demolition of the last bay of the Napoleonic block and the placement of the equestrian statue of Cangrande (c). Here, the incision is an element that holds the statue and the statue fills the volume. The perimeter interventions facilitate and frame this union: the delamination of the roof, the exposure of the Commune wall, the angled bridge, the orthogonal pedestal and viewing platform, the circulation through the space. In an interdependent syntax, the newer intervention draws from the extant to define its nature.

Lastly, the architecture of intermediation is defined by the interposition of a third element between the new and the existing. Two concrete side walls mediate both the intervention of stairs through the ancient Commune wall at Castelvecchio (e) and the sequence of views as the stairs are descended. Free of the mediating influence of the walls, the last stair bends out to orient itself with the angle of the river wall. Schattner inserts a glass house between the baroque Hirschberg Castle and a new kitchen and dining wing (f). This transparent building is a connecting space between the new and the existing, yet the castle may be perceived as a virtually untouched, individual volume. The syntax of mediation enables the extant and the new to exhibit their own orders while enjoining a third element to mediate their juxtaposition. The works of Scarpa and Schattner attempt to establish architecture as a simultaneously programmatic, historical, and formal concern; these three syntaxes of engagement demonstrate the beauty in deliberate interventions which reveal the continuity of change.

*Murphy, p. 4.*
“As time passes, when it is a ruin, the spirit of making comes back. It welcomes
the foliage that entwines and conceals. Everyone who passes can hear the story
it wants to tell about its making. It is no longer in servitude; the spirit is back.”
Louis Kahn

The small town of Pembroke in Southwestern Virginia is wedged between Route 460, which crosses the East-West running Appalachian Mountains, and the Northeastern bank of the meandering New River. Over a single lane bridge, on the other bank rests an exhausted stone quarry: a source of work for the residents of Pembroke in the mid 1900’s. The train, which follows the Southern bank of the river, still passes but no longer stops at the monolithic ruins which used to house the quarry’s gravel. These forms stand silent in the overgrowth of weeds and renegade saplings. Most of the secondary elements of function are gone; rusted and rotted away are the cables, tracks, chutes, and mullions. What remain are three concrete shells exhibiting an enduring presence.

The project begins with these three found objects: a wall, an arcade, and a massive, stepped concrete box. These objects may appear scattered on the site but geometric relations can be detected. The site is bounded by the abandoned quarry and road and slopes down to the other edge formed by the river and railroad tracks. Woven between these elements is the proposed monastery. In this project the monastery assumes the role of mediation between past and present, on one hand, the collective and the individual, on the other.
east-west cloister section, looking south  1"=32'
west-east cloister section, looking north  1"=32'
north-south cloister section, looking east  1"=32'
south-north cloister section, looking west 1"=32"
corner mediates between old and new

church-monks' chapel-library plan 3"=32'
church, transverse section  3"=32'
CHURCH, CHAPEL, LIBRARY

The church is the exclusive building in which both the secular and the monastic meet. Outsiders approach the church from the east, encountering a rough, planar wall penetrated by a small offset opening. After passing through this metal door chute, one enters the vertical volume of the sanctuary. The room is intentionally austere; the interventions are minimal. The existing rough concrete walls rise thirty-five feet and are tied by a deep cross beam. The proposed, enclosing steel truss and glass roof structure minimally bisects the opening to the sky. The wood bench seating is elevated above the excavated floor on a travertine slab. And, twelve foot wall panels differentiate a more intimate space within the volume. A significant change is introduced through the removal of the wall between the two tallest volumes. The general public never comes into direct contact with the monks, they are merely permitted glimpses of them behind the concrete grid screen which now separates the Church and Chapel. During public Mass, the monks attend the services in this small Chapel behind the Alter. The Chapel is illuminated by natural light pouring through the skylit church and sieved through the partition screen. Steel plates suspended in front of the four openings in this space also allow only indirect light to seep in.

The monks approach the Church in procession; they come from their cells along the monk walk to the West elevation. Entering on axis, the monks step into a metal forest. This third volume within the mass is mediated by an independent steel frame construction. The columns, an assemblage of four angles, rise from floor to ceiling and beams cross bidirectionally to rest in the columns' corners. This frame supports the stairs, partitions, floors, lighting, and books, leaving the existing walls untouched. The library lies to each side of the axial stair passage and is defined by transparent wire mesh partitions. The stairs are held by both the columns and the partitions; the monks descend through the books on their way to the Chapel. At the bottom of the folded metal stairs, the monks land on an independent concrete stair mass. An elevated plank bridges the distance from this landing to carry the monks through the wall and into the Chapel. A new metal sliding door encloses the sanctum.
plans
sections
elevations

library details  1"=4'

passage between chapel and library

library entrance
REFECTORY AND CELLAR

The cloister courtyard is defined by the cells to the west, the church to the north, and the refectory to the east. The southern edge of the courtyard is delineated by the extant concrete retaining wall. In front of this wall sits a rather large, cylindrical storage funnel. This metal vessel, adapted to hold water, becomes the cloister fountain. From this container a four inch channel of water runs north through the courtyard. The canal terminates in a small circular pool. It is here where the monks wash before their meals.

The refectory is placed within the existing arcaded structure and is adjacent to the cemetery and apple orchard. Three bays are created by four parallel arcaded walls. These existing walls create a frame for the intervention of the enclosing structures. The end elevations engage their two adjacent arches differently, juxtaposing an independent formal condition next to an interdependent one. Relative autonomy is maintained where one arch is shielded by the overlay of a glass grid cover. The adjacent arch however receives a concrete fill that directly abuts the arch; the infill holds a service entrance on the south and a window slit on the north.

Infill panels are set into the two longitudinal elevations. The south facing walls are concrete masonry units spanning edge to edge and rising from the ground up to eight feet. The remaining distance between wall and roof slab is filled with operable glass. A system of pivot arms operates the hinges of these ventilating louver panes. Independent panels sit within the north facing facade. Fixed glass mediates the interstitial space between the extant concrete and the metal edged, smooth precast inserts. The entrance infill panel in the left bay is differentiated from the others, it is set back and the roof slab provides an overhang above the opening.

Within the refectory, the first two bays accommodate dining, while the kitchen occupies the third. The thirteen foot high dining rooms hold two long wooden tables. The meals of the silent brethren are accompanied by reading. A lectern is provided in the middle bay so that all may hear the orations of the weekly reader. The kitchen is defined by a free standing cubic which holds the kitchen appliances and some storage. Most items of bulk are kept in the cellar adjacent to the kitchen. A side door leads to the cellar stairs. The underground space receives natural light through a skylight similar to those covering the rectangular openings in the roof of the arcade.
THE MONKS' CELLS

A line of cells comprise the western boundary. As a whole the row of cells act to mediate the constant ground slope between the extant retaining wall and church/library building. The cells maintain a constant elevation while the earth steps with each unit; the first cell is virtually embedded in the earth while the last cell, almost in contact with the library corner, is completely exposed.

The cell is dedicated entirely to the private realm of the individual monk. The transition from communal to individual occurs gradually with a layering of differentiated spaces. A monk proceeds along the elevated ambulatory, the "monk walk", to reach his cell. The monk walk is supported by the colonnade below. The bent columns beams of the colonnade come to rest on the exterior cell walls. The walkway is pulled away from the cell elevations to offer the order of the colonnade below and also to allow light to illuminate this space. A monk enters his cell by stepping onto two folded concrete stairs. Stepping down from "his bridge", he is between the exterior cell wall and the house.

The cell is defined by two primary components: this perimeter wall and the cella, the house itself. The perimeter wall protects and maintains the autonomy of each cella. The wall wraps the front elevation, delineates the boundary between the individual cells, and extends out to retain the earth in the garden. The perimeter wall then terminates in a covered cubic volume provided for reading or contemplation. The spaces between the exterior concrete walls and the concrete masonry cellas are intended to be mediators, insulating private from public zones.

The cellas are like small houses, inward directed, with rooms spiraling from least to most private. From the interior, there are no direct views, the north elevation is comprised largely of glass which faces the other perimeter wall. Light plays on this wall surface and indirectly reflects into the interior spaces. Upon entering his house the monk stands in an interior passageway that traverses the width of the house. To his right is the individual library and study space where he will pursue research and writing. Facing bookcases articulate an axial hall space that then opens up to a distinct work room terminated by a horizontal wood plane. A cantilevered desk slab runs the width of the house and receives natural illumination via a large glass wall plane on the left.

Continuing through the house mass, the monk steps outside onto the stair landing, a bridge between the concrete masonry house and the perimeter concrete wall. Cantilevered stairs give way to a stair mass as the monk descends into the lower level of the cell. The cantilevered stairs allow light to filter into the bedroom's glass plane opening. The bedroom is simply furnished with a bed, a wood burning stove, and a built in wooden storage unit which isolates the bathroom. One masonry unit by the head of his bed is pulled out to support a bible.
east-west longitudinal section, looking south

3"=32'
'Tradition...cannot be inherited, and if you want it you must obtain it by great labour. It involves in the first place, the historical sense, which...involves a perception, not only of the pastness of the past, but of its presence; [and] compels an [architect] to work not merely with his own generation in his bones but with a feeling that the whole of the [architecture] of Europe from [lctinus] and within it the whole of the [architecture] of his own country has a simultaneous existence and composes a simultaneous order. This historical sense, which is a sense of the timeless as well as the temporal and of the temporal together, is what makes an [architect] traditional. And it is at the same time what makes an [architect] most acutely conscious of his place in time, of his own contemporaneity.'

T.S. Eliot via Colin St. John Wilson
ILLUSTRATIONS


Unknown source. La Tourette balcony, p. 4; La Tourette aerial view, p. 5; La Tourette monk walk, p. 37.


The author is responsible for all other illustrations.
BIBLIOGRAPHY


VITA

Hilary Bryon was born in Los Angeles, California in 1964. In 1986, Ms. Bryon received a bachelor of arts in English from the University of Virginia. One year later, she entered the graduate school in the College of Architecture at Virginia Tech. Since completing her graduate coursework, Hilary has worked as a lab instructor for the Foundation Program in the College of Architecture.