Contemplation in an Urban Landscape  :  A Contemporary Cistercian Monastery

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Submitted to the Department of Architecture in Partial Fulfillment of the Requirements for the Degree of Master of Architecture at the Massachusetts Institute of Technology, February 2000.

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Abstract

At the proceedings of the Second Vatican Council from 1963 to 1965, landmark decisions called for the inculturation of the Roman Catholic faith — an attempt to have the faith made more accessible within the context of culture and society. This has led to changes in monastic life for the individual monk and his cloistered community. This thesis explores the repercussions of Vatican II on the time-honored typology of a medieval Cistercian monastery. A hypothetical community of twenty-four Cistercian monks attempting to locate on a strip of land on the edge of the city of Lowell, Massachusetts, is the vehicle used to implement some of the architectural possibilities to reflect the evolution of Cistercian Monasticism to date.

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Introduction

Monastery of Roussanou, Meteora, Greece.
Mid-16th century, Greek Orthodox.
A Brief History of Western Monasticism and Monastic Architecture

Western Monasticism developed from Eastern Monasticism and the Egyptian desert fathers and achieved some independence from the East as early as the 5th century. The writings of St. Augustine (refer to Appendix I), especially in the work of his maturity, *City of God*, synchronize many of the ideas that came to be cherished by those who pursued the monastic life as the optimal expression of an authentically Christian life in the West. Eastern Monastics expressed their search for God through an eremitic life, ordinarily dwelling in hermitages of one kind or another. Western Monasticism, under the influence of the Rule of St. Benedict (refer to Appendix II), led a cenobic, that is to say highly communitarian, lifestyle that mediated encounters with God through community life.

Western cenobic life oriented monasticism to develop a particular architectural schema to achieve its purposes. There is written record dating back to 9 A.D. of monastery layouts that remained intact through the centuries with only minor modifications. The 10th through 12th centuries marked the golden age of Monasticism; certain monastic orders grew and expanded at astounding rates unrivalled by any other movement in the Medieval Age. In a period where Europe was governed by feudal systems of alliance, monasteries became spiritual oases where a certain cognitive and moral objectivity could be attained, permitting the articulation of a spiritual ideal and arbitration of disputes and conflicts. The social influence of monasteries grew and they became the seats of both spiritual and political power.
St. Gall Utopia

The first written record of a monastery layout dates back to the 9th century and is known as the St. Gall Utopia. The dominant element in the tapestry-like layout is the church, oriented with the sanctuary facing east to the rising sun. To its south is the monastic cloister, with its surrounding buildings. On the eastern side of the cloister is the monks’ common room and the dormitory above. Located to the south of the cloister is the refectory, where meals are taken, along with the calefactorium, the one heated room in the complex. The cellar to the west completes the cloister. There was no reading room or library; the edge of the church, facing the cloister was the assigned place for monks to sit and read. The monk's life is entirely cenobic; everything was accomplished together, whether it be prayer, reading, manual labor, eating, meditation or sleep. All the buildings beyond the church and cloister served to support the contemplative lifestyle of the monks and cater to the monastery’s increasing political role. Further details of the St. Gall plan can be found in Appendix III, pages 109-113.

The Cistercians

The Cistercian Order was precipitated in 1075 with the aim of restoring the Rule of St. Benedict to its pristine form, which also involved disengaging from worldly political responsibilities. Everything not expressly allowed by the Rule in the way of indulgence in clothing, housing or food was banished. Their prime concern was the loving fellowship of all monks beyond the bounds of the single monastery. It was a reaction against the individualism, autonomy and extravagance of the great abbeys, such as Cluny, as described in Appendix III, pages 114-116. The all-powerful Order replaced the single abbey in importance.

The ordered life in Cistercian monasteries required strict adherence to the same laws day by day, which gave rise to a set of basic spatial requirements in all their monasteries. For this reason it is possible to set out for the Cistercians a binding schema on which all executed monasteries were variations. It has been
St. Gall Utopia redrawn, with identifications translated.
Original copy made between 816 and 836.
said that a blind Cistercian monk moving into any of the monasteries would instantly have known where he was. In it the evolution of the medieval Benedictine monastery reaches its climax and its culmination.

There are four preconditions for the physical appearance of Cistercian monasteries: the ideal of poverty, the desire to escape the world, the insistence on affiliation, and a new spirit of regulation, inspiring a new functionalism.

1. **The Ideal of Poverty**
   The ideal of poverty required each monk and also the monastery and its church to be poor and make a show of their poverty. In every monastery the same simple rooms were to hold the monks, and the same simple utensils and tools to be used. The churches possessed no towers, the windows displayed colorless patterns, and the only sculpture allowed was a Madonna. The Cistercians demanded bare, unadorned stone, unplastered and devoid of figural and ornamental decoration. The Cistercians habit was gray-white, woolen and linen cowls, neither bleached nor colored, as simple as their buildings.

2. **The Desire to Escape the World**
   The monks wanted to live from the work of their hands in the solitude of wooded valleys. But however much they sought out the loneliest, most barren combs for their new foundations, however many decades they lived off the most basic of food, their hard work in conjunction with the poverty inevitably brought prosperity. And with prosperity, worldly or secular obligations.

3. **The Insistence on Affiliation**
   The Cistercians aspired to build their monasteries in total isolation from any town, any village, or any castle. They wanted to avoid the possibility of a village community growing round the monastery.
For this reason they preferred narrow combes for their foundations, so long as there was running water, which is indispensable by their Rule. Everywhere they were to be on virgin, preferably uncleared ground. The choice of locations also implied a jealous independence of any bishop and of lay lordship. They were the first to designate the institution of new monasteries as a task of the monks themselves. Monastic communities testified to their divine zeal by the foundation of daughter-houses that were to remain attached to them forever, like children to their parents. This is the meaning of affiliation and it was the hope that this would result in the diffusion of the Order.

4. A New Spirit of Regulation, inspiring a New Functionalism

The fourth precondition, the new spirit of regulation and functionalism within the monastery, heavily influenced the architecture of the Cistercian monastery. The shape, size and place of the buildings are so precisely laid down, that it is possible to set out a standard scheme. The new regulatory drive aimed at greater simplicity, clarity and precision. Everything superfluous was forbidden, and what was built was to be plain, chaste and lasting. Attention was consequently paid to the stone, to its careful dressing and fitting, and to the proportions of the rooms it defined. Everything was built from the same pale, smooth-hewn stones. There were stone floors, stone door and window-frames, stone walls and stone vaults, and even roofs tiled with stone. There was nothing out of place, revealing the will and desire towards absolute harmony.

The Cistercian aesthetic unfolded in this world of stone, which eventually led on to the Gothic. With figural sculpture and color forbidden, the handling of stone reached new heights. Simplicity and geometric clarity were elevated into an ideal. This parallels developments in Islamic architecture that came about as a result of certain religiously motivated constraints. Just as the commandment to work inevitably produced wealth from poverty, art flowered from the desire for order. It was no more possible to sustain utter simplicity, than poverty.
Every Cistercian monastery lay by a stream in a valley. Once a site was chosen, at the point where a stream or river enters the plain, the abbot and the twelve monks built their new monastery. As a rule, the layout exploited the site in a masterly way. By reducing the site to an ordered array of architecture, a monastic landscape emerged. Marcel Aubert in 1943, and Father Dimier in 1962, presented a plan of the ideal Cistercian monastery. The plan is a fully evolved complex composed of a series of uniform elements, in which everything was provided for, nothing was superfluous. Right angles predominated; the articulation of the monastery was firm and clear. Following Benedictine custom, the church was wherever possible erected to the north and the cloister to the south. However, the unconditional requirement of citing the watercourse adjacent to the refectory arm of the cloister occasioned many exceptions. The church was intended for the monastery alone. There was no room for visitors and for a long time they were not given access, indicated by the lack of a west facade or a disproportionately small portal. A vestibule was allowed, as far as which the guests might go. The schema stuck to the simple pillared basilica with a transept in the east with a small rectangular choir. The monks could read their private masses in four, or six simple chapels of the transept.

A rood screen divided the church into the monks' choir and that of the conversi. Two benches for the sick were allocated to each part. Whilst the monks followed the service at the High Altar, two side-altars against the rood screen were provided for the lay brothers — the altar to the Virgin and the altar for masses for the dead. Monks and conversi entered their choirs by different entrances, the monks from the cloister, and the conversi via the narrow passage or lane, whose chief purpose was to ensure an area of quiet between their sphere and the cloister. The monks were neither to hear nor to see the lay brothers. At night the former had a further means of access to the church — the steep stair to the dorter, down which they went to Matins at one or two in the morning. The monks, having been asleep for six or seven hours...
The ideal Cistercian monastery as presented by Aubert and Dimier.

1. Sanctuary
2. Lych gate, the door through which bodies were carried from the funeral service to the graveyard
3. Monks' choir
4. Benches for the sick
5. Rood screen, separating the monks' choir from that of the conversi
6. Choir of the conversi, or lay brothers
7. Narthex
8. Night stairs from the church to the dorter
9. Sacristy
10. "Armarium" (aumbry), where books were kept
11. Benches for reading, and for the "Maundy" ceremony of foot-washing
12. Monks' entry
13. Lay brothers' entry
14. Chapter house
15. Stairs from the cloister to the dorter, which extended over the whole range 14-19
16. Parlor
17. Monks' common room
18. Room for novices
19. Latrine (used from the upper storey)
20. Calefactorium, or warming-room
21. Fountain, for washing
22. Refectory
23. Pulpit, for reading during the meal
24. Kitchen
25. Cellarer's parlor
26. "Lane" or "alley" of the lay brothers
27. Cellar, or store room
28. Lay brothers' refectory. The dorter of the conversi, or lay brothers, extended over the whole range 27-28
29. Latrines of the laybrothers' dorter
fully dressed on their plank beds, now had to last out another six or seven hours of choral service in the unheated church.

The cloister consists of a void open courtyard with an arcade for circulation between the various spaces in the monastic enclosure. Across from the entry to the refectory, a covered fountain provides the only protected habitation of the otherwise exposed, open cloister courtyard. I would like to propose that the courtyard could symbolize the inner sanctity of the individual within the bond of community and that the fountain becomes the symbol of habitation of that inner core.

The cloister, with its perambulating arcade, has also been described as the arms of the church extending out to the monastery, which draws the monks to itself. This extension of the church is a reminder of the omnipresence of God, that regardless of the direction taken, the path always returns to the house of God.

The Cistercians had a small sacristy with access from the cloister, not the church. As in earlier Benedictine monasteries, stone benches lined the north arm of the cloister against the church, on which, in proximity to the book-cell, the monks were to read in the open air. The chapter house adjoined the sacristy as usual. Then came the stairs to the large dormitory in the upper storey, and the prior’s parlor, which the monks entered one at a time for their daily allocation of work. It gave directly onto the garden to the east of the monastery. The provision of a monks’ common room was taken from Cluny. It took the place that might easily have been set aside for the novicate. It was created in most Benedictine monasteries merely through a fact of construction; the dorter, elongated so as to receive the growing number of monks, brought with it a lower storey which could not be filled by the chapter house, parlor and dorter stairs alone.

The calefactorium was the only heated room in the monastery. There the monks might warm themselves, prepare parchment and inks, grease their shoes, and dry out after rain. The calefactorium was also only accessible from the cloister. The Cistercians put back amongst the conventual buildings those, which for
reasons of hygiene, were specially housed outside them on the plans of St. Gall and Cluny. Everything specified in the Rule was to take place round the cloister.

The Cistercians made an innovation in the placing of their refectory. It was built at right angles to the cloister, probably less for giving it more light, than to leave room for a kitchen between the refectory and the house of the conversi. The detached situation of the refectory cried out for the monumental treatment. The hall was taken up through two storeys, almost to church height. It was part of a general development not restricted to the Cistercians that in the course of the 12th century a fountain was built out from the cloister opposite the entry to the refectory. To the right of the refectory was the kitchen, with a hatch to the monks' refectory and to that of the conversi. It could be entered and supplied from outside.

A contributing factor to the citing of the kitchen, was the endeavor to associate a monastery for the brothers with that of the fathers, with a clearly defined relationship to the church and the cloister. The monks wanted it near at hand, yet set apart from theirs. The conversi themselves wanted to turn their back on the world like monks, but their work required more frequent contact with it. For this reason they were allocated the west of the church and the cloister, living over the stables. They achieved their refectory through the extension of the cellar.

The alley of the conversi separates the menials from the monks. It exemplifies the whole problem of class-division in the monastery. The conversi had to be admitted to the church, but not to the cloister. This changed around the 19th century when people became more educated, but there was still a distinction between choir monks and lay brothers and conversi. With the advent of Vatican II in the 1960s, the distinctions were dissolved.

In all Cistercian monasteries the greatest attention was paid to the water supply. Cleanliness was inherent in Cistercian aesthetics. It is to be found both in the use of patiently smoothed stones and in the provision
of washrooms. The covered fountains became increasingly elaborate in response to this use. They are symbolic of the importance of the role played by water in the monastery.

The Cistercians were adept at the management of light, sound and proportions. Given that pictures and sculpture were denied, the monks saw to it that light was manipulated in accordance with function; they constructed their buildings using the traditional ratios since Vitruvius, but now endowed with new symbolic meanings. Furthermore, they strove for acoustics that would accentuate the clarity of the antiphonal singing of their choirs.

The Cistercian house was built seven hundred and forty-two times on the same plan. The Cistercians remained true to their schema for four centuries. However it is known that by the 16th century, each monk and each conversus had his own cell rather than a common dorter. The La Trappe reform of the 17th century, which espoused a return to a strict observance of the asceticism of the first Cistercian fathers, reversed this, amongst other issues, returning to a common dormitory. (The reform further defines two different branches of the Order — the Cistercian Order of the Common Observance and the Cistercian Order of the Strict Observance, also know as the Trappists.) However, Vatican II reform reversed the reversal and monks were once again assigned individual cells.
The monastic institution underwent a certain decline in the High Middle Ages, as the Mendicant Orders responded to the spiritual needs of a population experiencing the social pressures of initial urbanization and the birth of a consciousness of national identities. Then following the Renaissance and, in the 18th century, with the Enlightenment, came the French repudiation of monastic values and the destruction of monasteries associated with the establishment that the Revolution wanted to overthrow. The persecution did not cease until the beginning of the 19th century. Monasteries lost their political and economic might but the Orders were never completely eradicated. Monasticism has since made a recovery in the 19th and 20th centuries. It is but a shadow of its former glory in terms of its dominance of the European landscape. The role of monasticism changed even as adherence to St. Benedict’s Rule remained but was interpreted and expressed differently. Within Catholicism, the Second Vatican Council (1962–1965) effected a paradigm shift in its own self-understanding as an institution, which had enormous implication for its monastic orders. It inaugurated a new conception of the relations between Church and World, and in this framework, a new intuition of a contemplative mission for monasticism.

The evolution and development of Western Monasticism is long and involved and is further elaborated in Appendix III.
Second Vatican Council

From 1962-1965, during a three-year series of meetings in Rome of the Pope and the bishops from around the world, the Catholic church moved to engage modern culture in profound dialogue which altered its own self-understanding and its sense of mission to the world, and relations with other churches and religions. The choice to respond to contemporary culture gave birth to liturgy in the language of the vernacular in an attempt to have the lay people participate more freely in a liturgy intended to nourish their spiritual lives. There was an intention to bring the Gospel to the common person, to “inculturate” the faith and explain its relevance to contemporary issues of modern life, to understand its importance and application to his or her life and to help believers integrate their spiritual life with their daily routine of activities.

The decisions made at Vatican II brought about tremendous upheaval within the monastic orders as they grappled with a new perspective of their faith and its effect on their way of life. The choir monks, voted to grant lay brothers the right to vote in chapter meetings and invited the lay brothers to partake in choir and the liturgy. The lay brothers’ habit was rendered obsolete and all were expected to wear the monks’ habit. While the choir monks’ decision to abolish the separation and class distinction and to enfold the lay brothers into their way of life were well intentioned, the lay brothers’ opinions were not taken into consideration. During this period of adjustment to the new system many lay brothers left the Order having lost a sense of their vocation which they felt was taken away from them. Many felt their prayer and communion with God derived from the work of their hands and not from liturgical services chanted five to seven times a day. Monastic culture changed overnight and the turmoil only began to settle down in the 1980s and 1990s. Today, all who have made solemn profession, that is, taken vows of commitment to the Order, whether priests or brothers, are known as monks and wear the same habit. In the past, novices were assigned to be choir monks and lay brothers based on their education and upbringing. Choir monks were given theological training and were expected to become priests, while lay brothers were given more
simplified theological training and more technical education. The choir monks prayed and sang the liturgy, the lay brothers supported their lifestyle by attending to the day-to-day operations of the monastery. Today, all novices entering the Order are given similar preparation and training, and during their three-year stint in the noviciate, the novice master helps each novice find their vocation within the Order. Some become priests, some focus on choir and liturgy and others tend toward more practical vocations. However, the line between the vocations is blurred, priests and choir monks take on a share of manual labor, and all participate in the sung liturgy. Their ultimate vocation, regardless of their focus, is to be a monk, someone whose life is to worship God.

Another effect of Vatican II is that monasteries have become more accessible to the public, sharing the secrets of their lifestyle by providing guesthouses for believers and unbelievers who desire short-term retreats of contemplation and meditation. Some monasteries even allow people to spend a more extended period of time, as much as six months, living within their cloisters as a monk without making solemn profession. Monasteries are also less strict on the separation of their monks from lay people and have begun to invite lay people to participate more in the services. The process of accessibility is a gradual one and questions on how to achieve accessibility are vigorously debated within the monastic community. There are advantages and disadvantages on both sides of the issue and the healthy tension continues as the monks seek to find the balance of “being in this world and not of this world”.
The Site

Lowell, Massachusetts. Location of site in white box.
There were two main criteria in selecting a site to exploring this thesis — physical conditions that were not conducive to following the typical Cistercian monastery layout and environmental conditions that would inform the implementation of the Vatican II mandate.

A typical Cistercian monastery is situated on flat ground, close to a source of running water, that allows for the square, box-like typology of the cloister and its surrounding buildings. The intention in this thesis was to stretch the boundaries of medieval monastery design, as such, a linear and sectional site would require modification to suit the found conditions and yet continue to support the specific functional requirements of monastic life for the individual monk and his cloistered community.

Site Description

Panorama facing east. On the right of the picture is the site.
Furthermore, an urban setting would also add a layer of complexity to the extent that the monastery engages the public. Using architecture as one of the vehicles with which to illustrate this new era of greater accessibility is one of the main challenges in this thesis.

The site chosen is located in Lowell, Massachusetts, 60 miles northeast of Boston. The linear site is approximately 110' wide, north to south and 1000' long, east to west, with an average cross-sectional change of 15'. To its north is the Merrimac River, and to its south is a canal that runs parallel to the river, thus creating an artificial island removed from the town of Lowell. The canal becomes a sort of monastic wall, a barrier that creates the sense of being set apart from the world. The water level in the canal is approximately 18' above that of the river, depending on the time of year. The juxtaposition of the calm canal water and the raging river enhances the desirability of locating a monastery on the site particularly because water is often symbolic of spiritual purity and cleansing. Lowell's industrial past, elaborated in the next section, has already imparted a symbolism of industry to the Merrimac and the canal system. This new addition of spiritual meaning needs to be sensitively woven into the existing history of Lowell.
To the south of the canal, across from the island, are a Catholic elementary school and some residential homes. It is assumed that the school, being of the same denomination, will not be averse to sharing access to the main road with the monastery. The other residences, within 10' of the canal edge, hint at the density of the city's edge adjacent to the site. To the north of the site, beyond the Merrimac River is small highway with panoramic views of the island. To the east and west, the site is flanked by bridges that connect the highway to downtown Lowell.
History of Lowell

While there is no single birthplace of industry, Lowell’s planned textile mill city — in scale, technological innovation, and development of an urban working class — marked the beginning of the industrial transformation of America. The Lowell story is as much about change as about beginnings. Just as the city today reflects the deindustrialization happening across the northern states, so its historical structures represent one of the greatest transitions in American social history. This was the shift from a rural society, to one in which people responded to factory bells, where work was the same year-round and did not cease at nightfall.

With the social transition came an architecture that matched. Mid-19th century Lowell was impressive for its sheer scale. Massive five- and six-storey brick mills lined the river for nearly a mile amid the area’s scattered farms. The city itself was only a backdrop; textile mills dominated the Lowell scene. The complex network of power canals were just as impressive. By 1850 almost six miles of canals coursed through the city. Operating on two levels, they supplied power to ten major mill complexes employing more than ten thousand workers.

The population of Lowell grew dramatically during the years of rapid industrial expansion — rising from about 2,500 in 1826, to 16,000 in 1836, to more than 33,000 by 1850, when Lowell was the second largest city in Massachusetts.

Lowell mill owners knew as early as the 1890s that their mills were aging and becoming increasingly non-
competitive. Instead of modernizing their operations, they invested in modern textile plants in the South. The decline worsened after World War I and came to a virtual halt with the Depression. Lowell firms failed or left town, deserting its residents and leaving Lowell with no industry of which to speak.

By the 1960s, Lowell’s glory days were far in the past. The city was hard-pressed economically, and young people were leaving in droves for greener pastures. Those who stayed were ambivalent about their history, recalling the hard conditions under which they or their parents had worked. With little sense of a worthwhile heritage, many were ready to erase the past and start over. There were proposals to fill in the city’s most distinctive landmarks - its canals - in order to create more downtown real estate.

In the early 1970s, there came a proposal to revitalize the city based on its industrial and ethnic heritage. This heritage was considered the soul of the city, and not incidentally, a key to its economic salvation. After years of study and debate it was suggested that Lowell be made into a new kind of national park based on labor and its industrial history. Congress established Lowell National Historical Park and the Lowell Historic Preservation Commission in 1978. After the restoration and preservation, people have been returning to Lowell to visit an era of American History. Visitors can take tours of the canal system and rehabilitated mills to catch a glimpse of the bustling industrial heritage of Lowell. There are also efforts to establish a cultural center. For example, once a year, during a weekend in the summer, the largest folk festival in New England is held in Lowell. The National Historical Park status has revitalized much of downtown Lowell and brought business back to the area.

Lowell, unlike a heritage site, is still an evolving city with its fair share of social problems and economic concerns. The revitalization has certainly brought with it many good outcomes, and the city’s evolution will be watched in the years to come.
Design Process
My first intuitive gesture in response to Vatican II was to connect the island site back to the mainland as a way to engender greater openness and dialogue between the monastery and the people of Lowell.

Another important move that carried through to the final design is the alteration of the traditional inward focus of the monastic cloister and its surrounding building structure by "unwrapping" the cloister. This unwrapping was an opening up of the cloister as a gesture of being receptive to potential positive external influences and to acknowledge and thereby foster the individuality of the monks that make up the community.

The first schema that evolved had the cloister traversing the canal, with the workspaces located on the mainland and the guesthouse acting as a bridge over to the island. A central node on the island, consisting of the three tables — the church, chapter house and refectory, form the northern edge of the cloister. The chapter house is situated in the cloister courtyard, over the canal. It takes on the function of the wash fountain as the inhabited space in the cloister. The remaining structures, including the conventual buildings and monk cells, extended beyond the cloister instead of completing the enclosure.
Sketch Model. "Unwrapping" of the cloister.
Cisterian monasteries are traditionally located away from civilization, in order to foster an environment suitable to the ascetic, contemplative life, without the distractions and temptations of the earthly world. The attempt to locate a Cistercian monastery at the edge of an urban landscape is already a radical step for this monastic order. The canal somewhat isolates the site from the rest of Lowell, but with residences located at the water’s edge that overlook the island, it became apparent that more protection and separation was necessary than the first scheme considered if the monks were to maintain their way of life. The desire for openness needed to be finely balanced with an attitude of resistance to the urban encroachment of Lowell at this site. Furthermore, part of the appeal of a monastery is the element of mystery and secrecy within denied to those who have not been enfolded into its community. If a monastery is too open and inclusive, the mysticism and spirituality of the monastic life is lost for both the monks and the public.

With this attitude in mind, all the primary buildings in the monastery were pulled back to keep within the confines of the island. The cloister became more intact but not entirely enclosed, allowing for the partial unwrapping or opening up of the cloister. The traditional cloister and the act of unwrapping occur concurrently, overlaid on top of each other, reinforcing the complexity of balancing the desire to simultaneously cultivate individuality and build community. Grouping the three tables together to form a concentration node within the monastery carried over from the original scheme.
First Floor Plan
Scale 1" : 80'

1. Church
2. Chapter house
3. Refectory
4. Entrance
   Courtyard
5. Cloister
6. Library
Grouping the three tables together created a very strong presence, forming a void space that took away from the cloister as the symbol of unity and centrality within the monastery. Furthermore, the focal point within the cloister would be the refectory rather than the church which is located beyond the cloister and no longer at the “heart” of the community. In this scheme, there is also a lack of continuity in the circulation path around the cloister. The circulation around the refectory and workspaces is unresolved, resulting in an interruption in the otherwise fluid movement around the cloister.
Sketch Model. 3 Tables & Cloister.
Final Design Scheme

Site Model. Aerial View.
Based on the issues raised in the second scheme, the church was relocated to the head of the cloister, restoring it to its rightful place as focal point of the cloister and the monastery. The refectory was repositioned to the eastern end of the cloister, away from the church and chapter house. In this reformated layout, the three tables anchor the corners of the elongated and tapered cloister, thereby reinforcing the cloister as the central space around which the essential activities of the monastery take place. The problem of a displaced center, inherent in the second scheme, is no longer an issue. Nonetheless, the layout still implies a degree of hierarchy in the cloister; the pairing of the church and chapter house emphasizes the western end of the cloister relative to the eastern end where the refectory is located. The pairing of the church and chapter house also highlights the unique tension between them, as the political and spiritual centers of the community respectively. This relation is further described on pages 60-62.

The two bars of conventual buildings, where the day-to-day functions of the monastery take place, form the cloister. By imbedding the refectory within the cloister, at the critical convergence point of the conventual buildings, the refectory takes on the symbol of the necessary mundane activities that need to take place in order to create an environment conducive to the contemplative life.
Plan with the 3 Tables
Scale 1" : 80'

1. Church
2. Chapter house
3. Refectory
First Floor Plan
Scale 1" : 80'

1. Church
2. Chapter house
3. Refectory
4. Cloister
5. Porter’s lodge
6. Fountain
7. Receiving room
8. Seminar room
9. Counseling room
10. Monks’ common room
11. Library
12. Administrative office
13. Abbot’s office
Second Floor Plan
Scale 1" : 80'

1. Monk's cell
2. Infirmary
3. Showers & toilets
Basement Floor Plan

1. Guest house
2. Service entry
3. Work space or storage
4. Kitchen
5. Bookstacks
6. Laundry room
7. Monk's cell
8. Showers & toilets
Cross Section (South-North)
Scale 1" : 50'

1. Cloister
2. Seminar room
3. Monk's cell
4. Circulation
5. Administrative office
6. Work space
7. Chapter house
8. East facade of church
9. Bell tower
10. Bridge
11. Porter's lodge and Gues
12. Canal

Site Model. View from Northeast.
Longitudinal Section (West-East)
Scale 1" : 50'

1. Cloister
2. Church
3. Refectory
4. Library
5. Circulation
6. Bookstacks
7. Laundry room
South Elevation
Scale 1" : 50'

North Elevation
Scale 1" : 50'
Model. View from road bridge.
Model. Aerial View.
Site Model. View from Northeast.
The final scheme ironed out the circulation problems encountered in the second scheme, creating a clear and continuous passage around the cloister, to and from the church. This simple and direct path, along with the converging bars of conventual buildings, reinforces the symbol of the cloister as the arms of the church extending out to the rest of the monastic complex. From the position of the church, the convergence of the arcade and the sloping ground of the courtyard lengthens the cloister visually so that the arms of the church appear to be far reaching and present in every aspect of the monastic life. On the other hand, from any point in the cloister, the eastern face of the church becomes the main focal point. The angles of the arcade and sloping ground work in reverse effect, collapsing the perspective such that the church appears closer, its arms drawing the community into itself.
Longitudinal Section through Cloister

Scale 1" : 50'

Elongated Perspective of Cloister from the Church.

Collapsed Perspective of Cloister & Church from the Library.
The first of the three tables within a monastery, the church is the table of worship and sacrifice, indicated by the presence of the tabernacle and the altar. The interior of the church is traditionally divided into three sections — the sanctuary, the choir stalls for the monks and separate choir stalls for the lay brothers. With Vatican II, separate stalls are no longer required. However, the desire to be more inclusive of the public in the liturgy requires rethinking of public seating in the church. This design has the public assuming the stalls previously allocated to the lay brothers. This way, the public simulates the seating positions of the monk so as to participate more fully in the monastic chants, even if they are separated from the monks.

The church is to be made of heavy concrete masonry walls and floors. The ceiling of the public portion of the church is of like material, enclosing the public in a dark and heavy cube of space. The sanctuary and the monk's choir stalls are further differentiated from the public area by a pitched roof made of lighter material. The pitched roof draws in light from west-facing clerestory windows that illuminate the slanted ceiling. The altar and sanctuary are further illuminated by a skylight between the slanted roof and the eastern wall of the church. The sanctuary is raised one step, typical of Cistercian monasteries, implying the importance of the altar and tabernacle as the focal center of the church. The vertical slit on the eastern face of the church is oriented 6° northeast towards sunrise at Easter, the most important celebration of the Christian faith. At daybreak on Easter morning, the vertical slit is aligned to create a slot of light running down the middle of the church, heralding the risen Christ, who once was dead and is now alive.
Plan & Section of Church
Scale 1" : 50'

1. Sanctuary
2. Monks' choir
3. Public seating
4. Monks' entry
5. Public entry
6. Bell tower
7. Sacristy
8. Vertical light slit
9. Clerestory windows
10. Skylight
11. Ramp to access roof
12. Roof terrace
13. Public outdoor terrace
From the public's vantage point in the church, the monks and the sanctuary are “in the light.” However, the only illumination visible is the vertical slit; all other sources of light are hidden from view. This subtle use of light to “exclude” the public, without using any physical separation, serves to heighten the mystery and sacredness of the spiritual. It symbolizes the distinctiveness of a deep communion with God without rendering it inaccessible. During communion, the public is invited to pass through the monks’ choir stalls to the sanctuary to partake of the sacraments. This is the only time that the public is allowed to enter the illumined portion of the church.

The bell tower is located by the south entrance to the church. It is part of the access sequence of ramps to the roof of the church. The flat roof, above the public seating in the church, functions as a roof terrace available to the monks. The terrace is walled in to provide privacy from the surrounding neighbors but has specific openings that orchestrate a unique set of framed views out into the landscape.
Site Model. View from Northeast at Sunrise.
Chapter House

The second of the three tables is the chapter house, the table of instruction and decision-making within the community. Traditionally, this is the place where the Abbot gives spiritual and intellectual instruction to the whole community and where issues are discussed and decisions made. With the advent of Vatican II, the role of the individual monk in the political process of the monastery increased significantly and decisions are made and implemented with the consultation of the entire community. The Abbot’s role is viewed increasingly as facilitator and empowering agent, even though he wields authority second only to God within the community.

This increasing democracy required a form reflective of the empowered individual monk. The form of a circle would imply complete equality. However, there is still undeniable hierarchy within a monastic community, thus the chapter house, representative of the political center, takes on the form of a cube, suggesting equality but with a specific orientation.

The 30’ cuboid space meant 30’ high walls and a high ceiling. The chapter house is solid concrete masonry except for a north-facing glass facade that orients the seating arrangement to face the north, where the three superiors are seated. The square around which the community gathers is one step lower from the entry level, emulating the traditional stepped seating of medieval chapter houses. The north-facing glass wall admits indirect northern light into the space through a system of louvers that controls the views. Only when the monks are seated in their respective positions, below the eye level of a person standing, are
they privileged with a view to the outside. This progression from entry to seating position is a reminder of the process of discovery in the journey to the core — the Truth as symbolized by the center of the chapter house. Once in the center, aware of the unity of the community under God, the individual monk is then able to look beyond the interior to the exterior.

At the top of the walls are twelve framed openings filled in with glass blocks, three on each face, that diffuse light into the space without distracting the monks. During conversations with Father Isaac, a Trappist monk, it was suggested that the number of openings could signify the twelve foundation stones of the New Jerusalem (Revelations 21:10-27), the city with no light from lamps or the sun because God is its light. The chapter house is where the community seeks to make choices to conform itself to its destiny found in the New Jerusalem by relying on a light greater than itself. The twelve frames of glass block that emit light into the room serve to symbolize this act of reliance on God in the community’s formation and development.

Positioning the chapter house next to the church and giving it prominence at the entry to the monastic complex are both intentional. The church no doubt symbolizes the ultimate center of the monastery, indicative by sheer size relative to the rest of the monastic complex. However, the role of the politically-minded monk has increased in significance, and is reflected in the architecture through its form and its location. The chapter house is the place where the symbol attains consciousness, where the directives of God for the community are discussed and choices are made to implement them in all aspects of the community with the ultimate goal of spiritual growth and maturity, pressing forward to their destiny in Christ. However, this will to submission to God in the community’s choices can be tipped out of balance if the community is not careful and allows the political to overrule the spiritual. Thus, locating the chapterhouse next to the church signifies the direct correlation and simultaneous tension of the spiritual
and the political.

At the end of the entry sequence for the monk, the church takes a backseat and directs the view of the entering monk or potential novice towards the chapter house. Given the significant happenings in the chapter house, its proximity to the entry of the monastic complex serves as a symbol of its prominent role in the character formation and development of the community into which the individual monk is entering. Furthermore, its prominence at the point where the monk transverses from the confines of the monastery to the outside world is a reminder of decisions made within its walls concerning the community's relationship to the outside world. Upon entering the monastery proper and circulating around the cloister, the chapter house cedes prominence over to the church, as explained on pages 54-55.
Chapter house Plan
Scale 1" : 32'

Model. Chapter house in context.
The third and last table in a monastery is the refectory, the table of physical nourishment and replenishment where the monks partake of the main meal of the day, usually at noonday. The refectory is representative of physical and mundane requirements of a human being, albeit minimal, that need to be met in order to create the necessary temporal setting to focus on being a monk, someone whose life is to worship God. The refectory is inserted into the middle of the continuous cloister around which the more mundane functions of the community are carried out. This reduces its importance in relation to the church and chapter house, however, its location at the pivot point of the cloister suggests its importance relative to the other spaces around the cloister. Its location, directly opposite and furthest from the church, serves to reinforce the juxtaposition of the physical and the spiritual, and the spectrum of needs in between.

Within the refectory, the seating is similar to the choir stalls in the church. The monks dine facing each other but in absolute silence and meditation, while a fellow monk reads from a book to the whole community. A dumbwaiter serves to transport the prepared food from the kitchen below.

Similar to the chapter house, the views are targeted towards the north-facing window where the head table, with the three superiors, is situated. The focal point is apparent and acknowledged. However, once seated, the views open up to the east as well as to the north, affording the monks visual connection to the exterior as they partake of their meal in silence.
Refectory Plan
Scale 1" : 32'

Model. Northeast Elevation, Refectory in foreground.

Model. Refectory close-up.
The design element that distinguishes the three tables from the other spaces in the monastery is the access sequence into each. Instead of a traditional frontal entry, it is a gesture of discovery — of slipping in and coming around to the center. The center or focal point is not apparent as one engages the entry sequence but once within, the focal point becomes obvious but the path to the center is indirect. This act of seeking out and finding the center, instead of a direct confrontation plays out the mystery of the spiritual journey, where answers are not always clear and direct and where the process is important in the achievement of the end goal.

"Discovery of the Center" Motif
Diagram of Access to the 3 Tables.
“Discovering the Center” Motif.

- **Red**: Church
- **Blue**: Chapter house
- **Green**: Refectory
Library

While the library is not one of the three tables, it is probably the next most important communal space in the monastery. Medieval monasteries did not always have a library; the wall of the church facing the cloister had benches for monks to sit and read. However, as reading and study became more and more important in the intellectual development of the monk, and therefore his community, libraries became standard feature in monasteries. In this scheme, the library is located at the convergence point of the cloister, allowing habitation of the void courtyard space, similar to the inhabitation of the covered fountain in a medieval cloister layout. The reading room looks out over the courtyard and directly at the church, a reminder of the spiritual element in the midst of an intellectual endeavor.
Model. Close-up of Library Roof Top.

Library Section with book stacks below
Scale 1" : 32'

Model. Perspective of Library from Cloister.
The monastic enclosure is essentially made up of two linear bars of conventual spaces — one closer to the canal and to the world and the other more private and closer to the natural landscape of the island. The two bars make use of the site section to take advantage of views and light.

The bar closer to the canal is three-storeys tall and houses the functions more closely related to the world, including the workspaces and storage facilities in the basement, the administrative offices and the abbot’s quarters on the first floor and the infirmary, adjacent to the monks’ cells on the top floor.

From the level of the inner courtyard, the workspaces are below grade. However, due to sectional changes on the site, the other side of the work rooms hover over the canal and receive ample southern light exposure. Locating the work spaces over the canal is in keeping with the symbol of industry already associated with Lowell’s canals. Light reflections off the water in the canal also direct light into the work spaces and administrative offices above. The only room that does not have natural lighting is the bookstacks of the library. The workspaces are also located on the same level as the service entry to the monastery to allow for easy access while respecting the quiet of the cloister. Cistercian monasteries are self-supporting and thus income generation is an important consideration for the community. Usually, the workspaces are appendages to the buildings around the cloister. The location of these workspaces, which is within the cloister, limits the possibilities to industries that do not generate too much noise. Some suggestions made by monks themselves include bookbinding, electronic typesetting or electronic database entry.
Model. View from Southeast.
The administrative offices are located directly above the workspaces to maximize efficiency and communication between the two when necessary. The abbot’s office is closest to the church and has quick access to the chapter house. It is separated from the rest of the offices by the vertical circulation core, affording privacy for confidential conversations. The abbot’s balcony, which is on axis with the chapter house and next to his office, has a framed view of the world beyond the canal. This symbolic balcony alludes to his influential role on the direction of the community and his responsibility to shepherd and protect his flock in this world.

The infirmary is located on the top level, along with the monks’ cells. It is intentionally located within the main monastic structure as a means to integrate the infirmed monks with the rest of the community. The infirmary is traditionally located outside the cloister in its own separate set of buildings, and monks were often reluctant to be admitted to the infirmary because of its physical isolation from the rest of the community. This scheme allows them to live amongst their brethren under medical supervision of doctors, who have quick and direct access to the infirmary by way of the elevator and service entry, without intruding on the cloistered life of the community.

The conventual bar further from the canal is two-storeys tall. At the entry, next to the chapter house, is the receiving room. This is followed by seminar and meeting rooms, counseling and confession rooms, and a monks’ common room which doubles up as an additional reading room. This series of rooms steps up
with the sloping courtyard, registering the change in typography while the roof height remains constant; this decreases the ceiling heights from 18' in the receiving room to 9' in the common room. There are some monks' cells located below the cloister level that follow the gradation of the courtyard.

Plan of the Two Conventual Bars
Scale 1" : 100'

Model, South Elevation close-up.
Monks' Cells

Each individual cell is 9' wide by 18' long and 9' high. All the cells have northern exposure and river views with an individual balcony or patio that extend the individual space to the exterior. The variables between the cells are kept to a minimum to ensure sameness. The differences are the result of specifics related to the location of the cells.

The cells on the top floor of the conventual bar closest to canal are oriented north-south. Besides the north facing windows, there are additional clerestory windows with southern exposure to brighten the long narrow cell. Each cell has a small balcony that overlooks the cloister courtyard below. These cells also take advantage of the lower northern bar, which allows visual access to the river beyond. The walls dividing the cells extend beyond the interior to lend privacy to the balconies and suggest the individuality of each monk. However, a continuous roof over the cells and the dividing walls symbolizes the overarching community that the individual monk has chosen to be a part of. The majority of monks are expected to live in these cells.

The cells in the basement of the other bar open out to views of the river and the natural landscape of the site. With only northern exposure, the cells here are oriented differently from the cells in the other bar to maximize the amount of indirect north light entering each cell. Each cell has its own patio, thereby extending the habitable space. These cells are set apart for monks who wish to explore a semi-hermit
existence but within the context of a cenobic community. While these cells are more isolated from the main thoroughfare of the monastery, the architecture is less articulated than the other cells, blending into the facade. Furthermore, these cells look onto the natural landscaping that other monks are free to inhabit and use, thus reminding the solitary monk in his cell of his family ties to the community.
A bridge, straddling over the canal that divides the island from the mainland, is the primary access to the monastery. There are three separate entry sequences to the island integrated into this one bridge — one for the monks, one for the public and one for services.

The monks and the public both approach the monastery from the south, entering at the same level by the gatehouse, also known as the porter's lodge. This common approach to the monastery symbolizes that in the world, the monk, before entering the monastery, is no different from any other person on the street. However, upon arrival at the porter's lodge, the different entry sequences to the monastery play out the distinctions between the monastic life and that of a layperson. The public continues across the bridge to an outdoor terrace, which leads into the west portal of the church. To the left of the public entry route is a 9' wall with a gateway that the monks use to proceed towards the entrance terrace of the monastery. The monks move parallel to the public but proceed down a narrow descending ramp that brings them to a level 6' below the public. The wall between the two paths is not level, but descends at the same rate as the monks' ramp, flattening out to a 3' high enclosure of the public's outdoor terrace. This descending wall symbolizes the gradual separation of the monks from the world resulting from the life that they have chosen to lead. These parallel entry sequences which ultimately lead to the church portray the spiritual movement of all people towards a common end — communion with God. However, the narrow downward sloping ramp that the monks use imply a more difficult and less traveled road relative to the wide path taken by the public. The parallel and yet distinct paths prolong and heighten the emotional and psychologi-
Diagram of the 3 Entry Sequences
- Public
- Monks
- Services

Model. Entry Sequence from Southwest.

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cal separation from relationships in the world, such as family and friends, creating a sense of proximity but yet denying both parties the intimacy of journerying together towards God.

The covered service access is at the level of the workspaces, beginning below the porter’s lodge and continues under the public’s path across the canal. In combination with the two other entry sequences, the service circulation gives bulk and density to the bridge traversing the canal, thereby lending continuity to the heavy massing of the monastic wall facing the canal.

Model. Entry Sequence from Northeast.
Model. Entry Sequence from North.
The public zone of the monastic complex is the portion of the monastery given over to the public. Its boundaries define the transition from public to private and vice versa. The public zone is defined on its western edge by the descending wall that registers the gradual separation of the monks from the public on the bridge. It extends eastward to the line that separates the public from the monks within the church. For the monk entering the monastery, the prolonged entry procession ends at this eastern edge, at which point the monk is in the monastic enclosure proper. This implied line of separation also marks the eastern edge of the porter’s lodge. Below the porter’s lodge and within the public zone is the guesthouse for short-term retreats at the monastery.

Cistercian monks have limited associations with the public which require a meeting place for purposes such as hosting family visits and receiving laypersons seeking spiritual direction. Vatican II has also increased awareness amongst the monastic community of the need for greater communication with the public as a means to encourage others in their spiritual journeys. This intent of greater accessibility has manifested itself in several ways, including meetings with lay members of the Church and with the public concerning spiritual matters. The church is one shared space between the public and the monks in a monastery but it is also a place of quiet contemplation. It was deemed appropriate in this design scheme that the programmatic need for meeting spaces should be located within the public zone. It became apparent that the porter’s lodge, gatehouse to the monastery, could serve such a purpose. This solution also further increases the significance of the porter’s lodge as the point of intersection between the monastery and the world. Each time a monk meets with a member of the public, the drama of the coming together and the inevitable separation is reenacted as they converge on the porter’s lodge for conversation and later bid each other farewell.
The conceptual ideas formulated in this thesis design were thought to be structurally and tectonically expressed most appropriately by using standard load-bearing reinforced concrete masonry. Where long spans are necessary, such as the church and refectory roofs, glue-laminated wood trusses are used. The predominant material finish for the walls and floors is concrete, including the south facade of the monastery which is the wall that separates the monastery from the world. The plasticity of concrete was thought to best captured the essence of unadorned simplicity and frugality in the Cistercian way of life. The stark quality of the concrete finishes, like the pale, smooth-hewn stone used in medieval Cistercian monasteries, is a reminder of the ideal of poverty to which the monks aspire, an expression of a life that is dedicated towards that which is more ephemeral, more intangible and of greater eternal significance. However, there is also a consciousness of balancing this unadorned coldness with the judicious use of wood-frame members to add warmth to the habitation of the spaces. The open cloister and the north facade are predominantly wood-framed glass openings with wood shutters that lend scale to the building and control light and views to the exterior.
Unwrapping of the Cloister & the Contemplative Walk

The significant element of this thesis is the exploration of the traditional enclosed cloister and how it might be pried open to reflect the spirit of Vatican II. This spirit encourages the individual development of each monk in the context of community and acknowledges the role of contemporary culture and society in the understanding of the Catholic faith. This thesis is an attempt to explore the repercussions of the new openness and individuality on the monastic typology.

One of the direct results of Vatican II on monastic architecture was the provision of private cells for each monk. However, this change does not fully capture in architectural terms the paradigm shift brought about by Vatican II on monastic life. The thesis tries to more fully express the new openness and individuality in monastic life by the gesture of unwrapping the traditional cloister, which embodies the essence of the community. It was important that the unwrapping did not take away from the traditional inward focus of the cloister as a symbol of the community’s separation from the world and the corporate unity of its individual members. In the final design scheme, the unwrapping of the cloister involved cracking open this sacred void space to allow individuality to flourish but only as it enriched the life of the community.

The unwrapping weaves itself through the massing of the entire monastic complex. It begins at the entry to the monastery at the porter’s lodge, across the bridge, and continues through the church and the south wing, pivoting around the library and refectory to the north wing. The cloister breaks at the entrance courtyard where a fountain is strategically located to bring you around the chapter house, down past the
The unwrapping of the cloister ends with the contemplative walk.

Diagram of the “Unwrapping” Cloister

Site Model, View from East:
The unwrapping of the cloister ends with the contemplative walk.
Model. Church and Contemplative Walk, View from Northwest.
more solitary cells and towards the contemplative walk on the existing retaining wall between the canal and the river. Here the monk is fully exposed as he walks, accompanied only by the gently-moving water of the canal on one side and the raging whitewater of the Merrimac River, 20’ below, on the other.

The contemplative walk, requiring a willingness to be exposed to the elements and to the world, paints the picture of a lone monk who desires utter transparency of heart and soul in his worship of God, an impossible goal given his sinful nature. However, submitting himself to the transforming work of Christ, which is an act of vulnerability, he is able to attain the ultimate reality of dwelling in the presence of God, the sublime experience of heaven on earth.

The juxtaposition of worship by the lone monk on his contemplative walk and worship together in the church can be viewed from the north. From this direction, only the church and the walk are clearly visible; the rest of the monastery is intentionally shrouded by trees for privacy. However, from the south, one encounters the full length of the monastery, their way of life partially revealed but yet protected by the two-tiered monastic wall — the canal and then the heavy masonry south facade. From this side, one can view the church and the individual, perceiving the day-to-day conventual structure that allows the individual to flourish within the community.
This inseparable affiliation of the individual monk to his community is also played out in the circulation paths within the monastery. The individual monk’s entry sequence into the monastery sets up a circulation through the cloister that ends in the church. However, once inside the monastic community, the unwrapping of the monastery leads you from the church, where the community worships God, in the opposite direction around the cloister, and takes you out to the contemplative walk, where the individual communes with God. The combination of these two forms of movement through the cloister and beyond illustrates the path taken by an individual who enters into the community — the body of Christ, which is a necessary step before he can journey within to discover the ultimate reality — God.

The architectural symbol of the body of Christ in the monastery is the cloister. It speaks of their commitment to a contemplative life in worship of God. However, the formal cloister is not often occupied by monks seeking to be quiet and alone, even though it represents the inward focus of their lives, because there is no privacy. This reluctance to use the cloister as a place of quiet meditation is assumed in the design of the monastery. The sloping courtyard of this monastery, which accentuates the visual perspectives within the cloister, makes it even less habitable. The natural landscape of the rest of the island and the path to the contemplative walk is the alternative informal cloister that encourages the individual monk to linger, giving him a space out in the open to think and to meditate.

The transition from the formal cloister to the informal cloister is orchestrated by the strategic location of the fountain. In medieval monasteries, the covered fountain was the one enclosed space that occupied the void space of the cloister. Since the formal cloister in this design is considered a space that is viewed rather than inhabited, the spatial role of the fountain is transformed by relocating it beyond the chapter house where it serves as the architectural element that turns you around from the formal cloister to the informal cloister — the outdoor space meant for occupation.
The interplay of open and closed, inside and outside, exposed and hidden, formal and informal, corporate and individual in the monastery expresses the tension of unwrapping the cloister while preserving the secrecy and mystery found within.
Model. View from Northeast at Sunset.
At the Final Presentation, it was suggested that the area around the refectory and the library was congested relative to the essence of the monastery. Further conversations with Father Isaac, a Cistercian monk, brought to surface a solution that involved the enlargement of the corridor between the refectory and the library into a gathering space that functions as a social and information hub for the community. In a community where silence is strictly observed, written notices become a crucial form of communication. This centrally located node could fulfill such a need. Furthermore, there are three days within a year where the silence in the cloister is set aside — Christmas, Easter and Independence Day. On Christmas and Easter, there are processions through the cloister that culminate at the church. On these festive occasions, the main meal begins with a gathering within the cloister for hors d'oeuvres before convening into the refectory for the celebratory meal. Having a gathering space next to the refectory and opening out onto the common room balcony would serve such occasions handsomely.
The evolution of this thesis has been abundantly enriching to my emotional and spiritual life. My academic research readings of the writings and lives of the monks often left me so challenged and convicted that I had to stop mid-way to pray. I never dreamt that my faith could be so fully intertwined with the work of my hands. I feel blessed to have had this mountain-top experience but, alas, it is time to come down. The end of this thesis is bittersweet, but it is time to let it go and to allow God to show me the next step in my spiritual journey.

Of course this thesis will never leave me, it has left an indelible mark on my life. In terms of design, the next step would be a detailed exploration of the materiality and tectonics of the cloister and the monks’ cells. I look forward to the next stage of design but recognize that the intensity will probably never be the same as the semester of Fall 1999. Most of all, I am excited to see the unfolding of the ongoing significance of this experience on my life. To quote Father Isaac in his observation of the process:

“Was/is the design project an exercise in creating a kind of soul image?
A work in which the symbol attains consciousness?
Culminating in its active phase in Advent,
then coming to a kind of contemplative maturity at Christmas?”
Appendix I

The Influence of the St. Augustine’ writings on the Development of Western Monasticism

St. Augustine learned about the monastic life from Achanasius’ Life of Antony, which is cited in an extensive passage in the account of his conversion, the Confessions. The leading ideas informing the monastic movement in the West are synthesized in the work of Augustine’s maturity, the City of God.

The City of God is a series of twenty-two books written in the 4th and 5th centuries. It was extremely influential in the movement of Christian monasticism, giving rise to its beginnings and its continuity through history. The first ten books, written over a period of thirteen years, was a response to a charge that the decline of the Roman Empire had a religious cause, and should be blamed on Catholic Christianity. Augustine does not treat the theme of the “City of God” until he reaches Book Eleven. From Book Eleven to Book Twenty-two, he writes about the theology of two cities and of the intervention of God in human history. This paper relies heavily on Books 14, 19 and 22 for the explanation of the “two cities” and the reasons for choosing one over the other and how one is able to dwell in the heavenly city of God while living in the earthly realm.
Augustine begins with the then current premise of philosophers -- the existence of supreme good and supreme evil. Supreme good is defined as life eternal of good and perfect peace, which is attained when God is "all in all", that is, when all things are subject to his loving and perfect will. Supreme evil is the antithesis -- death eternal and separation from God. To obtain the one and escape the other, Augustine contends, we must live "rightly". To obtain the first is to live in the heavenly city, and the other to live in the earthly city without regard for one's ultimate origin and destiny.

As Augustine sees it, the City of God is not fully manifest in our current reality because the Kingdom of God is not yet fully actualized. Instead, we live in a world that possesses both good and evil and we need to filter life's experiences, to know and understand what is good and true. To accurately sift through things, one's spirit must be subject to God. A spirit and soul not subject to God is not able to fully control itself and its body towards supreme good. Even though the supreme good cannot be fully experienced in this current world, those who subject themselves to God can live in the hope and faith of the perfection that is to come. Augustine writes:

The true blessings of the soul are not now enjoyed; for that is no true wisdom which does not direct all its prudent observations, manly actions, virtuous self-restraint, and just arrangements, to that end in which God shall be all in all in secure eternity and perfect peace.²

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1 St. Augustine, City of God, Book XIX, Ch 4, p.676, 1950, Random House, New York, New York.
2 Book XIX, Ch.20, p.699.
In this state of affairs where the Kingdom of God is at hand but has not yet arrived in its entirety, there are three modes of life that one can lead -- that of studious leisure and search after truth, the easy engagement in affairs or the mingling of the two. Augustine labels these respectively, the active life, the contemplative life and a life that combines the two. The active life emphasizes the physical and the contemplative life the spiritual, but they are not mutually exclusive and the physical is found in the contemplative and the spiritual in the active. Since the whole man is body and soul together, the highest good is composed of bodily and spiritual goods. Augustine advocates a lifestyle that consists of both the active and the contemplative.

In the order of nature, “the soul is more excellent than the body; it should control the body and navigate man towards the highest good. Thus, sin is caused by the soul and not the body. The corruption of the body is but the punishment of a sinful soul”. And Augustine suggests that the soul controls the body more easily than it can itself because the soul is harder to pin down and to understand. From this, we can infer that Augustine is proposing that the contemplative life is perhaps more important. However both the active and contemplative life are necessary for an embodied being of greater intrinsic value and worth.

No man has a right to lead such a life of contemplation as to forget in his own ease the service due to his neighbor; nor has any man a right to be so immersed in active life as

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3 Book XIX, Ch.2, p.672.
4 Book XIX, Ch.2, p.673.
5 Book XIX, Ch.3, p.674.
6 Book XIV, Ch.3, p.444.
to neglect the contemplation of God. The charm of leisure must not be indolent vacancy of mind, but the investigation or discovery of truth, that thus every man may make solid attainments without grudging that others do the same. And, in active life, it is not the honors or power of this life we should covet, since all things under the sun are vanity, but we should aim at using our position and influence, if these have been honorably attained, for the welfare of those who are under us.  

The important issue is that no one should be prohibited from the search after truth. Holy leisure is longed for by the love of truth; truth reveals the primacy of love in the Nicene hierarchy of values, and it is the necessity of love that compels us to undertake business that constitutes the active life. If we are not compelled to seek truth, holy leisure allows us to sift and contemplate truth. When the demands of the active life are laid upon us, we are necessitated for love’s sake to undertake it but yet the times of contemplation bring out the joy and not the drudgery associated with work.

The art of living in such a manner that one attains the highest good, which is not instinctual but must of necessity be learnt, is what Augustine calls virtue. It is the coexistence and the balance between the active and contemplative aspects of life. Augustine suggests that virtue presupposes the existence of good but that virtue is not essential to good. In other words, for virtue to exist and to be valued, there is a presupposition of the existence of good; but that the existence of good is not precondition on the existence of virtue.

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7 Book XIX, Ch.19, p.698.
8 Book XIX, Ch.1, p.670.
9 Book XIX, Ch.4, p.677.
Furthermore, not every life but a wisely regulated life is virtue but there cannot be virtue without life\textsuperscript{10}. Virtue is the result of the existence of good and of life. Virtue is attained when we are able to integrate the two, that is, to experience the good in the life. If we are living rightly, virtue makes right use of the advantages of a peaceful condition; and when we do not live rightly, virtue prevails, making good use of the evils suffered, by awakening our conscience. Virtue approaches evil not by taking away from the natures within which it exists, or part of the natures, but by healing and correcting that which evil had vitiated and depraved. This is because “evils are so thoroughly overcome by good, that though they are permitted to exist, for the sake of demonstrating how the most righteous foresight of God can make good use even of them, yet good can exist without evil, ... but evil cannot exist without good, because the natures in which evil exists, in so far as they are natures, are good.”\textsuperscript{11} This modifies the original premise of the existence of supreme good and supreme evil as separate entities.

The will is truly free and able to choose rightly when it is not the slave of vices and sins. This is only possible when the will is subject to God, which is to say, Truth. Augustine believes that there is in man himself a certain just order of nature, so that the soul is subjected to God, and the flesh to the soul, and consequently both soul and flesh to God\textsuperscript{12}. Thus, without subjection to God, the will is waging perpetual war between the soul and flesh, resulting in habitually poor choices of self-destruction, known as vice. Since, the goal of man’s life is truth and the love of goodness and the supreme good, Augustine warns that

\textsuperscript{10} Book XIX, Ch.10, p.686.
\textsuperscript{11} Book XIV, Ch.11, p.458.
\textsuperscript{12} Book XIX, Ch.4, p.678.
the pursuit of knowledge is dangerous without a divine Master that subordinates all to a rational soul. The soul is less subjected to God when it is less occupied with the thought of God; and the flesh is less subjected to the spirit when it lusts more vehemently against the spirit. A soul that refuses to be subject to God is proud, Augustine suggests, for pride is the craving of undue exaltation rightfully belonging to God, and therefore the beginning of sin. Conversely, the act of submission to a higher authority is an act of pious humility and nothing is more exalted above us than God, and therefore humility, by making us subject to God, exalts us towards perfection.\textsuperscript{13}

Augustine proposes that there are two conditions that though unnecessary, would greatly foster the search for truth; and that when truth is found in God, who is the essence and embodiment of truth, it would result in submission to God. The first is peace and the other community with like-minded people.

Augustine considers peace a good so great, pleasurable and desirable that man cannot help loving peace of one kind or other.\textsuperscript{14} When man wages war, seemingly the antithesis of peace, the intention is that of peace. Even the wicked man desires peace, even if it is that all men and things might serve him, whether through love or conquest, yield themselves to peace with him. There are various manifestations of peace that man possesses – the peace of the body which consists in the “duly proportional arrangement of its parts”, the peace of the irrational soul that is “harmonious repose of the appetites”, and that of the rational soul which is “the well-ordered and harmonious life and health of the living creature”. According to Augustine, “the

\textsuperscript{13} Book XIV, Ch.13, p.460.
\textsuperscript{14} Book XIX, Ch. 11, p.686.
peace between man and God is the well-ordered obedience of faith to eternal law. Peace between man and man is well-ordered concord. Domestic peace is the well-ordered concord between those of the family who rule and those who obey. Civil peace is similar concord among the citizens. The peace of the celestial city is the perfectly ordered and harmonious enjoyment of God, and of one another in God. The peace of all things is the tranquility of order. Order is the distribution which allots things equal and unequal, each to its own place. However man possesses peace, it is not in fullness except with God. The supreme good is God in whom there is eternal peace and the perfect ordering of nature. While each person experiences different degrees of peace, we are all conjoined or disjoined to the order through our enjoyment of peace or the lack thereof. Augustine uses peace as a yardstick of a man’s well being, a point of reference to determine the state of man or a community of men.

Augustine believes that the most beneficial way of moving towards the fullness of peace is to form a people, an assemblage of men who possess a common acknowledgement of right, whose affairs can be termed a republic. Without injustice, a republic could neither increase nor even subsist, for it was laid down as an absolutely unassailable position that it is unjust for some men to rule and some to serve. However, in the actual day-to-day life of a republic, Augustine suggests that servitude may be advantageous when ruling is rightly administered and when lawless men are prevented from doing harm. In the same way, God rules man, the soul the body, the reason the passions and other disordered parts of the soul. In this example of hierarchy in the community, it is assumed that servitude to God is useful to all.

15 Book XIX, Ch.13, p.690.
16 Book XIX, Ch.21, p.700.
Thus a people whose common goal is the servitude of God is blessed with the right perspective and attitude, is able to foster peace within oneself, with each other and with God.

Augustine believes that a republic can only be effective if there is a common worldview and value system and that a city in which that is not the case is not a pure republic in its essence. This is where the monastic movement derives its reasoning. A monastery is a city unto itself, a coming together of men with the common goal of seeking truth, finding peace with God in a utopic environment. A monastery is viewed by its members as a safe haven of peace, of contemplation and prayer, and of honest active work and service to others. It is hoped that the life in a monastery is a reflection of heaven on earth, acting as a beacon of light and a witness of perfection to those living in the earthly city, in anticipation of the Kingdom of God that Jesus preached.

Augustine gives us two options; one leads to eternal life and the other to eternal death,

... two cities have been formed by two loves: the earthly by the love of self, even to the contempt of God; the heavenly by the love of God, even to the contempt of self. The former, in a word, glories in itself, the latter in the Lord. For the one seeks glory from men; but the greatest glory of the other is God, the witness of conscience. The one lifts up its head in its own glory; the other says to its God, “Thou art my glory, and the lifter up of mine head.” In the one, the princes and the nations it subdues are ruled by the love of ruling, in the other, the princes and the subjects serve one another in love, the latter obeying, while the former take thought of all. The one delights in its own strength, represented in the persons of its rulers; the other sought for profit to their own bodies or souls, or both, and those who have known God “glorified Him not as God, neither were thankful, but became vain in their imaginations, and their foolish
heart was darkened; professing themselves to be wise” – that is, gloriing in their own wisdom, and being possessed by pride – “they became fools, and changed the glory of the incorruptible God into an image made like to corruptible man, to birds, and four-footed beasts, and creeping things.” For they were either leaders or followers of the people in adoring images, “and worshipped and served the creature more than the Creator, who is blessed for ever.” But in the other city there is no human wisdom, but only godliness, which offers due worship to the true God, and looks for its reward in the society of the saints, of holy angels as well as holy men, “that God may be all in all.\textsuperscript{17}

\textsuperscript{17} Book XIV, Chapter 28, p.477.
Appendix II

Rule of St. Benedict

The Rule of St. Benedict is understood by Western monks to be the practical interpretation of the Gospel for everyday living. It is considered to be a practical guide for living as a disciple of Jesus Christ. As such, the Rule is second only to the Holy Scriptures and a monk is expected to meditate on it day in and day out. Through the course of history, the Rule has undergone different interpretations but ultimately the strict Orders show a greater capacity for survival. The Rule explicitly defines the foundation of the community, the essence and spirit by which they come together, and the practical working out of their faith. It stipulates the relationship of the individual to the community, the relationship of the individual to God and the relationship of the community to God. It dictates the behavior the monks, the course of their day, their prayers, their work, their meals and clothes, their attitude to one another, to their superiors, to the world and to women and children, to possessions, money and to honor. The ultimate goal is the desire for unconditional self-commitment and communion with God. It is the desire to see heaven on earth that spurs one into a community dedicated to the unceasing meditation upon God and his incessant praise. Without a Rule no monastery can endure. It governs the attitude of the monks, their corporate identity; it also defines the characteristics of their art.
The Greek monks, who lived according to St. Basil’s Rule, built magnificent monastic complexes, yet the norms are not nearly as defined as western monastic layouts. It was the Latin sense of order that developed programmatic monasteries. In the late seventh century, Benedictine abbots attempted to shape their monasteries into perfect instruments for the realization of the Rule. Firmly articulated traditions developed. Through the centuries the intention was always to meet these traditional requirements and at the same time to take the particular features of the site into account.

The stipulations of the 66th chapter of the *Regula Sancti Benedicti*, that are always taken to be the point of departure for the Western monastic system, are equally valid for a Basilian monastery in the East: “Whenever possible the monastery should be so laid out that everything essential, that is to say water, mills, garden and workshops for the plying of the various crafts, is found within the monastery walls” (Document No. I, Ch. 66). Mount Athos in Greece, to this day, aspires to the same self-sufficiency. The demand for silence applies similarly to all monasteries. However, in a Basilian monastery, each monk or nun lives alone in some hut, cave or arbor. The same is true of the early monasteries in Egypt, Syria, Spain and Ireland. In contrast, everything in a Benedictine monastery is done communally. The monks sleep, pray, read and eat together, and wherever possible they work together. There is a measured thread of processions through the monastery, according to a precisely fixed daily routine. The Benedictine layout grew out of the desire to keep the course of these processions as short as possible.

None of the Rules explicitly refers to works of art or architecture, only the attitude with which the artisans and craftman approach their work. However, the Rule does name a great number of the essential
monastery buildings. The spirit with which it is written implies an optimum framework for the daily round to be realized as exactly. The perfect life called for the perfect monastery. The monastery, independently of its church, emerged as the one branch of secular art to combine the purest idealism with the strictest functionalism.

The whole course of the day is divided into hours of prayer, reading, manual labor, eating, meditation and sleep. In Rule of St. Benedict, many of these activities are allotted distinct buildings. To the organization of the day in time corresponded its organization by place, and the perfect monastery could only emerge from their complete agreement. Each activity was to take place in its appointed room, which was to be used for no other purpose, whether this was sleeping, eating, working, meditating, washing, or even speaking.

Reflection on the spirit of the Rule led to the attempt to make each building’s appearance commensurate with its functional status. Every activity throughout the long progression of the day was to occur with the same dignity and perfection. For example, eating, washing, and working were all invested with a higher meaning – a symbolic importance in the Divine Order of things. Buildings and works of art were to manifest this symbolism. The monks were charged to see something hallowed in the everyday.
Appendix III

A Summary of the History of Western Monasticism and Monastic Architecture

Introduction

Western Monasticism developed from Eastern Monasticism and the Egyptian desert fathers and achieved some independence from the East as early as the 5th century. Western cenobic life, influenced by St. Benedict’s Rule, oriented Western Monasticism to develop a particular architectural schema to achieve its purposes. There is written record dating back to the 9 A.D. of monastery layouts that remained intact through the centuries with only minor modifications. The 10th through 12th centuries marked the golden age of Monasticism; certain monastic orders grew and expanded at astounding rates unrivalled by any other movement in the Medieval Age. In a period where Europe was governed by feudal systems of alliance, monasteries became spiritual oases where a certain cognitive and moral objectivity could be attained, permitting the articulation of a spiritual ideal and arbitration of disputes and conflicts. The social influence of monasteries grew and they became the seats of both spiritual and political power.

The monastic institution underwent a certain decline in the High Middle Ages, as the Mendicant Orders responded to the spiritual needs of a population experiencing the social pressures of initial urbanization and
the birth of a consciousness of national identities. Then following the Renaissance and, in the 18th century, with the Enlightenment, came the French repudiation of monastic values and the destruction of monasteries associated with the establishment that the Revolution wanted to overthrow. The persecution did not cease until the beginning of the 19th century. Monasteries lost their political and economic might but the Orders were never completely eradicated. Monasticism has since made a recovery in the 19th and 20th centuries. It is but a shadow of its former glory in terms of its dominance of the European landscape. Monasticism's role changed even as adherence to St. Benedict's Rule remained but was interpreted and expressed differently. Within Catholicism, the Second Vatican Council (1962-1965) effected a paradigm shift in its own self-understanding as an institution, which had enormous implication for its monastic orders. It inaugurated a new conception of the relations between Church and World, and in this framework, a new intuition of a contemplative mission for monasticism.
St. Gall Utopia

The first written record of the ideal western monastery dates to the 9th century. The St. Gall Utopia was mapped out as an ideal Carolingian Monastery by Haito, the Abbot of Reichenau and the Bishop of Basle.

The plan’s central focus is the church and all the other functions of the church are oriented in relation to the church. The plan can be divided into four main zones:

1. **South of the church**
   
   The south-facing wall of the church completes the claustrum or monastic enclosure round the cloister. The cloister is exactly a hundred feet square. To the east of the cloister, on the second floor, lies the dorter with sleeping space for seventy-seven monks, seventy-seven being a numeral representative of forgiveness in scripture. Below the dorter is the library and scriptorium. The chapter was not yet thought to need a special room. South of the cloister is the refectory where the meals are served and to the west lies the cellar. The only access to the cloister is through the church, in the area that is reserved for the monks only.

2. **North of the church**

   On the opposite side of the church lies the more “worldly” functions of the church. The portion of the monastic compound reflects the increasing role of the monastery in the affairs of the state. The Abbott’s palace, separate from the cloister is located here with a guesthouse and external school for nobility. There is also a hostel for pilgrims of lower social status. Along the north wall are
St. Gall Utopia redrawn with identifications translated.
Original copy made between 816 and 836.
(Braundeb, p.39)
accommodations for visiting monks who have chosen to be separate from the confines of the monastic lifestyle during their visit.

3. **Living and work space for the craftsmen, menials, and their animals**

Located to the south of the church and surrounding the cloister lies the functions involved in the day-to-day running of the monastery that supports the monks and their lifestyle. The areas that are noisiest and messiest are located furthest away from the church, and generally to the west, near the entrance to the monastery. The living quarters and the vegetable patch are located closer to the church and to the east. The hierarchy of the functions puts the lowliest to the west, closer to the external world, symbolized by the entrance and exit portal to the monastic limits.

4. **East of the church**

Here lies the infirmary and the novicate; each of which is a miniature monastery with its own cloister, chapel, bathhouse and kitchen. The physician, the operating room and the graveyard are all located here. To the east lies Jerusalem, the Holy City. It was deemed important that the sick and the old, and also the young are furthest east in the monastic compounds. Similarly, the altar table in the church is oriented to the east as is the dorter in the main monastery. It was also believed that the Messiah’s Second Coming would take place in Jerusalem. It is only natural that the eastern end of the monastery be reserved for the interplay between life and death, for the novices that have begun a new life at the monastery and for the sick and elderly who will soon leave this world to begin life in the heavenly realm. Furthermore, the east came to represent that
which is more important and at least the holiest in their system of hierarchy and authority. For example, on the northern side of the monastery, the abbot’s palace is furthest east, followed by the external school and guesthouse for nobility and then the hostel.

The Church
Since the church, the house of God, is the central focus in the compounds of a monastery, much thought and intention was given to its layout. The church in St. Gall plan reproduces the cathedral at Cologne. The church served the monks, the parish and the pilgrims in their designated and separate areas. The monks penetrated the church unobserved by the transept from the cloister while the lay people were accorded the open atrium, known as the Field of Paradise.

Consideration given to the formulation of the proportions of the church resulted in the ordinance for proportions that can be derived from the triple ratio of the Golden Rule. They are as follows:

\[
egin{align*}
40 &: 80 &: 120 &= \text{Breadth of the nave} : \text{Breadth of the nave and aisles} : \text{Length of the transept} \\
80 &: 100 &: 180 &= \text{Breadth of the nave and aisles} : \text{Length of the cloister} : \text{Length of the nave} \\
120 &: 180 &: 300 &= \text{Length of the transept} : \text{Length of the nave} : \text{Length of whole church}
\end{align*}
\]
This table can be read horizontally or vertically. Such proportions revealed an intention to absolute harmony, but also a spiritual approach that sought a religious symbol in every number. Three times three pointed to the Trinity, and in the horizontal and vertical equivalence of the central columns of figures the Cross appears.

This monastery plan was a network of complex interrelationships between the physical and the spiritual, between the various groups of people in the monastery and the treatment of visitors to the monastery. This complexity along with its self-sufficiency is similar to that of a miniature city, a republic, as St. Augustine would describe it. It represents the hierarchy in the common value system of monks and their will to find harmony and balance in their utopia.
Cluny, Burgundy

Through the centuries, with different developments in monasticism, monastic architecture has deviated little from St. Gall Utopia that represents their interpretation of being “in this world but not of this world” and that of St. Augustine’s writings in the “City of God”.

During the 10th and 11th centuries, one monastery towered above all the others and became the capital of a monastic empire – Cluny in Burgundy. This, the largest monastery ever built in the West, controlled in the 12th century around 1,500 abbeys and priories in every part of Europe. During the 12th century, up to 1,200 fathers and brothers could be accommodated in Cluny’s dormitories and dining halls. The church held thousands. Its abbots achieved princely status and they were counselors and judges within the monastic community and also in the secular sphere. Emperors, Popes and Kings sought their verdict.

In the St. Gall plan, there were four zones brought together in the ideal design. Three of them recur in Cluny; the domestic buildings, except for a few workshops, were omitted. As Cluny’s influence increased in Europe, the monastery became so wealthy that it owned most of the land around it, which was tenanted out. The monks no longer worked in the fields; instead Cluny farmed through its tenants.

The spheres of the distinguished guests and of pilgrims are clearly distinguishable to the north of the church. The conventual buildings round the cloister are similarly placed with those of the St. Gall plan. The only additions are the chapter house and the parlor for conversations, since the Cluniacs required unconditional
Layout of Cluny III, the monastery as it was about 1150.
(Braunfels, p.61)
silence in the cloister, dorter, and refectory. As in St. Gall, the infirmary and cemetery lie to the east of the church.

The most important innovation is the buildings for the serving brethren, the long, narrow range demarcating the monastic precinct to the west. In St. Gall, this area was used only as a cellar but at Cluny, the ground floor was for the horses of both the monastery and visitors, the upper floor contained the dorter and refectory of the lay brothers and conversi.

The architecture was in the Romanesque style. No expense was spared to the design and construction of the buildings; ornamentation was elaborate and extravagant, and buildings grew in size and grandeur. The architectural influence of the new church is a favorite theme of art history; but it had little influence on developments in monastic architecture.
The Cistercians

Cluny’s antithesis in the 12th century world was Citeaux. It embodied the attempt to extract Benedictine monasticism from the worldly role, which had fallen to it in the course of history. How can a monk flee a world that is to a large extent dominated and led by monks? Can the individual realize the aspirations of poverty, if his community as a whole has become inordinately rich? Reality contradicted theory. The Cistercians had withdrawn to remote and barren parts, but their credo of work made the lonely valleys and marshes flourish.

The new reformed Order was precipitated in 1075 by the flight of 8 monks from the monastery of St. Michele de Tonnere to the forest of Molesme. Twenty-two years later, in 1089, it was apparent that their retreat had become a center of attraction, and they fled further to the marshes of Citeaux. In that century of other-worldliness, sanctity was hard to hide; the Cistercians could not stay isolated from those seeking inner fulfillment. The aim of the Cistercians, laid out in their Constitutions and Statutes was to restore St. Benedict’s Rule in its pristine form. Everything not expressly allowed by the Rule in the way of indulgence in clothing, housing or food was banished. Their prime concern was the loving fellowship of all monks beyond the bounds of the single monastery. It was a reaction against the individualism, autonomy and extravagance of the great abbeys, such as Cluny. The all-powerful Order replaced the single abbey in importance.

The ordered life in Cistercian monasteries required strict adherence to the same laws day by day, which gave rise to a set of basic spatial requirements in all their monasteries. For this reason it is possible to set
out for the Cistercians a binding schema on which all executed monasteries were variations. It has been said that a blind Cistercian monk moving into any of the monasteries would instantly have known where he was. In it the evolution of the medieval Benedictine monastery reaches its climax and its culmination.

There are four preconditions for the physical appearance of Cistercian monasteries: the ideal of poverty; the desire to escape the world; the insistence on affiliation; and a new spirit of regulation, inspiring a new functionalism.

1. **The Ideal of Poverty**
   The *ideal of poverty* required each monk and also the monastery and its church to be poor and make a show of their poverty. In every monastery the same simple rooms were to hold the monks, and the same simple utensils and tools to be used. The churches possessed no towers, the windows displayed colorless patterns, and the only sculpture allowed was a Madonna. The Cistercians demanded bare, unadorned stone, unplastered and devoid of figural and ornamental decoration. The Cistercians habit was gray-white, woolen and linen cowls, neither bleached nor colored, as simple as their buildings.

2. **The Desire to Escape the World**
   The monks wanted to live from the work of their hands in the solitude of wooded valleys. But however much they sought out the loneliest, most barren combes for their new foundations, however many decades they lived off the most basic of food, their hard work in conjunction with the poverty inevitably brought prosperity. And with prosperity, worldly or secular obligations.
3. The Insistence on Affiliation

The Cistercians aspired to build their monasteries in total isolation from any town, any village, or any castle. They wanted to avoid the possibility of a village community growing round the monastery. For this reason they preferred narrow combes for their foundations, so long as there was running water, which is indispensable by their Rule. Everywhere they were to be on virgin, preferably uncleared ground. The choice of locations also implied a jealous independence of any bishop and of lay lordship. They were the first to designate the institution of new monasteries as a task of the monks themselves. Monastic communities testified to their divine zeal by the foundation of daughter-houses that were to remain attached to them forever, like children to their parents. This is the meaning of affiliation and it was the hope that this would result in the diffusion of the Order.

4. A New Spirit of Regulation, inspiring a New Functionalism

The fourth precondition, the new spirit of regulation and functionalism within the monastery, heavily influenced the architecture of the Cistercian monastery. The shape, size and place of the buildings are so precisely laid down, that it is possible to set out a standard scheme. The new regulatory drive aimed at greater simplicity, clarity and precision. Everything superfluous was forbidden, and what was built was to be plain, chaste and lasting. Attention was consequently paid to the stone, to its careful dressing and fitting, and to the proportions of the rooms it defined. Everything was built from the same pale, smooth-hewn stones. There were stone floors, stone door and window-frames, stone walls
and stone vaults, and even roofs tiled with stone. There was nothing out of place, revealing the will and desire towards absolute harmony. “It was both dungeon and paradise”.

The Cistercian aesthetic unfolded in this world of stone, which eventually led on to the Gothic. With figural sculpture and color forbidden, the handling of stone reached new heights. Simplicity and geometric clarity were elevated into an ideal. This parallels developments in Islamic architecture that came about as a result of certain religiously motivated constraints. Just as the commandment to work inevitably produced wealth from poverty, art flowered from the desire for order. It was no more possible to sustain utter simplicity, than poverty.

Every Cistercian monastery lay by a stream in a valley, never on a mountain, nor by the sea, nor on an island, nor beside a lake or big river. Once a site was chosen, at the point where a stream or river enters the plain, the abbot and the twelve monks built their new monastery. As a rule, the layout exploited the site in a masterly way. By reducing the site to an ordered array of architecture, a monastic landscape emerged. Marcel Aubert in 1943, and Father Dimier in 1962, presented a plan of the ideal Cistercian monastery. The plan is a fully evolved complex in which everything was provided for, nothing was superfluous, and which was composed of a series of uniform elements. Right angles predominated; the articulation of the monastery was firm and clear. Following Benedictine custom, the church was wherever possible erected to the north and the cloister to the south. However, the unconditional requirement of citing the watercourse adjacent to the refectory arm of the cloister occasioned many exceptions. The church was intended for the monastery alone. There was no room for visitors and for a long time they were not given access, indicated
The ideal Cistercian Monastery
(Braunfels, p. 75)

1. Sanctuary
2. Lych gate, the door through which bodies were carried from the funeral service to the graveyard
3. Monks' choir
4. Benches for the sick
5. Rood screen, separating the monks' choir from that of the conversi
6. Choir of the conversi, or lay brothers
7. Narthex
8. Night stairs from the church to the dorter
9. Sacristy
10. "Armarium" (launder), where books were kept
11. Benches for reading, and for the "Maundy" ceremony of foot-washing
12. Monks' entry
13. Lay brothers' entry
14. Chapter house
15. Stairs from the cloister to the dorter, which extended over the whole range 14-19
16. Parlor
17. Monks' common room
18. Room for novices
19. Latrine (used from the upper storey)
20. Calefactorium, or warming-room
21. Fountain, for washing
22. Refectory
23. Pulpit, for reading during the meal
24. Kitchen
25. Cellarer's parlor
26. "Lane" or "alley" of the lay brothers
27. Cellar, or store room
28. Lay brothers' refectory. The dorter of the conversi, or lay brothers, extended over the whole range 27-28
29. Latrines of the laybrothers' dorter
by the lack of a west façade or a disproportionately small portal. A vestibule was allowed, as far as which the guests might go. The schema stuck to the simple pillared basilica with a transept in the east with a small rectangular choir. The monks could read their private masses in four, or six simple chapels of the transept.

A rood screen divided the church into the monks’ choir and that of the conversi. Two benches for the sick were allocated to each part. Whilst the monks followed the service at the High Altar, two side-altars against the rood screen were provided for the lay brothers, the altar to the Virgin and the altar for masses for the dead. Monks and conversi entered their choirs by different entrances, the monks from the cloister, and the conversi via the narrow passage or “lane”, whose chief purpose was to ensure an area of quiet between their sphere and the cloister. The monks were neither to hear nor to see the lay brothers. At night the former had a further means of access to the church, the steep stair to the dorter, down which they went to Matins at one or two in the morning. They had been sleeping for six or seven hours fully dressed on their plank beds, and now had to last out another six or seven hours of choral service in the unheated church. The only thing common to monks and lay-brethren was the exit through which the dead, immediately after their death and a short service, were borne into the open and the graveyard behind the church. This door had no other purpose.

The Cistercians had a small sacristy and the library and access was from the cloister, not the church. As in earlier Benedictine monasteries stone benches lined the north arm of the cloister against the church, on which, in proximity to the book-cell, the monks were to read in the open air. The chapter house adjoined
the sacristy as usual. Then came the stairs to the large dormitory in the upper storey, and the prior's parlor, which the monks entered one at a time. There were allocated their work and utensils. It gave directly onto the garden to the east of the monastery. The provision of a monks' common room was taken from Cluny. It took the place that might easily have been set aside for the novicate. It was created in most Benedictine monasteries merely through a fact of construction: the dorter, elongated so as to receive the growing number of monks, brought with it a lower storey which could not be filled by the chapter house, parlor dorter stairs alone.

The calefactorium was the only heated room in the monastery. There the monks might warm themselves, prepare parchment and inks, grease their shoes, and dry out after rain. The calefactorium was also only accessible from the cloister. The Cistercians put back amongst the conventual buildings those, which for reasons of hygiene, were specially housed outside them on the plans of St. Gall and Cluny. Everything specified in the Rule was to take place round the cloister.

The Cistercians made an innovation in the placing of their refectory. It was built at right angles to the cloister, probably less for giving it more light, than to leave room for a kitchen between the refectory and the house of the *conversi*. The detached situation of the refectory cried out for the monumental treatment. The hall was taken up through two storeys, almost to church height. It was part of a general development not restricted to the Cistercians that in the course of the twelfth century a fountain was built out from the cloister opposite the entry to the refectory. To the right of the refectory was the kitchen, with a hatch to the monks' refectory and to that of the *conversi*. It could be entered and supplied from outside.
A contributing factor to the citing of the kitchen, was the endeavor to associate a monastery for the brothers with that of the fathers, with a clearly defined relationship to the church and the cloister. The monks wanted it near at hand, yet set apart from theirs. The *conversi* themselves wanted to turn their back on the world like monks, but their work required more frequent contact with it. For this reason they were allocated the west of the church and the cloister, living over the stables. They achieved their refectory through the extension of the cellar.

The alley of the *conversi* separates the menials from the monks. It exemplifies the whole problem of class-division in the monastery. The *conversi* had to be admitted to the church, but not to the cloister. This changed round the 19th century when people became more educated, however, there was still a distinction between choir monks and lay brothers and *conversi*. However, with the advent of Vatican II in the 1960s, the distinctions were dissolved.

In all Cistercian monasteries the greatest attention was paid to the water supply. Cleanliness was inherent in Cistercian aesthetics. It is to be found both in the use of patiently smoothed stones and in the provision of washrooms. The covered fountains opposite the entrance to refectories became increasingly elaborate in response to this use. They are symbolic of the importance of the role played by water in the monastery.

The Cistercians were adept at the management of light, sound and proportions. Given that pictures and sculpture were denied, the monks saw to it that light was manipulated in accordance with function; they
constructed their buildings using the traditional ratios since Vitruvius, but now endowed with new symbolic meanings; and they strove for acoustics that would accentuate the clarity of the antiphonal singing of their choirs.

The Cistercian house was built seven hundred and forty-two times on the same plan. The Cistercians remained true to their schema for four centuries. However it is know that by the 16th century, each monk and each conversus had his own cell rather than a common dorter. The La Trappe reform of the 17th century, which espoused a return to the Strict Observance of the asceticism of the first Cistercian Fathers, giving them the name of Trappists, reversed this, amongst other issues, returning to a common dormitory. However, Vatican II reform reversed the reversal and monks were once again assigned individual cells.
The Carthusians

Another monastic that developed during the 11th and 12th centuries is the Charterhouse or the Carthusian Order. The new Order’s aspiration was to combine the hermit’s existence and the common life in one monastery. St. Bruno realized that it was beneficial for an individual hermit monk’s desire for meditation in total seclusion to be held accountable by a monastic community dedicated to an eremitic life.

The Carthusian Statutes are an alternative to the Rule of St. Benedict, even though the Rule was its starting point, to avoid the hospitality requirements, among other issues. The Charterhouses were to house only 12 monks, 13 with the prior. Later there were double Charterhouses. Each monk lived by himself in his own cell. He only joined the others in daily Mass, Matins and Vespers. At all other times he prayed alone. On Sundays and certain feast-days meals were taken together in the refectory and a lesson read. On Sunday mornings, meetings in chapter were allowed. Only very belatedly was permission given for the exchange of experiences of the spiritual exercises in the cloister one hour a week. It was a purely contemplative Order. Any outward work like proselytizing or preaching was wholly prohibited by the circumstances of eremitical life. Solitude entrained silence, which would only be breached a few hours a week.

The monks inherited the Christian obligation to work. But the location of this was only to be their own cell and a tiny garden in front of it. It was therefore necessary to institute a separate organization composed of conversi and lay brothers, inspired by the Cistercian innovation of conversi to supply the needs of the monastery. The conversi and the lay brothers were both committed to life in single cells as well.
The security afforded against the intrusion of the world is responsible for the Carthusians’ lack of any special stipulations concerning the location of their foundations. There are Charterhouses in valleys and in the mountains, in villages, outside large towns and not infrequently even within town walls.

The monastery was strongly fortified and enclosed by a wall strengthened by seven towers. The complex was entered by a gate in the southwest, strategically covered by two of the defensive towers. This opened onto the large domestic court of the monastery with the prior’s house in the middle, backing onto the prior’s forecourt, which looked out onto the church. The first court was bounded by the guest-house, the stables, and the cells of the lay brothers. To the left of the church was the house of the sub-prior, and to the right of it the small monastery court, round which were grouped the conventual buildings – the charter-house, the refectory, the kitchen, and a chapel. This cloister corresponded in many of its details to the Benedictine schema. It could only be entered from the large cloister. The church was subdivided into a fore-church for the conversi and lay brothers, and a monks’ choir. The Carthusians were the first to make do with a single-naved oratory. The laity, who were originally excluded, were subsequently allowed access to a modest gallery over the entrance.

The large cloister consisted of a quadrangle, with a passage off which lay 18 cells. Here dwelt the monks, doubly protected against the world. Large-scale architecture was quite alien to the Charterhouses. Yet the plan reflects an ensemble of great beauty created by the repetition of the same small elements.
A typical Carthusian cell – a small self-contained house and garden.

(Braunfels, p.114)

Carthusian Cloister Layout
Plan of the Charterhouse at Clermont.

(Braunfels, p.112)
The Carthusians' functionalism extended even to the construction of the cells in which the monks lived. They each comprised a small house and a garden. They are carefully thought out miniature dwellings unique to the context of medieval architecture. They formed a kind of housing estate strung out round the passage or cloister. House and garden were even shielded against the slightest noise by a corridor. A *conversus* used to put the bare minimum of nourishment, bread and other food not available from the garden, through a slit. Even this slit communicated only with a closet. The prior alone was allowed to pass through this corridor to the door of the garden. The layout took account of the monk's need for solitude, to not only be alone but to also feel alone. The house consisted of three rooms – the heated anteroom; the cell, in which was four pieces of furniture and a small chamber used as a larder and a corridor leading to the latrine. The garden was three to four times as large as the whole house, and girt by a high wall. The only four pieces of furniture allowed were a wooden bed, a bench, a table and a bookcase. The only other possessions allowed were a straw mattress and pillow and two blankets for the bed, little and simple table ware, tools for repairs, sewing kit, a comb and a razor, writing utensils, and no more than two books to read. A crucifix was the only artistic object available.

No attempts were made towards architectural innovation. The focus of attention was always the nexus between the small cloister and the large cloister and also between the realm of the monks and the forecourt turned toward the outside world.
Further developments in Monasticism

Monasteries developed through the centuries according to their changing roles in history. While the Cistercians and the Carthusians adhered to their strict Rule, other Orders became more involved in the politics of their land. The seat of power within the church became increasingly associated with the monasteries. For example, in England, ten of the largest monasteries were simultaneously bishops’ seats. Furthermore, monasteries were also associated with the rulers of their countries. Palaces were built within monastic compounds in Spain and whole monastic cities evolved in Italy and monastic citadels were built in France. Monasticism took on a role far beyond the original intent of St. Benedict.

However with the onslaught of the Enlightenment, unleashed by the French Revolution in the late 1700s, monastic life was almost completely extinguished. Monasteries were politically very powerful at the time and the ideals of the Revolution reacted against the control that the monasteries wielded, and their aristocratic associations. Anticipated as it were in England, the pillage and destruction spread from France to Germany, Spain, Portugal and Italy. Monasteries were burnt and destroyed or sold, their churches deconsecrated. Cluny was sold in 1798, its church blown up in 1811, the ruins used as a quarry up to 1823, till finally they were accorded protection in 1826.

The will to secularization was deep-rooted. It combined three currents that viewed monasteries as politically obsolete and their art and architecture worthless. Protestantism, whose aim was the transformation of the existing institution, viewed voluntary submission to a self-appointed authority with disdain. This movement was especially strong in England under Henry VIII. Another current derived from
the groundswell of popular emotion, which took objection to any form of authority. The 17th century view of philosophers and thinkers clashed with monasteries, considering them enemies of all progress. These forces conspired together after 1766 in France and 1781 in Austria and did not slacken until every last monastery in France, Germany and Italy was suppressed. However, despite the wave of destruction, there were pockets of protest against these actions. However, this was a minority viewpoint and the suppression of monasteries was tremendous.
The Recovery

Yet the monasticism could not be stamped out. Resistance promoted a new idealism. Reports of abuses ceased, and those of new foundations increased throughout the 19th century. With the backing of Rome, old Orders were reconstituted, new Orders and new congregations were founded. Various rulers and private individuals founded and encouraged monasteries, including the most exacting contemplative Orders. The monastic situation in the late 19th and 20th centuries was a healthy recovery from the persecution of the 18th century. However, the conventual buildings built during this period of revival are less noteworthy and many Orders did not return to the schema of their medieval precursors. It was no longer possible to distinguish between the Orders on the basis of motifs or layouts. Monastic establishments ceased to be a mirror of their Rules.

In Le Corbusier’s design for La Tourette, the complex innate rationalism, lucidity and intellectual rigor of the Dominican Order and its French beginnings enter the present. The interplay between the cells and the communal rooms in the Charterhouse of Ema, also known as Galluzzo, outside of Florence helped Corbusier to derive his Modulor. He saw this as the prototype principle for housing the masses, equipping apartments with anticipated needs of its inhabitants. In his design for La Tourette, which was also to be a seminary for the members of the Order and a center of theological research, he drew from the old schema of Le Thoronet but enhanced with the Dominican Rule. La Tourette is three-storeys high. The traditional monastery is split between the first and third level, with the scholastic floor sandwiched between the two. The church, cloister, refectory and chapter house were located on the first floor and the study-cells on the third. The
Layout of La Tourette
(Braunfels, p. 228)
scholastic floor, the only publicly accessible portion of the monastery, became the natural entry point to the entire structure. The sloping topography of the site lent itself to such a departure from the traditional monastery entrance at the west portal of the church. The traditional foundation pavilion situated across the refectory in the cloister was reinterpreted as a small oratory. The divide between strictly monastic activities and the church which is the traditional meeting place of those cloistered and parishners is accentuated by a physical separation of the church from the conventual buildings. Another deviation from tradition is the intention to split the cloister into smaller cloisters. The circulation patterns break the traditional pattern of movement within the monastery, allowing one to “inhabit” the cloister, to move through it rather just around it.

After World War II ended in 1945, there was a huge wave of applicants to the monastic orders. Men, who had came face to face with death and had become disillusioned by the atrocities of war were seeking answers to issues of life, and sought the shelter and contemplative lifestyle that monastic orders offered. Many had become accustomed to obeying orders without question and did not have difficulty acclimating to the strict and disciplined ascetic life. Lay brothers began to outnumber choir monks at a ratio of 3 : 1. Many monasteries were bursting at the seams and had to build additional housing for the newly initiated. The 1950s saw the birthing of new foundations all round America that are still in existence to this day.
The Second Vatican Council
From 1962-1965, during a three-year series of meetings in Rome of the Pope and the bishops from around the world, the Catholic church moved to engage modern culture in profound dialogue which altered its own self-understanding and its sense of mission to the world, and relations with other churches and religions. The choice to respond to contemporary culture gave birth to liturgy in the language of the vernacular in an attempt to have the lay people participate more freely in a liturgy intended to nourish their spiritual lives. There was an intention to bring the Gospel to the common person, to “inculturate” the faith and explain its relevance to contemporary issues of modern life, to understand its importance and application to his or her life and to help believers integrate their spiritual life with their daily routine of activities.

The decisions made at Vatican II resulted in tremendous upheaval within the monastic orders as they grappled with a new perspective of their faith and its effect on their way of life. The choir monks, voted to grant lay brothers the right to vote in chapter meetings and invited the lay brothers to partake in choir and the liturgy. The lay brother’s habit was rendered obsolete and all were expected to wear the monks’ habit. While the choir monks’ decision to abolish the separation and class distinction and to enfold the lay brothers into their way of life were well intentioned, the lay brothers’ opinions were not taken into consideration. During this period of adjustment to the “new system” many lay brothers left the Order having lost a sense of their vocation which they felt was taken away from them. Many felt their prayer and communion with God derived from the work of their hands and not from liturgical services chanted five to seven times a day. The monastic culture was changed overnight and the turmoil only began to settle down in the 1980s and 1990s. Today, all who have made solemn profession, that is, taken vows of commitment
to the Order, whether priests or brothers, are known as monks and wear the same habit. In the past, novices were assigned to be choir monks and lay brothers based on their education and upbringing. Choir monks were given theological training and were expected to become priests, while lay brothers were given more simplified theological training and more technical education. The choir monks prayed and sang the liturgy, the lay brothers supported their lifestyle by attending to the day-to-day operations of the monastery. Today, all novices entering the Order are given similar preparation training and during their three-year stint in the noviciate, the novice master helps each novice find their vocation within the Order. Some become priests, some focus on choir and liturgy and others tend toward more practical vocations. However, the line between the vocations is blurred, priests and choir monks take on a share of manual labor, and all participate in the sung liturgy. Their ultimate vocation, regardless of their focus, is to be a monk, someone whose life is to worship God.

Another effect of Vatican II is that monasteries have become more accessible to the public, sharing the secrets of their lifestyle by providing guesthouses for believers and unbelievers who desire short-term retreats of contemplation and meditation. Some monasteries even allow people to spend a more extended period of time, as much as six months, living within their cloisters as a monk without making solemn profession. Monasteries are also less strict on the separation of the monks from the lay people and have begun to invite lay people to participate more in the services. The process of accessibility is a gradual one and questions on how to achieve accessibility are vigorously debated within the monastic community. There are advantages and disadvantages on both sides of the issue and the healthy tension continues as the monks seek to find the balance of “being in this world and not of this world”
Appendix IV

List of Illustrations


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All drawings by author.
Appendix V

Bibliography


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Trappist Monks with the West Portal & Bell Tower of St. Joseph’s Abbey in the background.