DESIGNING FOR SACRED COLLECTIVE SPACES IN THE CANADIAN CONTEXT

BLESSY ZACHARIAH

Supervised Research Project
Submitted to Professor Nik Luka

School of Urban Planning
McGill University, Montréal
September 2013

ABSTRACT

This paper traces the changing definition of the sacred in public spaces across the major stages of the evolution of cities, the enduring importance of sacred themes to the coherence and the identity of cities, and means by which these themes might be pursued in contemporary, pluralistic society—in particular the Canadian context. While city building no longer participates in establishing the absolute orientation of the Cosmos, the physical forms continue to be defined by urban values and vice-versa. This interplay, in turn, serves to either nourish or deprive its users of experiences essential to their wellbeing. The premise of this paper is based on building a framework that ensures that this relationship is positive and in sync with basic human conditions, fears and desires. The application of the sacred in architecture, both theoretical and practical, is used as the starting point and the core preoccupations are then extrapolated to the scale of city design. In creating public spaces of both conscious and sub-conscious awe, wonder and contemplation in the city, this paper calls for a revaluation of the design approach, the character and the shape of these spaces.

RÉSUMÉ

Ce document retrace l'évolution de la définition du sacré dans les espaces publics à travers les grandes étapes de l'évolution des villes, l'importance durable de thèmes sacrés à la cohérence et l'identité des villes et des moyens par lesquels ces thèmes pourraient être poursuivis dans la société pluraliste contemporaine en particulier dans le contexte canadien. Alors que la construction de la ville ne participe plus à établir l'orientation absolue du Cosmos, les formes physiques continuent à être définies par des valeurs urbaines et vice-versa. Cette interaction, par conséquent, sert à nourrir ou à priver ses utilisateurs d'expériences essentielles à leur bien-être. La prémisse de ce document est basée sur la construction d'un cadre qui assure que cette relation est positive et synchronisée avec les conditions humaines de base, les peurs et les désirs. L'application du sacré dans l'architecture, à la fois théorique et pratique, est utilisée comme point de départ et les préoccupations de base sont ensuite extrapolées à l'échelle de conception de la ville. En créant des espaces publics suscitant de façon consciente et subconsciente l'admiration, l'émerveillement et la contemplation dans la ville, ce document appelle à une réévaluation de l'approche de conception, du caractère et de la forme de ces espaces.

ACKNOWLEDGMENTS I would like to express my thanks to my supervisor Nik Luka for sharing his immense knowledge and inspiration in the researching and writing of this paper. To Radoslav Zuk for his expert opinion. To my peers from whom I have learnt much. My sincere gratitude also to Ishi Zachariah for the many hours spent proof-reading, and my parents for their steadfast support and encouragement. And lastly but definitely not the least, counting myself a believer of the sacred, I would like to acknowledge the One from whom I believe the perfection of all beauty originates.

TABLE OF CONTENTS

ABSTRACT / RÉSUMÉ....i
ACKNOWLEDGMENTS....ii
TABLE OF CONTENTS....iii
LIST OF FIGURES....iv
PROLOGUE....vii

CHAPTER 1. **INTRODUCTION**
1.1. **Cities, Society, and Sacred Spaces**....2
1.2. **Historic Sacred Public Spaces and the Secularization of the City**....5
1.3. **The Importance of Collective Sacred Spaces Today**....16

CHAPTER 2: **THE SACRED IN ARCHITECTURE**
2.1. **Current Use and Understanding of Sacred in Architecture**....22
2.2. **Key Principles and Preoccupations of Sacred Architecture**....24

CHAPTER 3: **THE SACRED IN CITY PLANNING**
3.1. **Key Categories of Sacred City Spaces**....30
3.2. **Good City Spaces: A Prerequisite for the Generation of Sacred City Spaces**....31
3.3. **Designing for Public Sacred Spaces**....35
3.3.1. Discussion of the Design Approach....36
3.3.2. Character of the Space....40
3.3.3. Shape of the Space....45

CHAPTER 4: **CASE STUDIES OF SACRED PUBLIC SPACES**
4.1. **New Haven, Connecticut**....52
4.2. **Canadian Centre for Architecture Sculpture Garden**....54
4.3. **Auschwitz-Birkenau Concentration Camp**....58

CHAPTER 5: **CONCLUSION**....62

ENDNOTES....64
BIBLIOGRAPHY....68

LIST OF FIGURES

Fig. 1. Yee Peng Sansai Floating Lantern Ceremony, Chiang Mai, 2012

Fig. 2. Acropolis, the house of the gods, looms over the historic Athens proper, photographer ca. 1870

Fig. 3. Colosseum, an iconic symbol of imperial Rome's power and moral degradation towers over the cityscape

Fig. 4. Depiction of a performance of the Mystery Play of Saint Clement in Metz during the Middle Ages

Fig. 5. Pageant wagon; each wagon held one play. The audience stayed while the wagon moved from place to place

Fig. 6. Plan view of Palmanova and its encircling sprawling fortification system

Fig. 7. Central hexagonal Piazza, Palmanova

Fig. 8. The Baroque Sindone Chapel by Guarino Guarini, Turin, Italy, 1667-1690

Fig. 9. London skyline in 1746, painted by Canaletto. Religious landmarks, including St. Paul's Cathedral tower over the city with only two secular features—the Monument to the Great Fire of 1666 and a bottle oven on the south bank

Fig. 10. England's skyline circa 1852, during the Industrial Revolution

Fig. 11. London skyline in 2012. St. Paul's Cathedral is now barely noticeable amongst the other much taller skyscrapers

Fig. 12. Abbey of Le Thoronet, Provence, ca. 1170; a key inspiration for Le Corbusier's concept of "ineffable space." In the preface for Lucien Herve's Architecture of Truth: The Cistercian Abbey of Le Thoronet, he describes it as being the "architecture of truth, tranquility and strength." It models "ineffable space" because "nothing further could add to it."

Fig. 13. Las Arboledas, Mexico City, Mexico, 1962, Luis Barragán

Fig. 14. Thermal Bath Vals, Graubünden, Switzerland, 1996, Peter Zumthor. Representation of spaces that are guided but seductive

Fig. 15. Bruder Klaus Field Chapel: floor of frozen molten lead contrasted with a roof open to the elements and wall surfaces of charred concrete walls. The construction of the walls began with a wigwam frame of 112 spruce tree trunks upon which 24 layers of concrete were poured. Finally, the wood frame was set on fire, leaving rough and dark ribbed concrete that fractures the light pouring in from the void on top

Fig. 16. Plutchik's Wheel of Emotions

Fig. 17. Serpentine Gallery Pavilion 2011 by Peter Zumthor

Fig. 18. Outside In: the infinite garden, exterior view by Meir Lobaton Corona + Ulli Heckmann

Fig. 19. Outside In: the infinite garden, interior view

Fig. 20. Serial Vision: Each arrow on the plan corresponds to a drawing, read from left to right

Fig. 21. Pazzi Chapel, Santa Croce, Florence, 1441-1460 by Brunelleschi

Fig. 22. Saint-Étienne de Metz, Lorraine, France, construction began 1220 and completed 1522

Fig. 23. Church of St. Benedict's Abbey, Vaals by Architect Dom Hans van der Laan

Fig. 24. The town of New Haven in the foreground with the East and West rocks looming in the distance

Fig. 25. The Town of New Haven with all the buildings in 1748. Commissioned by the Hon Gen. Wadsworthy of Durham

Fig. 26. The Central Green bordered by the three churches

Fig. 27. CCA building in the foreground with the sculpture gardens in the distance bordered by the two Ville-Marie auto route exit ramps

Fig. 28. Plan of the CCA Garden with the CCA building on the bottom,1988

Fig. 25. The Town of New Haven with all the buildings in 1748. Commissioned by the Hon Gen. Wadsworthy of Durham

Fig. 26. The Central Green bordered by the three churches

Fig. 27. CCA building in the foreground with the sculpture gardens in the distance bordered by the two Ville-Marie auto route exit ramps

Fig. 28. Plan of the CCA Garden with the CCA building on the bottom,1988

Fig. 29. The Allegorical Columns, 1988

Fig. 30. Column No. 11, "La Tribune", the final allegorical column in the series

Fig. 31. Map of the three main camps: Auschwitz I, Auschwitz II-Birkenau, and Auschwitz II-Monowitz

Fig. 32. Crematoriums

Fig. 33. The Execution Wall

Fig. 34. Publication by the Auschwitz-Birkenau State Museum showing photograph taken in the camp during its operation alongside picture of the same location today

The most beautiful thing we can experience is the mysterious. It is the source of all true art and all science. He to whom this emotion is a stranger, who can no longer pause to wonder and stand rapt in awe, is as good as dead: his eyes are closed.

—Albert Einstein

PROLOGUE

I come from an Eastern culture where the concept of the public sacred is intrinsically embedded in every individual. It is inescapable and this quality infuses the urban experience with a myriad of extremely sensuous, stimulating and profound experiences. It is chaotic, yet steeped in sacredness. It is very public, suffocatingly so in some instances, but in a great paradox, this grand, organic celebration of humanity affords countless opportunities for private contemplation. However, it is not comfortable. It is not predictable and I feel this is why the Western world, myself included, seeks to avoid it as our primary day-to-day living situation. Thousands of people travel to the culture to experience it for short bouts, in dilution, but living within it is hard for a sensibility not accustom to and completely immersed in it.

This research originates from a desire to find a place of equilibrium between these two extremes. While I struggle with constant frustration at the sterility of Western cities in comparison to their Eastern counterparts, I realise my resistance to giving up the personal comforts and immunity that this sterility affords. However, places that allow introspection and release should not be so elusive as to require one to travel to opposite ends of the globe, and our culture and expressions of the sacred should not be so compromised and diluted that stimulation has to be sought out in imported and contextually irrelevant systems. From time immemorial, public spaces of cities have played a central role in addressing basic human longings, not only by facilitating community bonds but by basing these on values of urban spirituality and a finely balanced web of interconnectedness that brought a sense of wholeness and well-being to society. However, as Camillo Sitte wrote in his 1898 treatise, *City Planning According to Artistic Principles*, "modern city planning is obliged to forgo a significant number of artistic motifs." If city designers, "practical artists", are to achieve success once again in generating stimulating public spaces, they cannot "let themselves be guided by sentimental impulses" of nostalgia and pinning after a lost past, but at the same time, must not treat city building as a technical problem that can be solved merely by modern inventions.[1] Therefore, the optimal designing of sacred collective space requires negotiating between the past and the present, between rediscovering the character of historic spaces that has for so long served humanity well while giving this character form in the contemporary city. It is hoped that this project contributes to making this process explicit and more clearly understood within the Canadian context.

1. Yee Peng Sansai Floating Lantern Ceremony, Chiang Mai, 2012

Source: My Modern Met, 2012, http://lurnq.com/resource/Stunning-Photos-of-Chiang-Mai-s-Floating-Lantern-Festival/, accessed 10 September 2013

CHAPTER 1

INTRODUCTION

1.1. **Cities, Society, and Sacred Spaces**

Cities are material culture. They embody social practice, identity and meaning. There are in fact no "neutral cities"—while the basic function of every city, whether in the past or in the present, has been to provide shelter and means of livelihood for its inhabitants, the definite form has always been detailed by cultural specifics. Urban sacred space historically developed in tandem with the very emergence of cities and indeed cities were often primarily made as centres of religious life. While a dominant narrative in Anglo-American planning history holds that the deliberate work of organising urban space arose in response to the problems of industrial urbanisation in the 18th and 19th centuries, there are long and rich traditions of city-building focused on ensuring that urban form expressed, captured, enabled and celebrated high-order cultural values—most notably the religious beliefs that have historically defined most every human culture. Cities were frequently conceived as ceremonial cult centres where the previously non-ritualised but similar beliefs of groups of people from a region were unified and concretised into formal expressions.[2] These expressions were both temporal in nature, such as daily rituals and religious ceremonies, and more permanent, conveyed through urban artifacts that originally supported urban life in accord with the beliefs, and now speak to us of the sacred frameworks that once guided historic societies.

One of the motivations for this study is to understand the rise and fall of urban public life in relation to the shift in importance from the sacred to secular in the shaping of these spaces. It is hoped that this will in turn inform the process of generating contemporary urban public spaces. The 20th century was one of the triumphs for institutionalised planning in many contexts, notably North America. Great advances were made and enormous allocations of resources ensured that basic functional needs were met. For the larger part of the century, the focus was on the private realm; the comfort of the individual was at the forefront not only of planning discussions but was also the priority for a host of other agencies which markedly influence the shaping of cities, from political powers to dominating financial institutions and corporations. Many observers have lamented the decline of the publicness of urbanity, especially in European and Anglo-American contexts. Some, such as Hayden and Kunstler, refer to the rude contrast between private opulence and public squalor when discussing cities. This discrepancy however, was highlighted first by J.K Galbraith's, *Affluent Society* in view of the mishandling of public expenditure by the American government, particularly during the 1950s and 60s, and the deficient culture it was enabling.[3] As another of his contemporary, Walter Lippmann, declared in 1957, "our people have been led to believe in the enormous fallacy that the highest purpose of the American social order is to multiply the enjoyment of consumer goods." Consequently, public institutions were being "scandalously starved."[4] True to their working, over time, city forms began reflecting these flawed values, most clearly seen in the spreading out of suburbs, and the draining of life from city centres and urban public spaces. Once the original short-sightedness became apparent in the physical form of cities, subsequent decades saw steady development in the critique of "placelessness". Edward Relph was one of the earliest voices to acknowledge the rapidly decreasing sense of place identity that stemmed from overt emphasis on generalisations and imported environments for the sake of efficiency and private profits.[5] Another critic of the modern landscape, James Howard Kunstler, writes along the same lines on the "tragic sprawlscape of cartoon architecture, junked cities, and ravaged countryside where we live and work."[6] He emphasises that public spaces with empathy for the human nature are born out of a culture for good-place making, and if not passed down over generations will eventually be lost.[7] Many others such as Martin Heidegger, Christian Norberg-Schulz, Dolores Hayden and Ray Oldenburg have further developed other aspects of the effect of poor design quality of the public realm and the need for a reassessment of our public spaces. Fortunately, recent decades have seen a renewed, albeit slow, interest in planning the city for the public and in making good city spaces. Planners, architects and urban designers turn to history for inspiration, examining public space from before the rise of the automobile as precedents for contemporary work. Values have changed, however; societies have become much more pluralistic. In fact, Mohammad A. Qadeer discusses that it is no longer just immigration, the traditional source of multiculturalism that brings in racial and cultural diversity, but added forces of globalisation now blur national and cultural boundaries. And while planning processes are gradually reforming to be more inclusive of the needs of ethnic groups, the execution is still relatively ad hoc with accommodations being made through means of "amendments, exceptions or special provisions to statutory plans, policies or programs" rather than being reflected in larger planning policies that display a comprehensive understanding of pluralism in the society.[8] This added layer of complexity poses a significant challenge in learning from historic models for urban space which were usually associated with homogeneous cultures. Moreover, perceptions and mindsets have not shifted and few individuals are willing to sacrifice their individual interests and benefits that have seemingly been achieved by the focus on the private realm. Public gestures are acceptable only if there is no compromise on private advantages; there is no longer a sense of mutuality where individuals are willing to give up "absolute claims of individual choice" for the benefit of and in solidarity with others in the society, in pursuit of the common good.[9] As a result, the only public gestures that are conceived, approved and implemented in the Western society are those that give us good secular city spaces. These are vital in a city; many are well-used and well-liked, and often very successful at bringing people together. However, the great majority of these interactions and experiences are far from sacred. They are mostly fleeting and superficial; in the words of Jacobs and Appleyard, they are often "purely defensive, parochial and self-serving."[10] Such a meeting of the individuals tends to result in no lasting stimulation, change or betterment—something that has historically been, to a great extent, the responsibility of the designers of city spaces. There is no experience of connection with grander forces: the divine, traits such as overpowering majesty, realisation of one's temporality and self-reflexive awareness. In their manifesto, Jacobs and Appleyard prompt planners to reconsider their roles in contributing to enchantment in the city; the city they say, "should have magical places where fantasy is possible, a counter to and an escape from the mundaneness of everyday work and living."[11] Spaces in the urban landscape should allow "belief [to] be suspended, just as in the experience of fiction." However, they emphasis such spaces cannot flourish within a self-seeking public sphere.

The second driving force behind this research is based on the wonder experienced in the city spaces of antiquity. This is not based on a nostalgic notion of painstakingly recreating the past, but rather exploring ways of bringing back into our cities the element of sacredness and wonder in whatever form best befits the modern city. As Joel Kotkin asserts in *The City: A Global History*, whenever a city rose to prominence, there were always three non-negotiables: economic power, personal security and sacredness, the last of which he relates to the capacity of the city being able to produce awe on the part of the citizens. "Cities can thrive," Kotkin warns, "only by occupying a sacred place."[12] Many if not most pre-Modern cities were based very much on sacred, immutable orders, and the effects of religious architecture, monuments, and festive and theatrical performances spilled over into the city

streets and onto other so called profane spaces. These provided coherence and orientation to human existence, and acted as a thread uniting society. However, given the secularization of society over the years (more rapidly so in the West compared to its Eastern counterparts) and its increasingly pluralistic structure, we have seen a dramatic decline in the dominance of religion and the hierarchal control often exhibited by the formal systems through which religious beliefs were expressed. While this has emancipated minority, certain community bonds and guiding narratives for the design of cities have also been swept away in the process. The case is made by many observers, such as Kotkin, that the sacred cannot only be a thing of the past—that it is also necessary for a superior urban experience even today.

The manifestation and the relevance of the sacred in contemporary pluralistic society has been debated in various guises by different professional groups. Numerous definitions that capture the different facets of what it means have been offered. But, perhaps by nature of the concept, there is no need to objectively define all it encapsulates. It is important to note that the framework being developed here is deliberately loose and is not based on any one specific understanding of the sacred. This ambiguity in the contemporary definition of the sacred is further discusses in Chapter 2. Nonetheless, it *should* be possible to distinguish whether the experience of a milieu is distinct and memorable from the multiple others experienced by a person in the everyday. This elusive quality has been referred to in various terms: "the quality without a name", "the spirit of place" and dichotomies are often created between place and non-place. However, one of the problems of such a phenomenological approach is the potential danger of useful ideas remaining mainly as theoretical works. Other fields are better off in this regard, architecture in particular. Given the scale of its interventions when compared to planning, it may be less problematic to distil the phenomenological ideas and give them shape in the physical. Through this project, I hope to be able to contribute to this process in the field of planning. Methodologically, this undertaking intentionally normative: a case for the sacred in urban design. It has been undertaken by reviewing key works in the scholarly and professional literature on city-building, along with research into three illustrative cases. The study is presented in five chapters and focuses on the possibilities of bringing back such spaces in the Western context, and in particular the Canadian context. The first of these considers the historic evolution of cities as mirrors of their religious beliefs, and the forms by which these were made manifest. This historical analysis also illustrates the failures of landscapes that lack sacred spaces while exploring the imperative for collective (versus private) sacred (versus merely good) urban spaces. The second chapter turns to architecture to briefly evaluate the current state of research of the sacred in architecture, given that contemporary architectural projects are comparatively more advanced in terms of integrating sacredness, and culminates with key elements applicable to urban design and planning. The third chapter is the core of this research; it consolidates all elements obtained from the first two chapters with further analysis of literature and projects by leading theoreticians and practitioners. It starts with a brief discussion of what kind of cities should be made in order to facilitate the generation of sacred space, arguing after Marx that sacredness cannot flourish in a city that is built as a "cash nexus." This chapter then presents a framework for collective sacred spaces in three levels: an appropriate design process, the character sacred spaces should exhibit, and the physical forms they can take. The fourth chapter presents three case studies that are illustrative of the framework and the fifth chapter concludes with specific recommendations for planning and design.

1.2. **Historic Sacred Public Spaces and the Secularisation of the City**

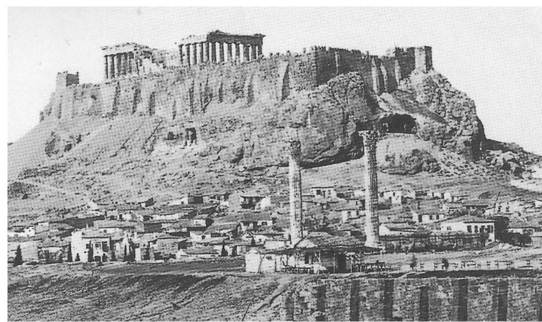
An enduring endeavour of the human race, from antiquity up till current times, has been the desire of individuals and indeed complete societies to search for meaning beyond that which is visible and obvious for their everyday activities and existence. Historically, the special character or identity of a city was entrenched in, and stemmed from, the religious cultures and belief systems that its human makers had adopted to find meaning within the cosmic scheme. In many developed societies, the whole was more important than the sum of parts and collective expressions of identity were prioritised over individual self-expression. Ancient cities from China to Greece were organised around collective monuments and public spaces. The importance of sacred spaces in city-building meant that great works of urban design were undertaken to respond to the needs of power, pomp and circumstance, as well as worship and meaning. As Kevin Lynch writes, the physical environment became the "material basis of the religious idea" and given the significance of the sacred at the time, the city was "carefully planned to reinforce the sense of awe, and to form a magnificent background for the religious ceremony." These sacred collective spaces were built with devotion and were an expression of human pride and a source of stimulating experiences. However, they also served another evident purpose: psychological domination where the peasantry was subject to the system.[13] As he goes on to later discuss, this was possible because such spaces provided an emotional stimulus that addressed the deep-seated sense of anxiety that is present in people. While we may question the appropriateness of what in the secular world is deemed as arbitrary power, the historic devices of ordered spaces and forms, power structures and social rites continue to lend a sense of pride, security and stability and "reinforce a sense of human continuity."[14]

While the power of dominant cultural orders and religious systems produced some of the most moving spaces and structures in history, for some civilizations this also meant that when resources were limited, attention to the less fortunate members of the community was of secondary concern.[15] This gave rise to the modern approach in which city spaces are conceived to ensure that certain basic needs were met on a larger scale—yielding a set of norms in planning and management that are secular and humanistic. Functionalism has addressed with vengeance the problems of the old city and its ideals—or its "romantic languishing"—that are incompatible with consumer society and secular attitudes.[16] However, as discussed earlier with regard to placelessness, in solving the multitude of problems of the masses, the modern city has seen a severe compromise in the art of city building. This was lamented as early as the 1890s by Camillo Sitte who strongly criticised the take-over of city building by the engineering profession and the consequent obliteration of a finely nuanced way of life that allowed the incorporation of elements that spoke to human longings and nature. While fully appreciating the improvements in living conditions brought about by modern advancements, he argues that the same can be achieved without turning city planning into a technical problem. Writing on the loss of agency of the planner, he writes:

> The town planner is not given a penny for the installation of colonnades, porticoes, triumphal arches, or any other motifs that are essential to his art; not even the voids between the building blocks are put at his disposal for artistic use, because even the open air already belongs to someone else: the highway or sanitation engineer.[17]

More than a century later, despite having progressed to a degree, much of his laments regarding the state of the public sphere continues to resonate with us.

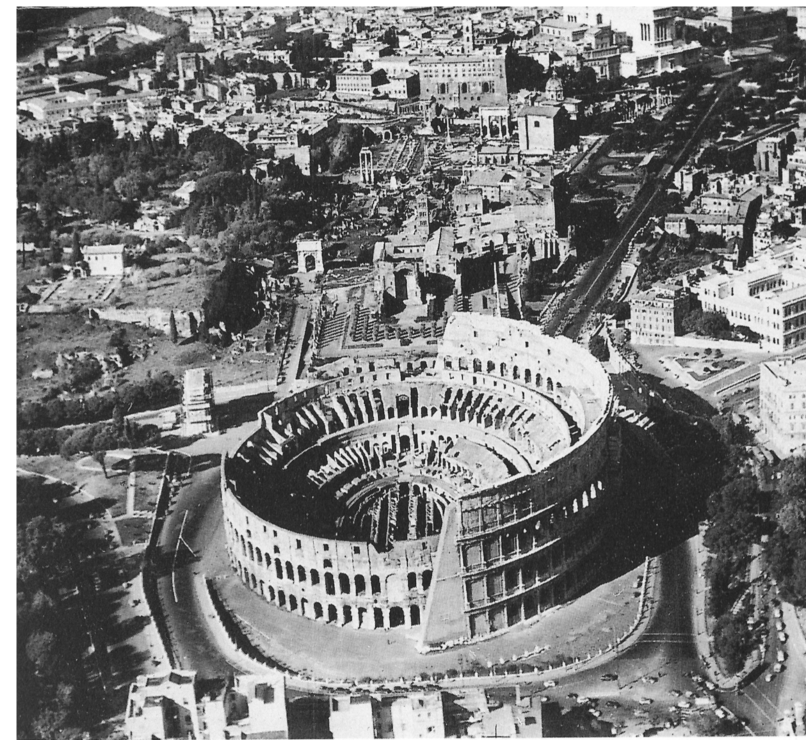
For the larger part of history, humans have occupied a sacralised cosmos. Upon closer examination, this process of sacralisation can be divided into two distinct categories. The first category addresses the time period prior to the wide spread acceptance of biblical/ Judaic faith. Here, there was no distinction made between nature and god; the divine completely encompassed the material world. As Harvey Cox writes of the time, "man lives in an enchanted forest. Its glens and groves swarm with spirits [....] Reality is charged with a magical power that erupts here and there to threaten or benefit man. Properly managed [...], this invisible energy can be supplicated, warded off, or channeled."[18] This world-view did not belong just to primitive societies but extended to the Sumerian, Egyptian, Babylonian, Greek and Roman civilizations with echoes stretching into the Medieval period. Despite their extremely complex theologies and religious systems, most retained a form of high magic, relying greatly on the integral relation between humankind and cosmos for their existential rationalisation. Gods, humans and nature were inseparable entities. Consequently, any mark made by humans on the landscape had to be done with extreme reverence with consideration for the astral deities (e.g. river goddesses, mountain gods and so forth). In most cases, the carefulness these considerations brought about did not restrict creativity but rather ensured that building was a craft dedicated to the sacred, and hence carried out with utmost care. Religion dominated life in the city, both socially palpable as well as physically visible. Kotkin writes of the priestly class being the primary organisers of urban order. The priests regulated large communal tasks and were in control of determining the entire city life having authority to lay out times for work, worship and feasting for the entire population.[19] Temples dominated the landscape, and shrines sacralised spaces throughout the city providing constant reminders to citizens of their vulnerability before the gods.



2. Acropolis, the house of the gods, looms over the historic Athens proper, photographer ca. 1870

Source: Kostof, Spiro. The City Shaped: Urban Patterns and Meanings through History. Bulfinch Press, 1991. 289.

Well-studied examples of how the sacred was inscribed in urban form include the settlements of ancient Greece, the earliest of which established circa 2000 BCE. The high places of the landscape were deemed sacred with the Acropolis eventually becoming a sacred precinct; with due reverence to the site of the gods, Athens proper developed around the base of the hill. The Greeks stressed the concept of the finite, neither the scale nor the design of their towns sought to overshadow nature or the abodes of the gods, instead fitting into the landscape as added components. Speaking briefly of the Acropolis which stands as a powerful reminder of the relationship among the gods, humankind and nature, it is important to note that the grouping of buildings were conceived, built and rebuilt over long periods of observation, perfected for experiencing by foot. In heightening the experience of the sacred, the extraordinary panoramic view of the surrounding hills and mountains was optimised, where instead of placing the buildings on an axis with the features of the overall view and thereby blocking key vistas and reducing the grandeur of the view, the Greeks positioned the individual elements to relate distant views to nearby temples.[20] As Perez-Gomez writes in *Built Upon Love*, these ancient designers were intentional in building a complete city; "this activity was named *poiesis* by the Greeks, signifying the sort of technical making proper to humans: a poetic making in the sense



3. Colosseum, an iconic symbol of imperial Rome's power and moral degradation towers over the cityscape

Source: Kostof, Spiro. The City Shaped: Urban Patterns and Meanings through History. Bulfinch Press, 1991. 231.

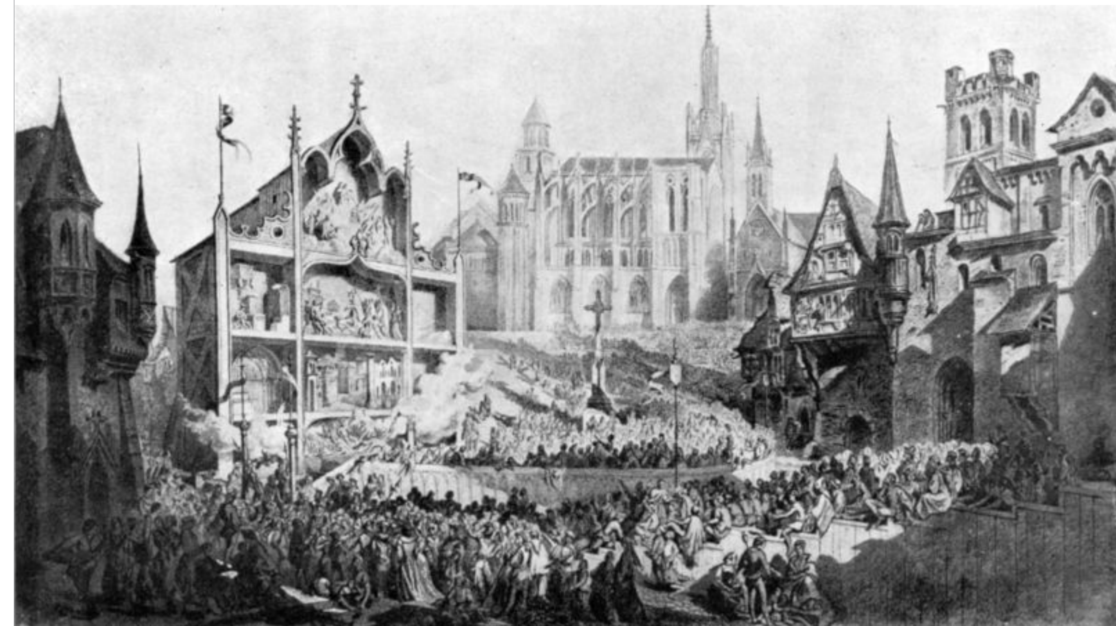
that it always aimed at *more* than preserving life."[21] The cosmic patterns were the basis for the multitude of rituals which were in turn transformed into art, drama and sculpture. These became models for architectural representation and to this day greatly define Western urban ideals.

Before moving onto the next major step of urban development, it is useful to examine the Roman settlements in some detail. The legendary date traces its foundation to 753 BCE. While the Greeks are unquestionably recognised as artists in their architectural and urban design contributions, the Romans have frequently been dismissed as mostly having imitated the Greeks in the aesthetic realm with their innovations only being limited to practical engineering discoveries.[22] However, upon study of the historic relics, it is evident that the Romans built with a very distinct purpose and method. They were much less explicit in their devotion to the divine. While the Greeks were driven by ideals of expressing the finite and revering the gods in their design, the Romans were motivated by political power and domination. This is very evident in their shaping of the built environment; while the Greeks based their design on the human scale, being careful to never overshadow nature, the Romans achieved their aesthetic sense from ensuring that the various elements of the building related harmoniously to each other rather than to the human. The basic "modules" they used were much larger and aimed at projecting an image of grandeur. Nevertheless, their design maintained a clear harmony; for instance, when they designed a building, the module to proportion all other elements might have been the column and when laying out elements of the town, another module would be chosen to relate all elements of the town.[23] However, while religious buildings were scattered throughout the Roman landscape, with the increasing thirst for power and material conquest, the sense of the sacred was gradually lost. As hypothesised by Kotkin, once the overarching divine narrative was removed, the Roman Empire rapidly started to lose its cohesiveness. As he writes, "Romans of all classes seemed to be losing a sense of moral purpose. Cynicism and escapist ideas infected the culture. Many in the elites openly despised Rome's urban life" and escaped to their opulent private retreats.[24] Those who could not afford to do so instead found escape in the barbaric and by all standards immoral entertainment put on by the state such as the violent spectacles at the Colosseum. As the moralist Salvian put it, "The Roman people are dying laughing."[25] But in a very clear display of humankind's constant search for existential meaning, amidst moral, social and urban degeneration, others found solace in rediscovering religion. Some sought to revive and import ancient cultic religions—but the one that resonated most strongly, and eventually took over the empire, was Christianity, discussed further in the following section.

This second form of sacralisation began following the spread of biblical faith from the East, to the Roman Empire. It is important to note that these Judaic beliefs had existed

previously, alongside the first category discussed above, but only became widely accepted after the start of Christianity. Organised in later years, Islam followed a similar belief structure based on the Abrahamic tradition. However, as this research focuses on the Western context, Judeo-Christian urban centres are the main focus of this historical overview. As Cox writes, the Hebrew understanding of creation was the start of the disenchantment process. Nature was separated from God, and humankind was distinguished from nature. The celestial bodies were no longer semi-divine beings with obeisance being offered to them, rather, all physical matter was the creation of Yahweh, created for the benefit of humankind. Previously, all components of nature, particularly those whose workings were not well-understood or those which posed a threat to people were objects of veneration. Now in the new epoch, God was sovereign over all elements and was to be directly worshiped and entreated; without the consent of the divine, none of creation's elements had any power over human life.[26] The second major shift in perspective was that while the previous worldview was based on humans perceiving the world as an inclusive cosmological universe where "kinship groups extend out to encompass every phenomenon in one way or another", now ties of kinship became temporal rather than spatial. The Hebrew kinship covers historical, linear time rather than spreading out over cosmological space. Guidance was not found in deciphering hidden messages in the cosmos but rather by reaching back to sacred teachings and revelations given by God to ancestors. Through these beliefs, humankind was given dominion over nature, and by disenchantment, which Cox argues does not connote "disillusionment but matter-of-factness", the stage was set for the development of natural sciences, crucial to future scientific and technological advancements. The nature of worship became very different which was in turn reflected in the built environment. It was now the Creator that was to be revered rather than the creation. Humankind was now at liberty to enjoy and delight in nature but it was all in celebration and recognition of God's glory and a reminder of divine power.[27]

It was within this world-view that the next major form of Judeo-Christian urban development took place: medieval towns and the cities of the Renaissance, though by the time of the latter, secularisation was already underway. This development was distinct from the Greeks and primitive settlements of the past, for there was no longer a fear of exploring the world and it was distinct from the Romans in that religion once again became central to the shaping of the society and the landscape.[28] While, the manner of connecting to God was different, it did not entail the abolition of rituals and the desacralisation of space. It is helpful to understand the difference in how sacredness of space was perceived. Previously, all nature was sacred and indistinct from the divine. Now, as Eliade proposes, there was sacred space and profane space. He writes that for the religious individual, space was no longer viewed as homogeneous but that there were distinct, sacralised spaces surrounded by an amorphous, formless expanse. It was in these places when the sacred penetrated the mundane, everyday existence of humankind that there was a revelation of absolute reality and a revealing of the "central axis for all future orientation." In this manner, the divine ontologically established the world.[29] There were two primary means by which a space could be sacralised: it could either be through hierophany (the direct manifestation of the divine at a specific milieu) or, it could be by ritual sacralisation where profane, chaotic space is cosmologised. The latter was



4. (Left) Depiction of a performance of the Mystery Play of Saint Clement in Metz during the Middle Ages

Source: Auguste Migette (1802-1884) ou la Chronique du pays messin, catalogue de l'exposition au Musée de la Cour d'Or, Editions Serpenoise, 2002.

5. (Right) Pageant wagon; each wagon held one play. The audience stayed while the wagon moved from place to place

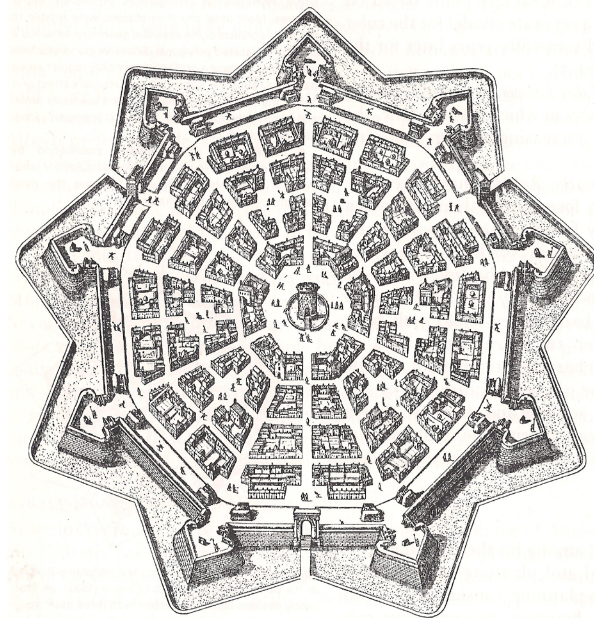
Source: Theatrefolk, 2011, https://www.theatrefolk.com/spotlights/medieval-drama, accessed 29 July 2013

more often the case in urban centres, where in order to provide orientation to the life of the city and its inhabitants, chosen places were consecrated. As Eliade writes, this organisation of space sought to "repeat the paradigmatic work of the gods."[30] However, what is especially interesting to note is the manner in which this sacredness spilled out over the thresholds of the defined sacred spaces and into profane spaces, ensuring that the city life was permeated with a sense of absolute reality, purpose and meaning. This way, for citizens who chose not to proactively engage in religious activities, the most essential elements of the framework and an overarching moral compass were brought to them. Following the degeneration and collapse of the Roman Empire, medieval society was well aware of the consequences of displacing the sacred in favour of more materialistic pursuits in their public sphere. Initially, following the fall of the Roman Empire, city life in Western Europe saw a rapid decline. For centuries there was a "simplification of culture, a moving inward, a time of narrowing horizons, of the strengthening of local roots, and the consolidating of old loyalties."[31] It was on this new, proven foundation, that the medieval cities were slowly built up and it is on these principles that the modern city was based.

A cursory examination of city structure from the time-period reveals a close meshing of religious institutions with every day public life, and is visible both in the Christian tradition as well as Islamic cities which grew in dominance following the decline of Rome and Constantinople. In Islamic societies, the central governing area contained the mosque, the market (the common public meeting area) and the Imam's house. From this focus point, the faithful would be called to prayer. Churches, also centrally located and towering over other profane buildings, followed a similar pattern. Additionally, within Christian medieval societies, sacralisation of space was achieved by means of liturgical dramas (passion plays, mystery plays and morality plays). These were performed in public spaces and sought to establish symbolic relationships between the divine and the spectators: vertically along the axis of Heaven, Earth and Hell, and horizontally according to the cardinal points. This was a means of bringing order to the city by imitating in human spatiality and time, what God had done during creation to transform chaos into order. It was also a way of ensuring that societal expectations of morality were conveyed to the many illiterate citizens and that they were able to affirm their place in the cosmos. A regular occurrence, temporary scaffolding and moving carts completely transformed the chosen location in the city and, as suggested by Marco Frascari, despite the ephemerality of these events, they left a lasting impression in the city, and its collective memories and texts.[32]

The Renaissance, the next stage of urban development, generally considered to stretch from the 14th to the 17th centuries, came to be known as the Golden Age of artistic, cultural and intellectual production. Late medieval cities underwent significant reconfiguration, both as a result of political and technological innovations, as well as the redistribution of wealth and remapping of cities due in great part to the Black Plague that killed large segments of the population. While this broadening of horizons did not cause a decline in public sacredness it did change the manner in which it was expressed. The advent of the press meant that written material was widely distributed and easier to access, and with the translation of Greek and Roman texts into Italian, French and English, ancient wisdom could be rediscovered.[33] Gothic architecture from the past era was displaced in favour of purer, classical forms of the Greeks and Romans but now expressed with Christian overtones. There were still clearly distinguished profane and sacred spaces, and elaborate theatrical performances continued to be an important part of city life. However, the aesthetics of art and architecture now followed strict geometry. Based on ancient wisdom to which Plato referred when he said, "God forever geometrises", it was believed that God's original act of creation was based on the laws of geometry. Hence, if these unchanging principles of geometry were reflected in works of architecture and in the city, not only was aesthetic perfection being achieved, beholders were also able to gain deep insight into the workings of the universe as established by the *deus geometra* or the divine architect.[34] As Gehl writes, the Renaissance marked a radical change in the history of city-building. The era of freely-evolved cities yielded to having the task discretely undertaken by specialists (architects, and later planners).[35] Many theories on the shape and function of cities were developed, and with this came the modern phenomenon that Christopher Alexander criticises in his writings: the ego of the designer. The ideal city became a work of art that was regarded from above, from the drawing board, with attention to the areas between the buildings and the experience of the city on foot becoming secondary. This means of understanding and organising the city doubtless had advantages—for example, many previously unaddressed problems with defense and transportation were addressed. However, a look at the star-shaped Renaissance city of Palmanova (comparable to the 20th century planning of Brasilia) reveals the main issue with this method of planning: built in 1593, the plan delivers a flawless artistic work, yet on ground, it remains lifeless to this day. Just one element of poor planning is the street dimensioning where all streets are 14 metres wide, regardless of their purpose or location. Meant to be inhabited by self-sustaining merchants, artisans and farmers, this ideal Renaissance city was eventually settled by criminals who had to be pardoned and offered free lots and building material in return for populating the town.[36] However, the impression that all design works during this period were doomed would be incorrect—magnificent works of architecture continued to be built. As Perez-Gomez writes, "Although the seventeenth century sought instrumental theories, [...] Baroque architects were motivated by the sensuous richness of God's created world. God's presence was felt intensely, particularly through the metaphysics of light [...] Endowed with simultaneity and ubiquity, it was close at hand yet infinitely distant."[37] Guarini wrote in the opening passage of his *Architettura civile,* "Architecture depends on geometry, yet it is an art of seduction that would never upset the senses by means of reason." One can hypothesise that while architecture was thriving, the new method adopted by city building was causing it to flounder; in the words of Sitte, "city planning stubbornly [went] its own way, unconcerned with what transpire[d] around it."[38] This lack of synchrony between architecture and city building, he writes, manifested itself beginning in the Renaissance and Baroque periods. The following sections will highlight clear parallels to the present-day pattern of hands-off planning where the city is designed from above and outside.

The Enlightenment period, spanning from around 1650 to 1800, was the next phase in the evolution of cities and the first in their secularisation. Like the Renaissance, it was a period of discovery but it focused on logic and reason. With new discoveries in technology and science being made, and ideas grounded in tradition and faith being challenged, the



6. Plan view of Palmanova and its encircling sprawling fortification system

Source: Morris, A.E.J. History of Urban Form: Before the Industrial Revolutions. John Wiley & Sons Canada, Limited, 1979. 173.

7. (Left) Central hexagonal Piazza, Palmanova

Source: Journalistica CWB, http://www.jornalistica.com/2013/04/palmanova-italia-que-poucos-conhecem.html#.UkAtRz_Q4SY

8. (Right) The Baroque Sindone Chapel by Guarino Guarini, Turin, Italy, 1667-1690

Source: Great Buildings, http://www.greatbuildings.com/buildings/Sindone_Chapel.html, accessed 01 August 2013

power of the church significantly decreased. As secularisation spread, society was unwilling to be subject to traditional hierarchies and power structures. This meant that not only was the church's authority being questioned but also that of the monarchy, which had previously been regarded as divinely ordained. This erosion of the monarchical power is illustrated by the fact that after centuries of royal processions that were on par with liturgical dramas in their elaborateness and popularity, the last major procession took place at the beginning of the Enlightenment in 1661 when the Restoration coronation of Charles II was celebrated.[39] While, the tradition has extended to the present-day on the continent, it is merely a shadow of its original pomp and glory—symbolisms and emblematic displays that previously elevated the monarch to the level of the divine and heroes of antiquity have been shed. When society was bound by sacred frameworks, people generally accepted their position in the social hierarchy as being ordained by the divine, but without that framework, there was a dissatisfaction that could be easily perceived, especially within the lower strata. Philosopher Immanuel Kant summarised the ideals of the time when he said "have the courage to use your own understanding! This is the motto of the Enlightenment."[40] It is important to note, however, that sacredness was not done away with in its entirety—powerful sacred places were still conceived and debates on existential matters were of great importance. Kant, for example, did not dispute the existence of the divine; rather he objected to external ritual, superstitions and hierarchical church order which suppressed rational thinking and hindered justice for all segments of the society.[41]

From the 1800s onwards, the Industrial Revolution transformed both the urban and rural landscapes of Europe as well as the mentality of its peoples. In London, the breakdown of the Catholic Church's enforced hierarchy enabled the development of a new economic paradigm that grew from the innovations of the Enlightenment. With potential for great economic benefits in sight, society by and large lost the notion of working together for the common good, of maintaining the public sphere, and of building the city up with sacred meaning and orientation.[42] The factory system was mostly responsible for the rise of the modern city; with factories employing a large number of people, many seeking work migrated into cities. Middle-class industrialists and entrepreneurs invested great amounts into the factories and enjoyed considerable success, albeit often with terrible working conditions in the factories, which depended heavily on child labour.[43] The aesthetics of the built environment saw a rapid decline and the social situation was forebodingly similar to that seen towards the end of the Roman Empire. As the philosopher Jacques Ellul writes, the rich retreated to their private countryside homes to escape the misery of city life, and the lower-class workers who could not afford to do so sought out whatever means of amusement they could to make urban suffering bearable.[44] Kostof also describes this segregation of classes as a means to remove the poor from sight of the upper class, on whose labour their riches were gained. While the displaced poor crowded into polluted city-centres, the English rich found their escape in traditional villages with cottage architecture and close contact with nature, and the rest of European aristocracy in its medieval towns.[45]

It was within these conditions that the final stage in the development of Western cities occurred—one which continues to this day.

By the mid- to late-19th century, the drastic need for improvements in the conditions for the workers was finally recognised. There was also wide-spread loathing towards the state of the urban landscape to which there were two very divergent responses. The first one was Romanticism, but it is only a side-note in this discussion as it was unable to affect city planning to a large extent and did not last very long. It is important however, as it makes visible the unabated human need for something beyond the ordinary, something that could strongly stir the emotions and take humanity back to a time of enchantment. It was an antithesis to the values of Industrialisation as well as the Enlightenment, seeking to validate intense emotional experiences as critical to aesthetic revival. Folk art and ancient customs were elevated, and in efforts to escape modern plagues such as industrialisation and urban sprawl, elements of medievalism were propagated in the hopes that the exotic and unfamiliar would provide a means of escape.[46]The other opposite response is identified by Gehl as the second radical change for city planning after the Renaissance. Known as functionalism, the emphasis was exactly on what the name implies: the pragmatic aspects of city planning. In the dire need to improve city life, aesthetics took a back seat while the idea of social betterment was approached with a specific and conscious effort. Based on new medical knowledge, increased hygiene standards and light, air, sun and ventilation was sought for all. Unfortunately, there was little consideration for psychological and social aspects in the design. "Functionalism was a distinctly physically and materially oriented planning ideology. One of the most noticeable effects of this ideology was that streets and squares disappeared"; whereas throughout history they had been focal points and gathering places, they were now replaced by roads and extensive decorative open space such as lawns which, it was believed, would improve urban conditions.[47] To a considerable extent, they did; new, well-lit multistorey blocks with heating and sanitation contrasted favourably with the dark over-populated worker housing lacking basic facilities. However, as Cloninger writes, "There is a need to design not just for the *soma*, Greek for "body", but also for the *psyche* which signifies "life, soul or spirit.""[48] Unfortunately, as the city spread out and thinned, most opportunities for close contact between people were also eliminated. Resources were dispersed through tangible and immediate improvements with little attention to lifting the morale of the working masses.

This ideology continues to this day despite the urban crisis brought on by rapid industrialisation being long over. Very often, resources are instead used for maximizing materialistic pleasures and other hedonistic pursuits, with the need for sacred spaces in the urban landscape typically being forgotten. However, individuals have not stopped searching for sacred spaces. As Kevin Lynch conveys in *A Theory of Good City Form:*

> Most people have had the experience of being in a very special place, and they prize it and lament its common lack. There is a sheer delight in sensing the world: the play of light, the feel and smell of the wind, touches, sounds, colors, forms. A good place is accessible to all the senses, makes visible the currents of the air, engages the perceptions of its inhabitants.[49]

Movements such as Romanticism and Surrealism are an expression of this longing; for example, André Breton's psychoanalytical readings of Paris are a clear manifestation of the human desire to find meaningful spaces and encounters in the city. While in the pre-modern world, spaces and events were pre-defined as being sacred and profane, in a context where these values are not on offer, the Surrealist often constructed their own alternative reality of the city that offered meaning to the mundane. However, as Perez-Gomez writes, all these movements have only been "strateg[ies] of resistance against the dominant forces, which co-opted architects into its fold."[50] I would propose that city-planning has long been added to the fold as well.

9. (Top opposite) London skyline in 1746, painted by Canaletto. Religious landmarks, including St. Paul's Cathedral tower over the city with only two secular features—the Monument to the Great Fire of 1666 and a bottle oven on the south bank

Source: Web Gallery of Art, http://www.wga.hu/frames-e.html?/html/c/canalett/7/canal705.html, "London: The Thames and the City of London from Richmond House," Canaletto, accessed 08 Septmeber 2013

10. (Middle opposite) England's skyline circa 1852, during the Industrial Revolution

Source: MIT, http://ocw.mit.edu/courses/economics/14-731-economic-history-spring-2009/index.htm, "Cottonopolis," Edward Goodall, accessed 08 September 2013

11. (Bottom opposite) London skyline in 2012. St. Paul's Cathedral is now barely noticeable amongst the other much taller secular towers

Source: Tapani Päkkilä Photography, "London Cityscape," 2010.

1.3. **The Importance of Collective Sacred Spaces Today**

The importance of collective, sacred spaces in society has been illustrated throughout history. Along with dedicated religious structures, most civilisations have also built public gathering spaces that have nurtured communal feelings and a sense of community cohesion. In instances when this was not the case, or where the quality of the public sphere was neglected for pursuits that were deemed more worthy of resources, various problems have arisen. As discussed previously, the 20th century had also fallen prey to this. Fortunately, the past few decades have seen a renewed interest in bringing individuals together, albeit within a very individualistic framework. However, the contemporary revival of the public sphere has faced two major challenges. The first challenge has been learning to tap into the benefits of multiculturalism. In many if not most major urban centres, this adds a layer of complexity that was not present at the same scale in cities of the past. Secondly, this is the first time in history that public spaces are being built without an overarching narrative which in times past was of the sacred. This has not only made it harder to discuss the task in a unified manner as individuals and groups have divergent priorities and visions, more problematically, without the sacred narrative there are some elements critical to human psyche that have been completely pushed out of the discussion as being unrepresentative of the autonomous modern individual.

This section examines the continued need for collective spaces in the modern context as well as issues around resolving the stark difference of interests among users. It also considers the necessity for at least some of these spaces to be designed after a higher order in order to express values that are sought after by many if not all members of the society. It does not however deal with the "how" of constructing these spaces as that will be the focus of the rest of the discussion.

In contemporary cities across the Western world, individual privileges and the private realm are highly esteemed, while the necessity of collective spaces often gets forgotten. This study advocates not just for an increased awareness of the need for sacred spaces, but for *collective* sacred spaces. A report published in the *Journal of Personality and Social Psychology* by Diener, Diener and Diener on the subjective wellbeing of nations offers an apt hypothesis. Using Independence-Interdependence as one of the key variables, it raises the possibility that in collectivist cultures, there is a greater feeling of social support with the focus being on achieving group goals rather than solely pursuing personal fulfilment.[51] Philip Sheldrake expresses similar sentiments when discussing urban spirituality's relevance to contemporary times. He believes such a spirituality should be expressed in the interaction of people and in the nurturing of urban virtues, of which a key one is a renewed sense of mutuality. Although contrary to the thinking of a consumer culture, Sheldrake believes that compromising on absolute claims of individual choice is the only way to effectively deal with diversity in our societies. This sort of spirituality he reasons "interrupts or disrupts the everyday city" when there is a need to confront structural evils and acts as an effective urban critique built on a collective sacredness.[52]

This exploration is grounded in the Western tradition and its primary positionality being Montréal. With an increasing number of cultures diversifying Québec, particularly its urban areas, which have historically been strongly Francophone, it is interesting to consider the conclusions of the Bouchard-Taylor report, *Building the Future: A Time for Reconciliation,* which was carried out in an effort to build a philosophical framework that would enable Québec to function as an increasingly diverse society.[53] One of the key recommendations made by the report is that there should be a focus on interculturalism where citizens discuss their differences in a common society rather than multiculturalism where groups are encouraged to keep their separate languages and cultures. Interculturalism does not imply the loss of unique attributes of the cultures but is a means of challenging self-segregation tendencies by encouraging increased cross-cultural dialogue and interaction.[54] To facilitate such an exchange, there is a need to generate public spaces that encourage a civil, unbiased and unfettered flow of ideas among cultures. Historically, when society was bound by rituals and traditions that most participants had a homogeneous interpretation of, it was simpler to construct these spaces. However, in today's pluralistic society, design has to be much more nuanced and perceptive to meet the multiplicity of needs. For a relevant public space, its design has to either address denominators common to all of humanity which every member of the society can comprehend regardless of their background, or the intervention needs to be multi-faceted enough to meet the varying needs of the participating cultures. As a result of these complexities, new research and thought into sacred public spaces is extremely pertinent.

While present-day Western society for the most part is based on civic principles that emphasis its secular character, its religious past is an intrinsic part of the history. To that end, it is essential to differentiate between maintaining religious neutrality with disposing of national religious heritage and culture. This exploration does not intend to call for the return of religion in the public sphere by imitating history; it seeks instead to find new means to the same end—one that allow cities to resound with a similar wholesome character where citizens are able to reflect inwards, as well as outwards on their place in the community, rather than functioning as if they were mechanical elements of an endlessly churning machine. However, one of the primary steps should be maintaining elements of collective heritage. Religion and the religious history of the place cannot become a taboo subject that has to be done away with under the guise of accommodating interculturism. A city without its memories is comparable to a person without any recollection of his/her past, heritage and value system. As Dolores Hayden writes, "identity is intimately tied to memory."[55] Secularists have persistently fought for the removal of religious symbols of Québec's dominant religion, such as the cross on Mont Royal or in the National Assembly. However, these are neither propaganda tools nor inconveniences to those not practising the particular religion; they are passive physical reminders of Québec's history and in principle, the dominant religion's acceptance of other cultures. Political scientist, John Redekop states that rather than being a hindrance to freedom of conscience and religion, "it is the Judeo-Christian ethic that allows religious freedom."[56] Québec is an interesting case where open secularisation is encouraged as opposed to a country like France where restrictive secularisation is the norm. This is also expressed in the Bouchard-Taylor Commission's study which acknowledges the detrimental effects of forcing complete privatisation of religion and that "instead of pushing religious expressions out of the public sphere—in effect, isolating religious and cultural minorities—the report calls for those expressions to be welcomed into the public sphere, which will hopefully bring all citizens into the mainstream and further unify the Quebecois society."[57] This conservation of collective heritage along with encouraging open expression by other cultures is a positive step in the generation of public sacred spaces.

It is useful at this point to get a preliminary grasp on the *necessity* of sacred collective

spaces that are relevant in contemporary societies but, as discussed above, have as a backdrop the religious monuments and the memories of parades of yesterday. Jonathan Sacks offers a good introduction on the basis that these spaces should be built:

> We have run up against the limits of a certain view of human society: one that believed that progress was open-ended, that there was no limit to economic growth, that conflict always had a political solution, and that all solutions always lay with either the individual or the state. We will search, as we have already begun to, for an ethical vocabulary of duties as well as rights; for a new language of environmental restraint; for communities of shared responsibility and support; for relationships more enduring than those of temporary compatibility; and for that sense that lies at the heart of the religious experience, that human life has a meaning beyond itself.[58]

For the purpose of this exploration, the latter argument is particularly important—it defines the ultimate aim of the urban sacred, collective space. These are spaces that play a critical role in mending some severe fractures in the modern society, that serve to heal individual consciousnesses that have been fragmented to such an extent by commodification that elemental values of human existence such as mortality and beauty are all but lost. These spaces are not based on efficiency; they are selfless, giving spaces where one is no longer required to justify one's presence according to the function of the space or his/her contribution to it.

Technology has solved many issues associated with exponential urban growth and contributed to greatly improving human living conditions. However, as Michael Dowd writes, because of technological growth "cultural contexts have changed enormously—but our brains and bodies have not. We still have the same fears and desires as our ancestors, but now those instincts are out of sync with life conditions." "Our ways of getting news, interacting with friends and dealing with enemies have been altered beyond recognition by modern technologies."[59] Technology and modern belief systems have changed irreversibly, yet providing spaces where humans can face and reflect on basic emotions is one of the responsibilities of the planner. While the role of the architect and planner is not mutually exclusive, the architect is more often entrusted the responsibility of crafting spaces for individual, private use. The planner on the other hand has the greater share of responsibility for orchestrating spaces that enable collective living and reflection. The greatest physical mirror of shifting paradigms in our global culture is the built environment. It is hoped that the reverse is also true and that by building into the urban landscape places of contemplation, breaches brought about by modernity in the society can be addressed.

Finally, sacred collective spaces are necessary not just for the well-being of individuals, but for a civic spirit to flourish in the city. Robert Egan very insightfully proposes that all inner betterment ultimately is for the sake of transformative action in society, and Segundo Galilea offers that unless social justice agendas are driven by internal transformation, and passions higher than mere political ambitions, they will be of little effect. [60] While contemplation can be carried out in the private realm, the desire behind making such spaces publically accessible can be compared to the goal of bringing the sacred into the public sphere in historic cities. Just as the spilling over of the sacred into profane spaces was

essential in ensuring that every member of the society, whether illiterate or non-religious, was aware of the moral frameworks and obligations of the time, contemplative sacred spaces today are essential in encouraging people and groups to understand their place in society and to draw them out of a self-seeking mentality. As *Faithful City* suggests, cities rooted in sacredness have four distinct social benefits:

1. They enlarge our imagination by setting the individual into a larger existential framework. This provides us meaning outside ourselves hence providing an orientation and coherence;
2. They teach and encourage the practice of wisdom, virtue and justice by enabling the pursuit of lasting happiness rather than hedonistic pleasure;
3. They open us up to the new by making possible the practice of religion as a means of personal and community identity but are not fearful of embracing strangers and new knowledge that they might bring;
4. They deepen our sympathies by understanding that all of humankind shares a common experience, with different means of expressing it.[61]

Adopting such a philosophy of city building ensures that planners, "practical artists", maintain a realistic approach where advancements are embraced for their benefits but objectivity is maintained in recognising where they do not align with basic human instincts and natures. Planners are an important voice for the community when it comes to negotiating the countless forces acting on city spaces and therefore need to strive to bring into the discussion immaterial but pertinent issues that would otherwise be overlooked by other powers which only understand the technical needs of the city. As Leonie Sandercock, an advocate for a more therapeutic model of planning writes, planners need to plan "by negotiating desires and fears, mediating memories and hopes, facilitating change and transformation."[62]

CHAPTER 2
SACRED IN ARCHITECTURE

2.1. **Current Use and Understanding of Sacred in Architecture**

One finds great inspiration in the writings and philosophies of designers who strive to achieve the kind of spaces described previously. Curiously, it seems that most of these designers are architects, with works on a city scale being very sparse. Correspondingly, the few city spaces with a contemplative or sacred character seem to have come about more due to a fortunate but happenstance convergence of ideal, nurturing conditions in the particular niche of the city rather than by a purposeful and city-wide integration into the fabric. That may not be the incorrect way to encourage such spaces, indeed preliminary research indicates that fostering good city conditions is an integral part of developing such spaces (the reasons for which will be explored further on). Regardless, a core issue is the by-and-large complete overlooking of the fact that such spaces are vital to the holistic development and success of the public realm. Historically, a discrete study to cultivate such city spaces was not necessarily required; however, with extreme specialisation markedly distinguishing architecture, city building and engineering, this is no longer the case. In the following sections, I outline a process that can be used to guide the shaping of a sacredly inclined city. This does not imply the creation of a step-by-step manual on how to design sacred public spaces, for that is not only much beyond the scope of this project but will most likely be pointless for there is no easy, clear way of creating these spaces; rather, as Christopher Alexander writes, they can only be "generated" by following appropriate principles or "patterns" in a larger vision of city building. To that end, rather than ranking methodologies used by architects of spaces with sacred themes and imitating them in city planning, I would like to briefly outline the practices and philosophies of some eminent scholars working with this focus, and extract key elements that are also applicable to designing at the city level.

In the Anglo-American world, rising skepticism about organised religion, combined with the secularisation of society, meant that by the 1960s, discussion of the sacred was largely eliminated not just from the public realm but also from university programs in architecture and planning. However, the repercussions of this void started becoming evident fairly soon. Some perceptive scholars such as Aldo Rossi and Robert Venturi spoke out as early as the 1960s and 70s, articulating what the public already implicitly sensed: the failures of clinical utopianism in modern design. In an effort to address this tension, new approaches to design have been consistently developed but the problem of inhumane architecture has persisted. There have been many successful spaces that have been created based on these new ideas but a certain nostalgia and longing for traditional forms has endured.

The growing acknowledgment of this void within mainstream architecture was manifested in a 2007 symposium at the Yale School of Architecture, entitled *Constructing the Ineffable* that examined the definition and role of the sacred within architecture. The introductory remarks to the diverse gathering of architects, philosophers and theologians expounded on the use of "ineffable" based on Le Corbusier's reflections on the potential of a weighty and temporal art to convey concepts of the transcendental and the sacred.[63] While the symposium focused on architects speaking explicitly of their work on worship spaces and memorials with religious connotations, most of them also apply the same principles in their work on secular buildings to create evocative atmospheres. These architects, along with numerous others constitute a unique group maintaining the importance of the sacred. Studying their philosophies provides practical insight into the creation of sacred spaces; this is followed by proposing a theoretical synthesis of other elements integral to sacred city-building that may prove to be complementary or contradictory. Peter Zumthor's work and principles will be explored and the discussion of sacred public spaces is based on his nine suggestions for creating what he calls "atmospheres". However, as he himself admits, these nine principles are highly personal; the work of others is also brought to bear to complement Zumthor's approach.

12

12. Abbey of Le Thoronet, Provence, ca. 1170; a key inspiration for Le Corbusier's concept of "ineffable space." In the preface for Lucien Herve's Architecture of Truth: The Cistercian Abbey of Le Thoronet, he describes it as being the "architecture of truth, tranquility and strength." It models "ineffable space" because "nothing further could add to it."

Source: Provence Web, http://www.provenceweb.fr/e/var.htm, accessed 12 July 2013

2.2. **Key Principles and Preoccupations of Sacred Architecture**

> […] those ancient sages, who sought to secure the presence of divine beings by the erection of shrines and statues, showed insight into the nature of the All; they perceived that, though the Soul is everywhere traceable, its presence will be secured all the more readily when an appropriate receptacle is elaborated, a place especially capable of receiving some portion or phase of it, something reproducing it, or representing it and serving like a mirror to catch an image of it. —Plotinus[64]

Understanding and designing spaces based on this ancient concept of building has been the main preoccupation of architects creating in a sacred idiom. However, as discussed earlier, the contemporary architect is designing faced with a major contradiction; they are working to frame the sacred for a secular society, one that identifies itself as nonreligious but continues to be "unconsciously nourished by memories of the sacred, in camouflaged myths and degenerated rituals."[65] Given this ambivalence regarding the sacred, it is useful to more accurately define what it entails. As specified in the *Oxford English Dictionary (OED),* it can be a direct reference to the divine where "things, places, persons and their offices, etc" are "set apart for or dedicated to some religious purpose, and hence entitled to veneration [and are...] made holy by association with a god [and are therefore...] worship[ed], consecrated, hallowed." On the other hand, the term sacred does not always directly allude to or describe the sacred—it may also figuratively describe non-divine entities that are "regarded with or entitled to respect or reverence *similar* to that which attaches to holy things." Further definitions include "secured by reverence, sense of justice, or the like, against violation, infringement, or encroachment" and "devoted to some purpose, not to be lightly intruded upon or handled."[66] Generally, contemporary sacred spaces should be viewed in light of the second, figurative sense. The sacredness of a space can be measured by its ability to capture and express something as potent as the divine, similar to the description by Plotinus. As revealed by the work of architects such as Peter Zumthor, Luis Barragon, Steven Holl and Carlo Scarpa (just some among the finest), these spaces have a gravitas that transcends their functional aspects—"an emotional binding relationship that is not measurable" occurs, a "condition [that...] is related to a notion of wonder."[67] Inanimate objects such as brick, mortar and wood, upon being brought together well, are manipulated to exert the power of transformation on users. Therefore, it can be summarised from the above observations that a structure with characteristics of the sacred is one that prompts an exchange between the human and the environment, and enables a higher experience than that found in other "profane" spaces. Without any change in the life circumstances of the person, these spaces draw from within usually dormant expressions of awe, clarity, peacefulness and so forth. To serve secular civic purposes in an increasingly multicultural society, architects of these spaces play on shared but rarely recognised human needs and emotions rather than specific religious associations as in times past. Many in fact object to being labelled as architects of sacred spaces, their focus being on creating a hybrid variety of space that serves a dual fold purpose, its primary usually secular function along with providing a pause in the monotone flow of life to contemplate on higher purposes. However, most architects designing such spaces function with certain common principles at the forefront—while this is potentially a very extensive discussion, I will attempt to summarise the ones central to the practice and pertinent to the needs of urban public spaces.

Theoretical Understanding of the Concept of the Sacred in Architecture

Whether a person adheres to seeing the divine as immanent or transcendent, throughout history, nature in its purest, untouched state has been revered as signifying the divine. However, spaces without domestication do not allow a person to dwell, as defined by Norberg-Schulz who writes, "the space where life occurs are places."[68] He extrapolates this understanding from Heidegger's concept of dwelling where "man dwells when he can orientate himself within and identify himself with an environment."[69] A central role of architecture is to transform a sacred space into a sacred place where the architectural intervention allows humankind to dwell at a safe distance from the power of nature and at a comfortable concentration. However, it is possible for this enclosure to become so effective that it completely estranges the person from the context and its characters that originally made it sacred. To begin with, the space has a *genius loci* or the "spirit of place" but as humans occupy the space, making it into a place, the profane (or the human, everyday element) is introduced. During this transformation, it is very much in the hands of the architect to orchestrate to what degree and in what manner the spirit of the place is allowed to permeate the human dwelling. Architects of sacred spaces are those who have found the ideal balance—be it by the way they compose the threshold, balance the enclosure and exposure, the entrance of elements such as the light and wind, or other means of connecting the structure to the context. Given that in a settlement there are potentially thousands of other such "profane" structures, it takes discernment and skill to recognise the *genius loci* of the place and capture it within the designed space. This concept of *genius loci* is a Roman concept, brought back into the discussion by Norberg-Schulz who explains *genius* as standing for what a thing or place "wants to be."[70] It is clear that not all architecture is timeless; however, for ancient peoples, it was of great existential importance to reconcile with the *genius* of their context. Continued survival depended on an appropriate relationship with the intrinsic character of the place, both physically and in a psychic sense.[71] However, with the technological prowess afforded us, we are today able to physically survive while stifling the *genius loci.* Unfortunately, for the most part, the psychic well-being and the need to be connected to the definite character of the environment is forgotten. The belief that architecture needs to address this void is a key principle guiding the work of most contemporary architects whose projects display elements of the sacred.

Practical Application of the Concepts of the Sacred in Architecture

Hogrefe, in *Divine Interventions*, speaks of the work of a group of architects of contemplative spaces, particularly Steven Holl. Though not willing to be boxed into a rigid category of architects who create spaces with sacred characteristics, Holl does not shy away from admitting that every person longs to commune with a power higher and beyond themselves. On his part, he believes that these moments are best accommodated in his design when "space and light and texture and sound come together to give [a] pause." Not all of Holl's works are grandiose gestures, but he strives in each to provide "a heart-stopping sense of space beyond space."[72] Phenomenology, the stimulation of the senses and the emphasis on experiencing the building in its entirety, is an important aspect in the work of all architects of sacred spaces with notable architects along with Holl who place emphasis on it being Christian Norberg-Schulz, Peter Zumthor and Juhani Pallasmaa. Although

the end result in most of the spaces designed with phenomenological forethought is of ease and lightness, there is nothing vague or ambiguous about the intentions. For instance, Zumthor's spaces are open to interpretation and exploration by their users but he makes clear that in fact, his vague is strictly planned and beauty is obtained through precision.[73] Phenomenological design provides a channel for the sacred spirit of the place to find entrance and expression in the human realm by the purposeful engaging of the sensory perceptions. In the *Forward to Obra Poetica*, Jorge Luis Borges writes, "The taste of the apple...lies in the contact of the fruit with the palate, not in the fruit itself."[74] In the same manner, sensory perception is inextricable from the experience of the sacred. There is no awareness of the spirit of the place as long as this contact is not established between the place and the user's senses. Through phenomenology, architecture frames the immaterial and provides it physical expression thus allowing us to experience it. As Holl puts it:

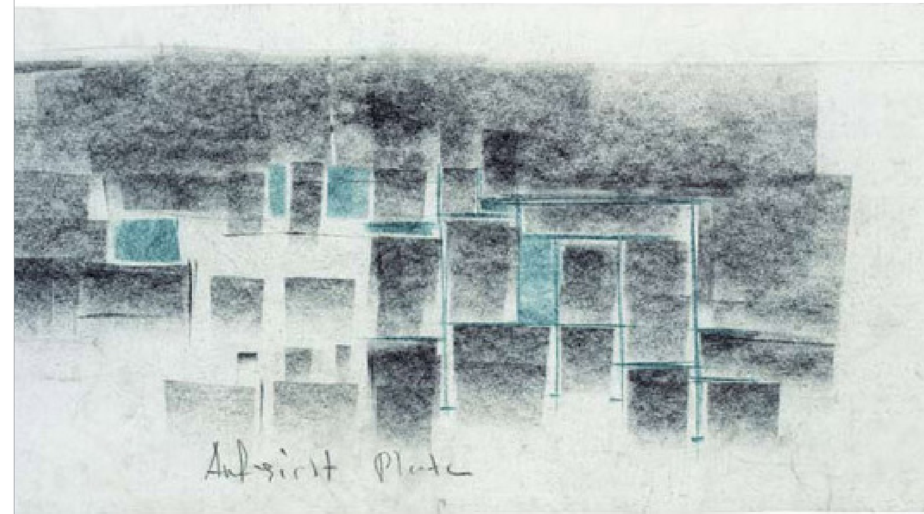
> Architecture, more fully than other art forms, engages the immediacy of our sensory perceptions. The passage of time; light, shadow, and transparency; color phenomena, texture, material and detail all participate in the complete experience of architecture. The limits of two-dimensional representation [in photography, painting or the graphic arts], or the limits of aural space in music only partially engage the myriad sensations evoked by architecture. While the emotional power of cinema is indisputable, only architecture can simultaneously awaken all the senses—all the complexities of perception.[75]

By means of a vast and varied range of sensory stimuli, there is a heightened consciousness that has the ability to catch a glimpse of realms beyond our own. Even if only for the briefest of moments, this awakened consciousness allows for a number of simultaneous (sacred) experiences.

A major preoccupation of phenomenology is that of apprehending "pure" beauty within the spaces, be it in the tactile experience of a sun-warmed wood surface, or in the visual appreciation of a form revealed by a flawless mix of light and shadows. Luis Barragán's designs stems from an outlook that is rare in this secular age; he designed with an explicit devotion to the divine and believed that such beauty could only fully be understood in terms of the sacred.[76] His desire in his work was to give form to the ethereal perfection of beauty found in the character of the divine and he lived and created by the words of his friend, Edmundo O'Gorman, "the irrational logic harbored in the myths and in all true religious experience has been the fountainhead of the artistic process at all times and in all places." It appears that his religious convictions gave

13. Las Arboledas, Mexico City, Mexico, 1962, Luis Barragán

Source: The Pritzker Prize Architecture, http://www.pritzkerprize.com/1980/works, accessed 14 July 2013



14. Thermal Bath Vals, Graubünden, Switzerland, 1996, Peter Zumthor. Representation of spaces that are guided but seductive

Source: The Pritzker Prize Architecture, http://www.pritzkerprize.com/2009/works, accessed 14 July 2013

him a certain release to go against the tide of rationalism which he felt hindered aesthetic fullness; he emphasised the importance of exercising the "difficult art of seeing with innocence" to ensure that the design vision was not overpowered by rational analysis.[77] However, what makes Barragán's quest for beauty especially pertinent to learn from is that despite calling for use of concepts such as Beauty, Inspiration, Magic, Enchantment, Serenity, Silence, Intimacy and Amazement—concepts that are deemed to be irrational in a secular society—his work was very relevant to the advancements of his time. He made heavy use of modern reference points, being particularly influenced by the European Modern Movement, but ensured that his architectural language was not restricted by the current trends. Instead he introduced layers of richness and a timeless quality that is central to all good sacred spaces. He chose to do this by infusing his designs with clear vernacular vocabulary of Mexican villages, and Latin and Arab-Andalusian repertoire, all relevant to the context for which he was designing.[78]

Another preoccupation of this type of architecture is to increase the self-awareness of the user of the space. As Holl puts it, these spaces seek to enable one to "[get] down to the root of any feeling." The intensity of emotions brought about by an increased awareness of self and the cosmos should not lead to confusion of thought but rather an increased clarity. For instance, if the intended effect of the space is to reveal the smallness of humanity within the cosmic scheme, this awareness should be conveyed without compromising the dignity and significance of the individual experiencing the space. If instead the intended effect is to reveal the prowess of humanity over nature, it should be done while conveying the virtues and necessity of humility. Zumthor stresses the importance of achieving this fine balance; in his book *Atmospheres*, he writes at some length on the need for such spaces to be mysterious enough to awaken a sense of wonder while having enough direction to prevent an unpleasant sense of disorientation. He describes this quality as the space being in a state "between Composure and Seduction."[79]

As an example, the essence of these key principles and preoccupations is illustrated well in Zumthor's method of designing. The central intent in his work is to evoke emotion, remembrance and memory. Emotion is the only way to reach what he calls the "authentic core" of things. Spatially, he does this through "architectonic dramatisation" believing that this most deeply moves the emotions of an individual. When this emotional stirring occurs, and meanings, feelings and experiences that are typically beneath the level of conscious awareness are brought to the surface and self-awareness is heightened, a memory is created. A sacred or a non-profane experience has been lived; in a world of shallow interactions and superficial experiences, a non-temporal field has been penetrated: the space of the memory.[80]

Having looked at some key architectural means used to convey a sense of the sacred, the following section will explore these ideas at the level of city planning: a level where there are much fewer practitioners working to give physical form to these ideas. Zumthor admits to not having dabbled with city planning but when questioned on it, he makes reference to Aldo Rossi, who has also explored concepts of the "city of memory" and emotions. For Rossi, the monuments of a city have the power to arouse strong emotions and hence are inextricably linked to memory. Spatially, to a person experiencing the city, a critical layer in building up a mental city map is the link between the city's monuments; as a consequence of the emotions being most strongly evoked at these monuments, sharp memories are formed.[81] However, monuments should not be the only place for forming such memories. By definition, the word monument is derived from the Latin term that stands for to "remind and teach."[82] While this element is essential in public sacred spaces to form collective memories, in addition, there should be contemplative spaces that do not bear the burden of the past. These should also be places that don't have rigid implicit meanings which is the case with most monuments. By creating another such network—along with the one written of by Rossi—across the city, there will be spaces that allow for creation and celebration of memories that may in fact be intensely private but formed within the public realm.

CHAPTER 3
SACRED IN CITY PLANNING

3.1. **Key Categories of Sacred City Spaces**

For the purposes of this exploration, sacred spaces have been categorised into three ideal types. This has been done through the differentiation of key characteristics by studying a range of sacred public spaces. On reality though, most sacred places may not fall into any single one of the three groups, usually borrowing characteristics from two or all three of the categories.

The first category is where the primary goal, from the conception of the space, is to make explicit a religious reference of some sort. Many historical spaces fall under this category where entire settlements were laid out according to the concepts of divine geometry and based on high classical urban design. This manner of designing played a large role in contributing to the sacredness of cities of the bygone eras. However, few planning schemes are carried out on this basis now and given the secularisation of contemporary society, neither is this an appropriate model to reinstate in the profession. Nevertheless, it is of utmost importance to preserve these places, study them and understand the context in which they were built and appreciated. Also, it is undeniable that these places do still have a poignancy and power upon the human emotion, and to that end, while their larger design processes may no longer be relevant, they hold many valuable lessons in the phenomenology of the sacred; something that is still deeply appreciated today.

The second category includes urban spaces that are a valuable derivative of an overall sensitive planning ethic. They may be planned or may equally well have emerged and matured over time. Very often these are liminal, in-between spaces offering a place of respite and contemplation in a fast moving society. These may be places that encourage private reflection without any specific agenda or they may be conveying some inherent message. Whatever the case, these places play a role in putting into perspective our being in the world, be it by introspection or an outward observing of the society we live in and our place in it.

The third category covers places that are not necessarily urban spaces but it is important to include them for the sake of completeness. These, unlike the previous category are not spaces which one can stumble upon while moving through the urban fabric. While these are still public, they often require an intentional journeying to them. Reaching these sacred spaces takes on the form of a pilgrimage and part of the experience of the sacred is in fulfilling this ritual. Very often the vastness and magnificence of the natural context within which these spaces are set play a significant role in contributing to their sacredness. As there are fewer "profane interventions" at these sites, the *genius loci* is much more palpable, frequently without the need for framing by the designer.

3.2. **Good City Spaces: A Prerequisite for Generation of Sacred City Spaces**

For a city to generate and maintain successful sacred spaces, it is of critical importance to acknowledge that they are not mutually exclusive of good city spaces. They cannot thrive and fulfil a sacred role if situated within a vacuum of dysfunctional urban settings. However, this does not mean that the two categories are guaranteed to correspond, i.e. all good spaces are not sacred just as all sacred spaces may not necessarily fulfil all the requirements of a good public space.

The entire city cannot be made sacred, and neither is there any need to do so (even in history when cities were considered sacred, there still existed everyday profane spaces). But for particular sacred nodes to exist throughout the urban fabric, the city does need to have a morphology supportive of such spaces. By and large, contemporary cities do not play this role well. We need to have "good city spaces" such as the ones propagated by numerous theoreticians and practitioners like Kevin Lynch and Jan Gehl for there to be even a possibility of sacred spaces existing and thriving. This is necessary both for the psychological preparation of the users of the space as well as for the built environment. Good city spaces brought about by the timeless order of "life, space, buildings" provide a transitional space into the sacred collective spaces.[83] Social activities in these public spaces enable varying degrees of contact intensities and as Gehl writes, though these "see and hear" contacts appear insignificant, they are prerequisites for more complex interactions.[84] They foster an appropriate state of mind in which people are stimulated and encouraged to become an intrinsic part of the city life. These spaces begin to counter modern attitudes where the citizens' only sanctuary is their private realm and further a community oriented outlook.

Permeable Edges, Fluid Boundaries

For sacred collective spaces to integrate well into the city fabric, they have to be treated in a manner similar to which they were in the historical city: the profane and sacred cannot have hard edges distinguishing them. Instead, moving through the city should offer numerous opportunities for contemplation and refreshing, or for merely a pause at a place of special beauty. These places should have such loose, fluid edges that people almost stumble into them but once inside should feel provoked to recognise them as a reflective space. If the sacred spaces do not naturally flow out into the profane city spaces and draw people in without conditions, they will not be much different from religious institutions which are perceived as differentiating between people's beliefs and are therefore only entered by some. These sacred spaces are public and intercultural, and should feel equally welcoming to every citizen who happens to come across them.

Scale of Design

Jan Gehl argues that urban design can be described at three distinct scales: city scale, project (development) scale and human scale.[85] Generally, there is a wealth of information available for the first two scales but the human scale is often neglected—perhaps because it is considered insignificant but also because it is perceived to be difficult to work with. However, for public spaces in a city to succeed, the comfort and stimulation of their users should be a primary concern, and for that, considerations for the human dimension are indispensable. Michel de Certeau, in his essay *Walking in the City*, provides an adept analysis of the problems of Modernist planning methods that lead to severe compromises at the human scale. He writes of standing on top of the World Trade Centre, being "lifted out of the city's grasp", and how this allowed

him to read the city as a text rather than being "possessed" by it. This description is offered as a parallel to the way planning is carried out today—while the designers look down and lay the city out from their totalising vantage point, those fated to use it are "ordinary practitioners of the city who live down below."[86] Planning in this manner has meant that the two top-level scales have received the major emphasis. However, the more intangible human scale is largely ignored, mainly due to a number of key difficulties with dealing with this level. The first is that this level, unlike the other two, requires a certain degree of indeterminacy. While historic city planning had room for organic growth and alterations as users saw fit, modern planning methods depend heavily on social engineering and stringent regulations. The second major difficulty with human scale planning originates from design having become extremely mechanised. With this, as the components and building blocks that designers work with get larger, much larger than the human scale, spatial visualisation and interaction at the eye level appears to become laborious, inefficient and time-consuming. On the other hand, historically, when the basic components were at human scale, humane design came much more naturally. Unfortunately, larger components only serve to enable the poor practice of the planner laying out the city from above and outside, completely disengaged from the actual complexities of city life.

Space between Buildings

For timeless sacred collective spaces to be generated, the "space between buildings" as studied by design scholars such as Christopher Alexander, Jan Gehl and Larry R. Ford is crucial. It is these spaces that act as the places of transition discussed earlier. In fact, often these intervening spaces *are* the sacred spaces. It is in these places that children find adventures and mysteries and adults find respite. What is it that can bring an increased number of such spaces into play? Andrew Crompton believes that designing at a smaller scale, with smaller components as discussed above, is a large part of the answer. In his essay, *Scaling in a suburban street*, this hypothesis is tested out at the scale of a street:

> A fractal environment can accommodate more small objects than expected because fresh small spaces come into play as the size of object diminishes. Could the built environment behave like this? To test this hypothesis the number of cars that could be parked in a street was estimated for different sizes of cars. The results indicated that scaling does occur. This is as if space can be manufactured from nothing by designing at an appropriate scale.[87]

It means increased usable communal space and also addresses one of the greatest complaints against today's cities: their homogeneity. It is clear that designing at a smaller scale allows for the integration of a greater variety. For example, in Crompton's case, smaller cars means more cars and hence the possibility of a greater variety of cars. Similarly, when cities are built from the smallest scale upwards, the spaces between buildings are not large but they are more numerous and of a greater variety, hence offering more opportunities. With regard to the discussion on enabling sacred spaces, when the design starts at the eye level and ends with the bird's eye view rather than the reverse, the aesthetics of public spaces are sensitively dealt with, an essential element for sacred spaces.

Place Expressivity

The need for meaningful design of public spaces bears mentioning. A city's public spaces have the option of being designed

as superficial and feeding the culture of materialism by providing instant gratification, or they can take the opportunity to nourish the well-being of its citizens. In *Tearing Down the Streets: Adventures in Urban Anarchy,* Jeff Ferrell writes of citizens making choices where planners did not act.[88] While themed amusement parks and idyllic holiday resorts have their place in the modern landscape, this is a portrait of citizens reclaiming public spaces in the face of excessive Disneyfication. By stripping city spaces of their original history and character, and repackaging it in a sanitised form, citizens lose all reference points and the city its collective memories. The dumbing down of cities by setting up false veneers of easily grasped fantasies serves little purpose in helping citizens cope with reality. By wiping out past wrongs and victories, opportunities for potential collective lessons and celebrations are missed.

Legibility

Many arguments can and have been made for what an ideal good city space possesses. This analysis on what an ideal good city space possesses is far from comprehensive but it must touch upon legibility, as strongly asserted by Lynch. This is a vital need for a city that supports the generation of sacred spaces. Earlier, in a discussion of architecture with sacred qualities, Holl was quoted on his explanation of how architecture more fully than other art forms deals with all the complexities of our senses and perception. City design is an art that is equally complex and stimulating, if not more. As Lynch discusses in the opening of the *Image of the City*, like a work of architecture, the city is also a construction in space but one of a much vaster scale and able to be grasped fully only over long spans of time. Like architecture, it is a temporal art but its designers have even less control over the sequence and views experienced by the public. It is an art where no one individual can be the master builder; even when strictly planned in a top-down manner, once it is released to its users, countless dynamic, interactive forces begin to alter and claim it as their own. Indeed, the designers themselves cannot ever know it in its entirety. As Lynch writes regarding this art, "there is no final result, only a continuous succession of phases. No wonder, then, that the art of shaping cities for sensuous enjoyment is an art quite separate from architecture or music or literature."[89] However, with this wide scope and constant change that is outside the control of a single person or group, there is a need to ensure that the basic framework does not disintegrate into chaos. Despite the agency given to the public, and even where organic growth is encouraged, there needs to be an overall clarity to the cityscape. This is a difficult balance to achieve, and without due care, this organisation can become overbearing. A network of good city spaces is established when there is an overall coherence such that users feel guided but not limited. Familiarity is essential but so is distinctiveness; it is this distinction that makes points in the city memorable, heightens the intensity of the experiences and leads to the creation of mental images.[90] In achieving this legibility, it must be noted that there are both immaterial considerations to be made, such as the area's history, function and implicit social meanings, as well as physical factors that Lynch talks about, namely the five elements in his classification: paths, edges, districts, nodes and landmarks.

All these considerations among others allow the creation of appealing city spaces in terms of protection from the elements, spatial sequence, visual appeal by variations and so forth. These city spaces in turn foster the development of alluring sacred collective spaces which suit the modern multicultural

demographics. To close this section, I would like to briefly reiterate the distinctive purposes of good city spaces and sacred public spaces within the city by extrapolating an argument by Jan Gehl. He argues that by means of mass media, we are made aware of the larger, more sensational world happenings but by local interactions in public city spaces we learn of the society and culture we live in.[91] Thus, good city spaces allow us to establish a confident relationship with our communities and fellow citizens. I would like to suggest that sacred public spaces can introduce a new, more intimate level of awareness. These are in essence places for positive transformation through self-reflection by evoking qualities of transcendental goodness.

3.3. **Designing for Public Sacred Spaces**

No matter how technologically advanced humanity gets or how far we push the envelope of knowledge and human intelligence, there is a complex desire that defines us. The Germans know it as *Sehnsucht,* a term for which the English language finds no adequate translation. Some have expounded it to indicate life longings or "intense desires for ideal states of life that are remote or unattainable."[92] It is a profound feeling where the intense emotion is recognised but the object of desire often remains untraceable. Perez-Gomez also writes on this elusive state of being and calls it the "space of desire."[93] This lack or the constant looking for "something" he believes sets the human race apart as a spiritual species. This lingering desire in humans is like an open horizon and cannot be satisfied by the mere fulfilment of practical needs or acquisition of material possessions (as much as these are necessary). Yet, finding no other means of satisfaction, humanity continues closing in on the horizon before it spills open before them again. Urban landscapes and city spaces are not capable of providing closure, but if designed adequately, they *are* capable of providing a pause in this journey. In some instances, these spaces might not provide a pause but might help in reorienting the desires in more worthwhile directions. The modern built environment may do no more than play a functional role, but sacred spaces are nurturing spaces. They allow both the religious and the secular individual to experience the numinous and, even if just for a moment, an experience of absolute rightness and beauty can overwhelm the consciousness.

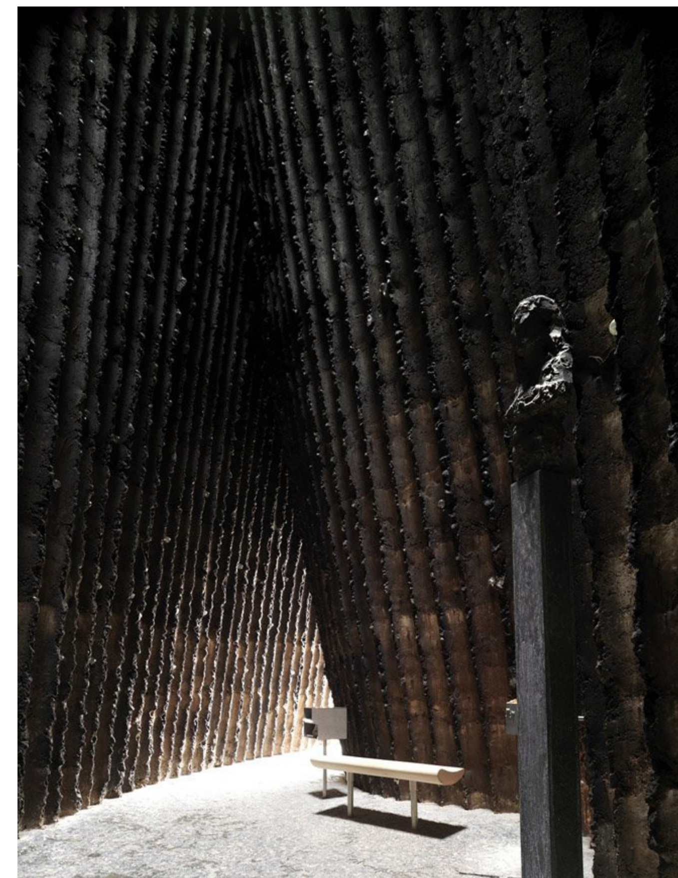
This section focuses on the creation of such spaces: firstly by discussion of an appropriate design approach and the need to redefine it so that it is accommodative and encouraging of sacred aspects and the human need for it; secondly by discussing the character such spaces should possess and the themes that make them effective sacred collective spaces; and, lastly, by considering the physical form these spaces should take to contain and express the sacredness of the space.

3.3.1. **Discussion of the Design Approach**

For sacred spaces to once again become an inherent part of our urban landscapes rather than afterthoughts, a fundamental shift in how they are perceived is needed. A common misconception is that taking into account emotions, feelings and sensations, indeed any non-quantifiable element when designing is an antithesis to rationality, the hallmark of post-Enlightenment thought. How little thought is paid to the sacred in professional practice has become increasingly evident in the course of conducting this research; while architecture has seen focused work being done on sacred (not just religious) architecture, it has been very difficult to find any such practical work done on city spaces. There have been numerous theoreticians who have explored this area, even some architects who have ventured here, but rarely urban designers or city planners. If it is a valuable discussion at the architectural level, surely there must be benefits at the city scale? With modern medicine finally recognising the central role the psyche plays on the physical well-being, it should be evident to planners that the psychological effect of their work directly affects its practical use.[94] The fact that this element of planning cannot be completely rationalised but has to be dealt with by being willing to wrestle with complex phenomenological issues and subjective study does not make it any less pertinent.

One element of design that needs to be accepted at the onset of creating effective collective spaces is indeterminacy; this discussion is as much about revealing the fallacy of following rigid rules in planning as it is about understanding how effective spaces can be generated (versus planned). As an example, just one of the unfortunate means of simplifying urban reality has been the obsessive zoning of everyday functions into distinct forced categories. This has literally built the sacred *out* of the public sphere; being a fluid, amorphous element, once harsh boundaries appear, the sacred no longer finds a place in the city. As previously described under "Scales of Design", humane landscapes can only be built when there is potential for spontaneity and expression by leaving opportunities for its users to weave their personal stories within the larger planned framework. This only gets truer when it comes to sacred spaces meant for contemplation. Christopher Alexander explores this means of designing extensively; he makes it clear though that an organic method of generation does not mean that there is no longer a frame or basic modules for the designer to work within. Quite to the contrary, he provides an entire framework, his *Pattern Language*, dedicated to providing detailed "patterns" that can be combined to make up a pleasing whole. When proposing how these patterns can be useful to us today, Alexander makes an interesting hypothesis: he suggests that the art of designing buildings and towns has not actually changed that much over time. At its heart, there is actually only one way that is discovered and rediscovered repeatedly by those willing to search and understand the art deeply.[95] The "style" of the work is merely an overlay that the designer puts on it, perhaps to stamp it as their own, perhaps to conform to the norms of the times.

Historic spaces and buildings resonate with us, not because they have trapped in them some mystical qualities from times past but because they are true to human nature and the laws of nature—they reflect the truth at the very heart of the art. If these kinds of spaces are to be created today, part of the design process is to rediscover lost patterns. This recommendation is not based on a romanticised notion of imitating the past in our contemporary landscape, but rather discovering the *principles* that lend poignancy to the spaces. This observation and study of historic spaces has provided inspiration to most of the architects of spaces with sacred qualities; Holl for instance, frequently talks of the days he spent in Rome as being the beginning of the development of his widely-admired phenomenological approach.[96] This is not a complicated process, but it does require honesty when dealing with elements that will eventually form part of the whole. What does this entail? Every element—whether the light on the site or the concrete used to build the structure—has its own character. Letting the true character of the elements come through instead of subjugating it to our design ideals and whims allows a balancing of forces in the finished piece. These elements will be discussed more in depth in the following two sections, "Character of the Space" and "Shape of the Space."



15. Bruder Klaus Field Chapel: floor of frozen molten lead contrasted with a roof open to the elements and wall surfaces of charred concrete walls. The construction of the walls began with a wigwam frame of 112 spruce tree trunks upon which 24 layers of concrete were poured. Finally, the wood frame was set on fire, leaving rough and dark ribbed concrete that fractures the light pouring in from the void on top

Source: Architecture Week, http://archweekpeopleandplaces.blogspot.ca/2012/09/2013-riba-gold-medal-to-peter-zumthor.html, accessed 14 July 2013

To generate sacred spaces that feel liberated and unhindered, they need to be born from the reality of the situation rather than preconceived ideas. When users occupy these spaces, it can only be a space of contemplation and reflection if it is not being stifled with the ego of the designer and the space is in harmony with its context. Alexander believes that this can be achieved by using "living patterns." Patterns in essence are the relationships between contexts, problems and solutions. While almost anyone can come up with such a relationship, what distinguishes one as a capable designer is when he or she can achieve a perfect balancing of the internal forces within the space and the external forces acting on the space: when this happens, all the patterns in the space are in harmony and come together as a living whole. This can only be achieved through patience and experimentation which, unfortunately, our modern design approach does not usually make room for. Most historic spaces, for example the cathedrals of Chartres and Notre Dame or the buildings of the Acropolis, as well as modern works by architects of the likes of Peter Zumthor, are conceived, built and altered over relatively long periods of time. For example, when working on the design of an old age home, Zumthor produced many full-scale mock-ups of the timber floor, tramping and polishing them over and over with different waxes till he finally achieved the sound and smell which conveyed a reassuring sense of domesticity appropriate to the specific use.[97] In the case of the Bruder Klaus Chapel, he spent months deciding on the best materials and their combination, achieving what he calls the "critical proximity between [the different] materials."[98] For forces to be balanced, the process cannot be hurried. Regrettably, this is typically the case in an age where most projects are undertaken in a framework of deadlines and profits.

15

However, there is even more to the design of sacred collective spaces than the mastery of materiality and craft. In order to sensitively address the layers of complexities that come with working within the public sphere in a multicultural society, there needs to be a meeting of the minds of all the stakeholders. The planner on his or her own simply does not possess all the knowledge required to address the multiplicity of needs. He or she may have a general, overarching knowledge of most of the parts, and hence is in the position of directing the project, but unless the individuals parts of the whole are handled with deep knowledge and insight, the combined whole will always fall short of perfection, and the feeling of rightness required of the sacred will not be achieved. While this confluence of all relevant fields seems impractical for public policy in contemporary practice, it must be remembered that it was a norm in the design of historic cities and a continuing necessity, albeit largely overlooked, for us today. As discussed in the introduction, this paradigm of city planning where a single profession assumes the entire burden of building the city life only began during the Renaissance—with demonstratively inferior results. Dolores Hayden describes how *The Power of Place,* a work on rebuilding public memory around different sites and buildings, proved valuable only due to the collaboration across many fields.[99] Similarly, only by working together with experts in relevant fields—public historians, landscapers, architects, artists, scholars of phenomenology, environmentalists and citizens among other—can a sacred space embrace the complete reality of specific human lives and societal diversity. Each of these fields will be able to contribute to the knowledge of the forces acting on the site.

Sacred space design requires a highly intuitive approach; the designer himself needs to be emotionally affected by the site before being able to make a space of profound beauty. It is only after he or she connects with the *genius loci* of the place that it can be framed by the designer for the users of the space. As explained in relation to architecture earlier, this task of framing the spirit of the place is one of the primary responsibilities of the designer, yet one frequently disregarded, leading inevitably to lifeless spaces. Perez-Gomez writing on how the designer takes the *genius loci* and extends it to create a complete place says, once the designer's soul has been "affected by external objects through perception and memory", they must take "the imagination further by relating this memory to a thousand other ideas to create something with a much more intense feeling (sentiment)."[100] This theoretical understanding has been demonstrated to be sound in the work of Peter Zumthor. For him the repertoire of images and atmospheres he uses in his practice are comprised of previous memories—many of his concepts have been born by combining these mental images.[101]

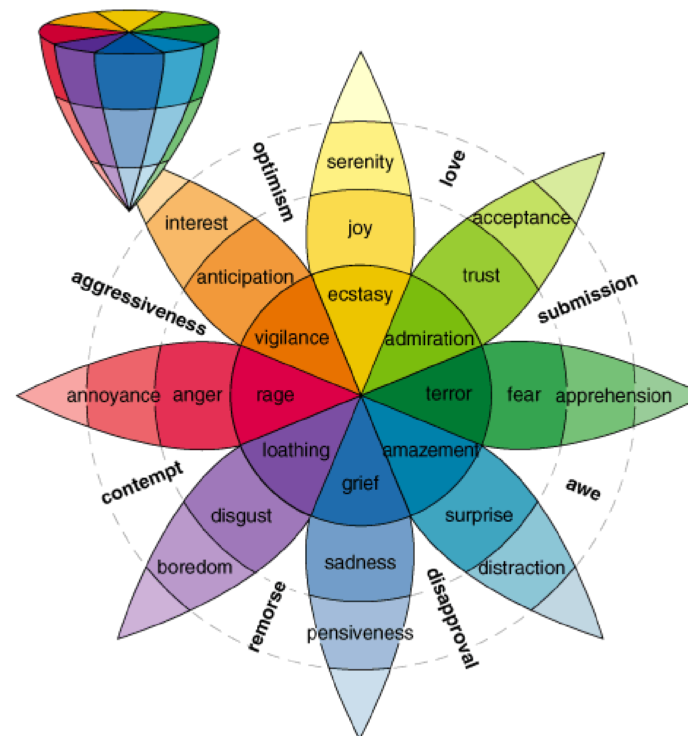
The shortcomings of designing from the outside and above in a detached manner, and the ills thus inflicted on the city have been discussed above. The same is true at the site specific scale when urban designers lay out entire public spaces on their drawing boards without a comprehensive understanding of the site and the context. With advancing technology, sun-studies can be carried out and materials can be switched virtually, all with very casual interactions with the site and the builders carrying out the actual groundwork. But as Alexander criticises, the details of the space cannot be made alive; for the sake of simplicity and because technology is not capable of stimulating all the infinite variations of reality, all instances of a specific part are considered identical. As a very simple example, the overall concept of a project might benefit from a regular layout of trees and might look appealing on the plan and simulations, however on site, one of these trees without adjustment in its placement may be obstructing a spectacular view. The necessity for such subtle adjustments in an overall scheme will never be revealed unless the forces are understood from the perspective of the final user. This is also a key means of avoiding the monotony that has crept into modern design due to overt standardisation. There is nothing inherently wrong with using the same patterns repeatedly in a design. However, the problem arises when they are used blindly without any artistic discretion as is the case with the current design-build process described above. Alexander provides a good distinction between modularity (sameness) and pattern repetition (familiarity): the former is comparable to our building practices and the latter to the design of nature. Despite using the same patterns repeatedly, such as in the formation of waves, nature never gets oppressive in its banality. Although the same broad patterns that dictate how the waves should be formed reoccur, the individual waves are formed differently every single time. These slight adjustments are critical not only in maintaining their beauty and intrigue, but also in order to ensure that all the forces acting at that particular moment, and at that particular location are resolved perfectly.[102]

Ultimately, sacred collective spaces should be made with the awareness that not only are they serving the role of providing places of contemplation and respite, they are also responsible for cultivating in society the lost sense of beauty. Many cities are vibrant, active, economically profitable and technologically advanced, but only a few have a timelessness that can fill us with awe.

3.3.2. Character of the Space

A city of character is one that embraces its past by celebrating its victories and recognising its wrongs, is dedicated to its present by serving the psychological and physical well-being of its citizens and is committed to building a lasting legacy for its future. But this kind of a city cannot be built upon a shallow foundation of an ahistoric ethic that focuses only on the now and the present. By creating a network of collective spaces with nodes throughout the city that are especially charged with sacredness, moving through the urban fabric will allow one numerous opportunities to orient themselves within the larger cosmic scheme and the life of the city. Generating places like these throughout the city has the potential of catalysing positive transformations in the physical fabric and in the mental and social wellbeing of citizens. This section explores the fundamental characters of such spaces.

Possibly the most important character of a sacred collective space is the ability for it to elicit deep emotions in all who experience it, in spite of the differences in the social, cultural and intellectual backgrounds of the individuals. As explained earlier, architecture does this by playing on shared but rarely-acknowledged human needs and emotions rather than specific religious references—the same principle can be applied to public spaces. Sacred spaces are those that etch the deepest memories by moving past mundane and touching a rarely stirred area of consciousness. Therefore, these should be designed as places of heightened awareness which urge users to explore their inner emotions, and personal and collective beliefs. A sacred space can be understood at many levels. At the basic level, it projects a common image conveyed in unambiguous messages, perhaps by its name or iconography. At a deeper, more intangible level though, every individual feels a different range and combination of emotions depending on personal life experiences, beliefs and associations with the space. There is an increased self-awareness in the space which enables the user to get down to the root of any perceived emotions, in turn providing greater clarity and orientation. This is in sharp contrast to functionalist contemporary planning where the space is not created or intended to elicit any emotions. Given the subjectiveness of the task, identifying emotions and their intensities is not a straightforward task—phenomenology has long wrestled with means of observing and describing accurately something so ephemeral. Although I did not come across any specific instances where it was applied to design practices during the course of this research, one potentially useful model for considering the range of emotions a place could have on an individual is Plutchik's Wheel of Emotions that suggests eight primary bipolar emotions: joy versus sadness; anger versus fear; trust versus disgust; and surprise versus anticipation. His circumplex model also makes connections between the idea of an emotion circle and the 16 colour wheel. Like colours, primary emotions can be expressed at different intensities and can mix with one another to form other distinct emotions. A sacred space may aim to elicit one or more specific emotions, allowing its users to explore the entire range of intensities associated with it as well as proximate emotions, for example: ecstasy, joy and serenity along with anticipation, trust and their intensities and combinations (optimism, love). On the other hand, the space may be created neutrally, at the convergence point of all the emotions with the aim of allowing a free exploration of emotions. It is typical to associate sacred spaces with only positive qualities, understandably so as the divine is synonymous with absolute goodness. I would like to propose that spaces with sacredness are not always agreeable and delightful to be in. Sacred spaces instead are those that always reorient us to positive transformations, as individuals or as part of social groups. This discrepancy is explored in Chapter 4 in the case study examining the present-day site of the Auschwitz Concentration Camp as a sacred space.



16. Plutchik's Wheel of Emotions

Source: American Scientist, "The Nature of Emotions," http://www.americanscientist.org/issues/num2/2001/4/the-nature-of-emotions/1, accessed 20 July 2013

In terms of spatiality, what kind of context can be emotionally charged? I would like to borrow the terminology used by the Cubists: the "fourth dimension", a construct in space that enables a human experience that goes beyond time and space. Le Corbusier has formerly used this concept to describe spaces that are particularly potent and containers for spiritual powers:

> The fourth dimension is the moment of limitless escape evoked by an exceptionally just consonance of the plastic means employed [...] Then a boundless depth opens up, effaces walls, drives away contingent presences, accomplishes the miracle of ineffable space.

Ineffable space, a term perhaps ironically coined by Corbusier is a concise expression of countless efforts to describe the key quality of sacred spaces. The physical brilliance required of such a space is best described in Corbusier's own words once again:

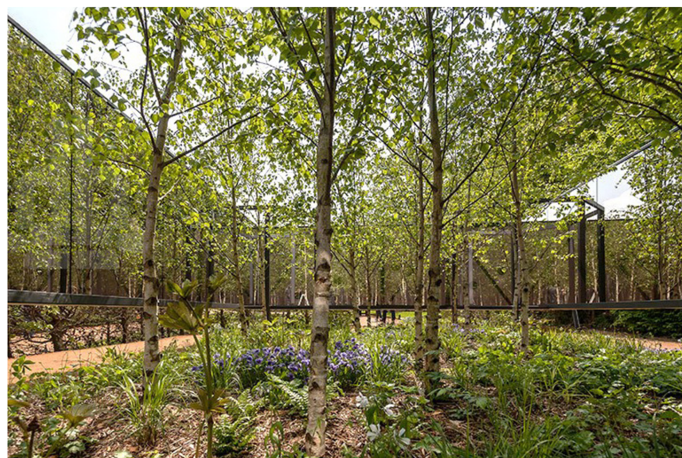
> When a work reaches maximum of intensity, when it has the best proportions and has been made with the best quality of execution, when it has reached perfection, a phenomenon takes place that we may call "ineffable space." When this happens these places start to radiate.[103]

Ineffable is the negated form of *effare*, the Latin for "to speak out", which the *OED* defines as a quality "too great or extreme to be expressed or described in words."[104] Architecture of the sacred and sacred public spaces, like great works of art, poetry and music, therefore can be windows into otherworldly realms and expressions of desires, longings and emotions too intimate to be profaned by inadequate verbal utterances.

Sacred collective spaces also need to have a sense of timelessness to them; spaces representing the sacred through materiality cannot possibly be designed on the principles of a passing fad and succeed. This harkens back to the previous discussion on Christopher Alexander's recommendations for the need to rediscover the truth that lies at the heart of the art. This timelessness arises when spaces are composed by an intelligent integration of materials provided us in nature's palette as opposed to modern counterfeits: light and shadows, natural materials with as little human interventions in their processing as possible and the four traditional elements of air, fire, water and earth to name but a few. These allow the viewer's gaze to penetrate deeper than the visible, and when brought together in a proper

composition, introduce element of mystery and the unknown, and provide a break in the homogeneous character of surrounding everyday spaces. By using materials that are vulnerable, materials that graciously submit to the forces of weather, and the changes of seasons and times of the day, very valuable layers of richness are introduced. The space is now placed within the continuum of time; it becomes an empathetic space that is sensitive to basic human conditions. Like its users, it is also subject to the effects of time and aging, and to changes in its context—both the good and the bad. It is no longer a "retinal art of the eye" that we behold as outsiders, but rather, as Juhani Pallasmaa states, has a connection with the "language and wisdom of the body."[105]

As a general recommendation, sacred collective spaces should have their grounding in locally rooted meanings and history. There are some exceptions which serve as typological pieces rather than contextual pieces; typically focused on the stimulation of the senses and perception, these are designed with the intent of fitting into almost any surrounding. One example is Peter Zumthor's Serpentine Gallery Pavilion where the built structure really is just a frame around the nature present on the site.[106] A second example is the enthralling Outside-In infinite garden by Meir Lobaton Corona + Ulli Heckmann where the intent is to present a magnificent infinite garden but one that can only be experienced by sight. A contemplative space, it takes viewers through a range of emotions (delight at the beauty to frustration at not being able to reach out to it) and is a "trapped narrative" where one is forced to rely on imagination for a holistic experience of the site.[107] More typically though, and perhaps more importantly, sacred spaces are frames for native cultures and are responsible for gathering and condensing the local *genius loci*. There is a persistent longing



17. (Top opposite) Serpentine Gallery Pavilion 2011 by Peter Zumthor

Source: arch daily, http://www.archdaily.com/146392/serpentine-gallery-pavilion-2011-peter-zumthor/, accessed at 15 July 2013

18. (Middle opposite) Outside In: the infinite garden, exterior view by Meir Lobaton Corona + Ulli Heckmann

Source: design boom, http://www.designboom.com/art/outside-in-the-infinite-garden-by-meir-lobaton-corona-ulli-heckmann/ , accessed 15 July 2013

19. (Bottom opposite) Outside In: the infinite garden, interior view

Source: design boom, http://www.designboom.com/art/outside-in-the-infinite-garden-by-meir-lobaton-corona-ulli-heckmann/ , accessed 15 July 2013

in the human nature to connect to something greater—both in depth and scope—to lend existential meaning and purpose. Rebuilding of the public collective memory of a society is one way of fulfilling this desire. In attempting to convey the richness hidden within artifacts and local memory, Gavin Buggy builds up a concise but powerful narrative in which Rome is conceived as a psychical entity where "nothing that has once come into existence will have passed away and all the earlier phases of development continue to exist alongside the latest one."[108] While obviously impossible within the constraints of reality, it is nonetheless a fascinating concept and a means of making the modern designer realise the wealth they forgo when the past is discarded as an obstacle. One approach to rectifying this is of course by the preservation of physical relics—something that has gained traction in the last couple of decades. However, if the city, a "theatre of memories", is to "retain the visible marks of the passage of time and enable them to symbolize or encapsulate a culture of place"[109], it must be more than a prop storage room where there is no narration or story line to go along with all the visual richness—the case when there is a lack of inherent shared memories among the people of the society. Mirei Shigemori, a notable modern Japanese landscape architect, has worked extensively to address this disconnect. He strongly opposed the contemporary approach to Japanese landscape design which either went to the extreme of imitating the past in a desperate attempt to hold on to its fading fragments, or sought to annihilate all traces of the past in discovering a new model. In reviewing Shigemori's methodology, Christian A. Tschumi emphasises the use of memory; Shigemori drew heavily from the site history and the contextual past and present, and worked to transform these memories into new and relatable forms.[110] For the Japanese, Shigemori's works are compelling reminders of their shared history and its worth, and the fact that historic ethics and values can indeed co-exist with the modern landscape. For urban design, his work is a testament to the possibility of culturally grounded innovations. Along with preserving physical remnants of history, this approach ensures that corresponding cultural narratives also remain alive and accessible, which in turn make the experience of the physical relics much more meaningful. In a city, as an individual travels through the proposed network of sacred collective spaces, he or she gains incremental insight into the collective memories and the cultural richness of the city, a keener sense of place and multiple opportunities for forming personal memories.

Another key consideration that each one of these spaces needs to possess is intentionality. History has repeatedly proved the misfortune that befalls poorly defined spaces. While the base referent of all sacred spaces is reflection, depending on their context, their broader roles will differ. For instance, while some may be about providing explicit messages on common concerns such as cultural fragmentation and social injustices—issues that establish a meaningful order for human life—others can merely be egoless places just to be in, but even this vagueness must be purposeful. If not designed with the character of intentionality, these supposed public spaces will prove to be wastelands. Whatever the specific message, all sacred spaces should be built as places of refuge where there is a conscious retreating away from what typically defines us. The unrelenting search to establish a deeper sense of identity seems to be a basic need for individuals and societies—to define ourselves as distinct entities but also to find ways in which we fit into the world. And as Thomas Barrie writes in *Spiritual Path, Sacred Place*, "self-definition and sense of well-being

[are] often intimately connected to specific places."[111] Through their implicit meanings, these spaces should be capable of revealing parallel realities that lie beyond the material world, be they universal moral truths, specific divine interventions or realities of an individual's existence. Meaningful places allow humans beings to acquire an existential foothold, and a place that does not serve such a purpose, that has no sense of place, can get oppressive in its disorientation or purposelessness.

The last consideration is the sense of the mysterious that is central to most successful sacred spaces. When journeying to and through the space, there should be a feeling of expectancy. This does not necessarily mean that the space in itself has to be complex with multiple details and niches to be explored in search of the unexpected. This sense can be present strongly in very simple spatial compositions with mystification coming instead from layers of meanings and associations that can be uncovered, from the use of contradictory sensory stimulations that keeps one suspended in anticipation for instance by frequent alterations between light and darkness, as well as unexpected stirring of emotions that lie dormant in the subconscious. Achieved through a delicate balancing of revealing and concealing, the space should hold on to its secrets but not so tightly that that it alienates us. It is imperative to note that while many sacred spaces base their qualities on elements of surprise and mystification, as Lynch outlines, the enjoyment rests on two conditions. Firstly, there not being an actual danger of losing basic form or extreme disorientation with the confusions only being limited to small areas within a visible whole, and secondly, the space in itself having some form that can be explored and apprehended eventually.[112] As seen in earlier chapters, for the human mind, experiencing the sacred has the potential of becoming frightening if not framed within human frames of reference. However, a proper experience of the mysterious has the potential of awakening a sense of wonder that many lament has been lost in the de-sacralisation of the world. As Abraham Joshua Heschel, a prominent Jewish philosopher wrote, "Mankind will not perish for want of information but only for want of appreciation. The beginning of our happiness lies in the understanding that life without wonder is not worth living. What we lack is not a will to believe but a will to wonder."[113] He urges individuals to live with what he termed "radical amazement"—a sense of living in awe. The primary purpose of sacred collective spaces is to reintroduce this sense back into our landscapes.

3.3.3. **Shape of the Space**

This final section explores the actual physicality of spaces made in a sacred idiom. While it goes without saying that the specific forms differ greatly depending on the context and the site, what is it in the putting together of these spaces that creates the distinctive atmospheric qualities discussed above?

A significant portion of the answer can be found in the work done by phenomenologists, particularly within the field of architecture as examined in some detail earlier. By experiencing a milieu through all the senses, one is encouraged to think about the space not just with one's mind but through the body, thus building an intimate connection between the individual, the physical space and the *genius loci* of the place. Local conditions of light, air and climate in a city are not within a designer's control, but if he or she is able to work with them to the space's advantage, the phenomenological experience can be made all the richer in its distinctiveness. While all senses act simultaneously to enable a holistic experience, many have written on the need for a conscious designing for the fourth dimension compromising movement, spatial sequence and time. I will briefly discuss the importance of experiencing a space through all the five senses as well as through this fourth dimension.

The Sound of a Space
Frequently overlooked, if a comfortable psychological space is to take form, acoustics need to be taken into consideration. The manner in which a space is shaped, whether it is an inscribed space (not fully enclosed but implied by the presence of edges) or a circumscribed space (completely or almost completely enclosed) dictates how the sound is collected, diffused or amplified.[114] The materials of the space also greatly affect the sound of a space which in turn directly affects how we interact with and perceive the space, its geometry and it textures. As Pallasmaa writes in his essay *An Architecture of the Seven Senses,* "Sight makes us solitary, whereas hearing creates a sense of connection and solidarity", it has an emotional charge because "it puts us in direct interaction with the space; the sound measures space and makes its scale comprehensible."[115]

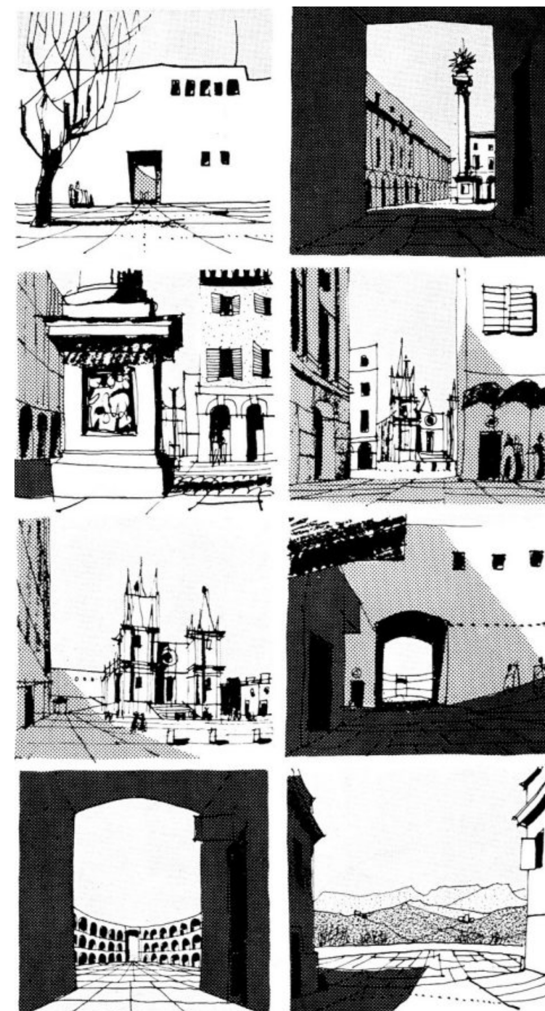
The Tactile qualities of a Space
In the most intense of emotional encounters, if one's sense of touch cannot be activated, the visual can become very frustrating: the visual provides the allure but the haptic is the fulfilment of that planted desire. Tactile exploration allows one to penetrate deeper into a pleasing sight by fully understanding its textures, materiality and temperature, consequently intensifying the experience. When this dimension is not given equal importance to that of vision, there can be a great sense of disappointment in the experience; many modern synthetic materials manage to very closely visually resemble a natural material, but when one reaches out to it in anticipation, it seems cold and unyielding with no secrets to reveal.

The Scent and Taste of a Space
These are means that further augment what the vision and the tactile have revealed. Though difficult to define, the taste of the space, as Pallasmaa suggests, subtly interacts with the other senses—for instance, vision and tactile experiences both have the power to induce and heighten oral sensations. The scent of a space plays a much greater role than what most designers credit it for—it has the potential to take one back to forgotten periods of their life, cause suppressed memories to resurface and has the ability to strongly affect the psyche of a person and their perception of the place. Some of the strongest memories many people have

are associated with the particular smell of a place. Smell has an exceptionally strong power of association. Once the smell of a memorable place is embedded into memory, it has the tendency to resurface when experiencing similar situations and emotions. The argument for an honest use of materials put forward in the previous paragraph is equally applicable here. For instance, it is a bitter disappointment to see the patina of wear on a surface, only to discover its artificiality, which often precludes the associated scents. Such deceit demeans the sacredness of a space.

The Vision of a Space

This sensory aspect is usually acknowledged among designers—one such prominent voice is Gordon Cullen who has extensively discussed urban environments as perceived through the sense of sight and the emotional impact this has on one. One of his key contributions has been the concept of "Serial Vision" [20] where he has dealt with the importance of designing from the perspective of a moving person who experiences the environment as a series of vignettes that open up, juxtapose with emerging ones and are subsequently left behind for new ones. A sense of place is created when these are interesting, distinct and give the sense of an unfolding narrative.[116] As this sense requires little defense on its importance, I will deal instead with an essential subsection within seeing: the light on things. Endued with spirituality, the interplay of light and shadows has vast potential to completely transform a space; it brings the space to life with depth and character brought about by its dynamic nature through the day and the seasons, and infuses it with mystery through a sequence of revealing and concealing, transparencies, translucencies and opacities. When forming a sacred space, natural and artificial light must be among the primary considerations as illumination and shadow can define the shape of the space. Nothing sucks the life out of a potentially captivating space as insensitive, homogenous lightning where everything is laid bare with no space for imagination. While the North American culture appears to live in a strong fear of shadows—we dispose of them not just in our interiors but also by flooding the night skies with artificial lighting—the Japanese have illustrated the value of shadow.[117] By the skilful use of shadows, traditional Japanese design brings a contemplative aura into a very profane of space: the toilet. Jun'ichirō Tanizaki, in *Praise of Shadows* writes on the spiritual repose he finds in the traditional Japanese toilet set within a grove. He states, "no words



20. Serial Vision: Each arrow on the plan corresponds to a drawing, read from left to right

Source: Cullen, Gorden. *Townscapes.* The Architectural Press, 1961. 17.

can describe that sensation as one sits in the dim light, basking in the faint glow reflected from the shoji, lost in meditation."[118] He talks in particular of the toilets of the Kantō region where illumination comes in only from the long, narrow windows at the floor level—in these shadows, the sharpness of the vision that we typically rely on is dimmed, and all other senses are awakened. He writes appealingly of the experience: "one can listen with such a sense of intimacy to the raindrops [...] to the chirping of the insects or the songs of the birds, to view the moon, or to enjoy any of those poignant moments that mark the change of the seasons." As he writes towards the end of the book, "the quality we call beauty [...] must always grow from the reality of life."[119] Instead of fighting darkness, traditional Japanese design works with it. Zumthor also suggests systematically considering the interaction of light and the materials and surfaces to be used in the space; materials must be chosen with the "knowledge of the way they reflect and to fit everything together on the basis of that knowledge."[120]

The Fourth Dimension

The fourth dimension comprising movement, spatial sequence and time complements those discussed above. As this discussion is largely concentrated on the experience of a focused sacred space, it is useful to discuss the typical elements used in the typology of such spaces in order to more clearly understand movement through them. Firstly, the creation of a sense of enclosure is often important in making the user distinctly aware of being present in a sacred space versus the profane, homogeneous space that surrounds it. It allows a conscious retreating into a sanctuary and is particularly important when the space being set apart is in an urban setting where the *genius loci* is not easily perceptible and needs to be consciously channeled into the space. Sacred spaces within natural landscapes on the other hand may work with or without enclosures; they derive their sacred identity from nature itself and do not need a marked perimeter into which to gather sacredness. In instances, where the vastness of nature is overwhelming to a disconcerting degree, enclosures may still be called upon in an effort to provide orientation, a humane scale and a sense of safety. Peter Zumthor talks about this as his first principle for designing: "the Body of Architecture" —the sense of a bodily mass enveloping the user which Zumthor compares to anatomy. The suggestion is that within the physical covering lies immutable, invisible wealth. While pertinent to sacred space design, it is useful to note that urban spaces would benefit from greater porosity than what Zumthor implies. As discussed earlier, there should not be any sharp edges between a collective sacred space and the surrounding city spaces; porosity is essential in ensuring the vitality of the space. In creating the basic form of a sacred space, historically, a number of other elements were also utilised. From Barrie's analysis of these elements, there emerge three key ones: the entry point(s) along the threshold, the path (with the three subcomponents of preparation, separation and return) and the place/centre itself which is also known as the *axis mundi.*[121] Their major importance previously resided in their symbolic religious significance but with the breakdown of the historic framework, their use in contemporary spaces is much more flexible. Nevertheless, these remain fundamental ordering devices. Entry points offer a "place of decision" as to whether or not to break away from the known and profane, into the unknown and sacred. A comprehensible path sequence serves to orient one physiologically, psychologically and spiritually, and builds up the sense of anticipation for the arrival at the sacred centre—as Hoffman writes,

it “represents the journey from initiation to transformation. It provides a way to gain knowledge and, perhaps more importantly, to awaken consciousness.”[122] And finally the sacred centre is the culmination of the journey, where, as Anthony Lawlor states, “the contradictions of the path are transcended, unity is discovered, and peaceful fulfilment is achieved.”[123] While the spatiality of the art is clear from examining these elements, the fourth dimension reveals the temporality of the art. It is within the scope of the designer to manipulate time inside these contained spaces and the sacredness of these spaces is often achieved by suspending time. Time can be distended primarily by two means: by creating a highly stimulating, varied and intricate experience where time appears to slow down as one applies himself or herself to comprehending the unknown and processing the many simultaneous stimuli, and secondly, by creating a situation at the other extreme of the spectrum where repetition is introduced.[124] In this case, time slows down due to repetition in the rhythm of the movement and the elements composing the space (such as the Zen garden or a colonnade).

In discussing the “Shape of the Sacred”, we must also consider the relationship of the space with nature; it is for this reason that the intimate connection which existed between nature and spaces of antiquity has been demonstrated time and again throughout the course of this exploration. Often, even before shrines to divinities were set up, the nature at the site was deemed sacred and revered; the harmony between the builtscape and nature directly reflected a society’s proximity to the gods. Countless religious traditions and myths have been based on natural elements such as stones, mountains and trees, given that these were thought to symbolise the untainted creation of the divine. Religious buildings throughout history have been built either on high points of the earth, or, where topography did not facilitate it, have had steeples, spires and towers integrated in an effort to connect the human realm on the earth to the heavenlies in the skies. In terms of sacred collective spaces, sensitively incorporating nature is one of the key means to connect to the spirit of the place. In particular, the four classical elements have long been universal markers of the sacred with symbolisms established in the pre-Socratic times continuing to deeply influence European thought and culture. By taking earth, air, water and fire—elements that can in their natural state be threatening or overpowering to humans—and setting them within a human frame of reference and scale, they can continue to root us in nature and our surroundings.

At the larger city scale, natural features still serve to provide many settlements with orientation and identification, and recreating this at the microscale, within a sacred space can be a powerful tool. This emulation can take various forms of expression. To define some key categories that designers can use as guides, we can borrow the typologies that Norberg-Schulz adopted for large landscapes and scale them down. The first of these is the “Romantic Landscape” where the overpowering presence of something sacred is most tangibly felt. The most untamed of all, the ground has a varied relief and the space is typically subdivided into microstructures that offer frequent surprises as one moves through the space. The vegetation, rock plantings and use of features such as water is non-homogeneous and utterly unpredictable. The quality of the light in the space is dynamic and ever-changing—filtered through vegetation in some places and reflected off the water in others—resulting in a situation where regardless of the size of the space, it never seems monotonous. Secondly, there is the “Cosmic Landscape” which contrasts sharply with the Romantic Landscape in terms of heightening awareness and consciousness. Here, all the

complexities that invade our contemporary life are eschewed in favour of the basics. There is a slowing down of the pace which in turn allows every stimulus to be savoured with depth. Unlike the first category, this is not a space of anticipation but of calm and acceptance. There is homogeneity in the treatment of the space but it is done with such fine craftsmanship and care that it is soothing and nurturing rather than oppressive. The consistency of the elements speaks to an eternal and infinite order. Lastly, there is the “Classical Landscape” which is dictated neither by “monotony nor by multifariousness. Rather we find an intelligible composition of distinct elements.”[125] These are sculptural spaces with carefully planned geometries and vistas. No element is placed in position without a reason. An individual’s relationship to such a space is that of an equal where the stimulus and emotional reactions to the space are much more controlled. It should be noted that these three are of course outlines of archetypes which in reality may not be applied so distinctly.

The ability to heighten perception is one of the vital attributes of sacred spaces, and apart from those already discussed, various means can be adopted. One of them, embraced frequently in Zen philosophy, is the art of subtlety. Spaces that do not reveal everything at once seduce the imagination, reflecting at the micro-scale the mysterious nature of the sacred and humanity’s enduring quest to comprehend it. Subtlety also relies on working with less and confronting the vices of excess so present in the modern world; providing minimal but quality information allows room for personal interpretation, something that is especially pertinent in pluralistic societies.[126] Another means of entering higher states of consciousness that is used in many effective sacred spaces is by allowing for multiple states of being while in the space. This can be achieved by working with contradictory atmospheric qualities such as “Silence and Noise” (where silence as a reaction to the presence of the numinous interrupts human utterances and signifies a break in the space-time continuum), “Darkness and Light” (in the space where light turns to darkness or vice versa, the numinous is ushered in and the profane space is sanctified), “Emptiness and Profusion” (the sparseness of a space as well as the profuse decoration of another both signify the divine) and “Humility and Monumentality” (humble spaces speak of the realm that humans occupy, while commanding spaces the realm in which God dwells—it is at the intersection of these that God and humankind meet).[127] By sudden transitions from one to another, one’s senses are quickened and he or she becomes consciously aware of the space being occupied. Also, by providing for exclusive, private niches for the user to occupy within a public space (for example a shielded corner within an otherwise exposed and vast space or a stream of light piercing a shadowy space) there is a sense of the numinous being tangibly present and in personal communion with the individual. Public spaces like these facilitate an intimate connection with the sacred where the individual witnesses first-hand the profane space becoming sanctified by an overwhelming hierophanic revelation.

Finally, it is critical to consider the geometry, scale and proportions of the space with utmost care. In denoting spirituality and in uncovering secrets of the cosmos, geometrical purity and study have been recurring themes over history. For example, the ancient Greek and Roman belief that sacred geometry enabled a dialogue between the divine and the human can be clearly seen to have carried into the Renaissance: it was on Vitruvius’s interrelationship between the divine and the human as denoted by the circle and the square respectively that Brunelleschi based the Old Sacristy of San Lorenzo, Florence. Here, 21 supreme elegance and solemnity was achieved

21. (Left) Pazzi Chapel, Santa Croce, Florence, 1441-1460 by Brunelleschi

Source: Clinton, Jessica Lynne. “The Ornamentation of Brunelleschi’s old Sacristy of San Lorenzo in Florence” Diss. Louisiana State University and Agricultural and Mechanical College, 2007. 24.

22. (Right top) Saint-Étienne de Metz, Lorraine, France, construction began 1220 and completed 1522

Source: The Institute for Sacred Architecture, http://www.sacredarchitecture.org/articles/documentation_address_to_conference_on_sacred_architecture/, accessed 20 July 2013

23. (Right botton) Church of St. Benedict’s Abbey, Vaals by Architect Dom Hans van der Laan

Source: National Geographic, “Upper Church of Sint Benedictusberg Abbey,” http://ngm.nationalgeographic.com/ngm/photo-contest/2010/entries/gallery/places-week-10/#/20265, accessed 20 July 2013

through an extraordinary sense of geometry and order, and a microcosm was created by using the square/cube and the circle/sphere as the basic modules of spatial organisation.[128] On the other hand, sacredness in a space can also be achieved by ordering proportions and scale in a more intuitive manner. This paradigm was applied most effectively in Gothic architecture [22] where sacredness was revealed not through clarity and rationality, but rather in the form of soaring, mysterious spaces. With all the historical symbolisms related to geometry being shed, this approach is also much more common in contemporary sacred architecture and can equally well be extended to sacred public spaces. For example, the Church of St. Benedict’s Abbey [23] at Vaals by Architect Dom Hans van der Laan is so emotionally provocative because as Dermot Boyd writes, it was built from “the reality of seeing.” There is definite proportion and rhythm but it is born from visual perception rather than preconceived notions of specific references that must be incorporated. As Boyd states, “true measurement for Van der Laan is not based on numbers or counting or units of length but on an instinctive measuring of form or size which is purely sensory.”[129]

All of these concepts can be combined into what has been defined by Walter as *Pathetecture:* the process of building feelings and meanings by the arrangement of material objects, especially through construction, dilapidation and excavation.[130] However, sacredness cannot be instilled into the space only by achieving perfection in the physical form. As the organisation of this paper has hoped to reveal, despite its importance, the physicality of the endeavor is in fact the last step of the undertaking, built on the foundations of its equally important precursors—the design intent and approach, the creation of an appropriate context and community and the premeditated characters and meanings intended for the space among others. In an age where everything can be explained by reason and logic, an age where as Paul Goldberger writes, “technology has debased the currency of ineffable space” because awe is so much harder to evoke,[131] a sensitive and knowledgeable meshing of the outlined elements can still create “ineffable spaces” that allow us to transcend the material, mundane and profane.

CHAPTER 4

CASE STUDIES OF SACRED PUBLIC SPACES

4.1. **New Haven, Connecticut**

The first kind of sacred public space is where the primary goal, from the conception of the space, is for an explicit religious reference. This is most typical of historic spaces where given the emphasis placed on replicating divine design to achieve perfection, at times entire towns were based on religious themes. Such spaces have informed a lot of the analysis carried out and are a valuable resource in furthering the knowledge on the topic. However, given that the aim of this research is to create a framework for how sacred public spaces are to be designed *today*, the major emphasis will be on the second case study which is an example of a contemporary sacred public space. This first case study is brief, as is the third case study of a non-urban public sacred space.

New Haven, Connecticut is a fitting example of a city planned with a utopian vision of the sacred. It is based on the work of Juan Bautista Villapando, a Jesuit priest and an architect—specifically his reconstructions of the Jerusalem Temple and its surrounding palace area, as described in the Old Testament (Ezekiel 48). To Villapando, the nine-square grid represented divine geometry as revealed to Moses, Solomon and Ezekiel for the building of past sacred spaces and as made known to John the Apostle for the future heavenly city. As George L. Hersey writes, while Villapando's nine-square lattice was applied frequently in Baroque buildings, this application of it by Reverend John Davenport in a New World town was probably the first time it was employed at the urban scale. In 1638, Davenport and other colonisers who were in his group begun laying out what he said would be "the perfect pattern of God's eternal design."[132] They were designing a heaven on earth—literally the "New Haven."

Ezekiel's prophecy begins with God taking him to the top of a high mountain which is described "as a frame for a city on the south." For Davenport, this mountain was found in the red outcrops of volcanic stone, the East Rock and the West Rock, looming to the north of New Haven. A perfect square was laid out between two creeks and further divided into nine smaller squares. These squares were arranged in such a way that all the north-south streets clearly open up to the East Rock while the cross-streets face the West Rock. While eight of the periphery squares were subdivided into house lots, the central square corresponds to the space occupied by the Levites, the priestly tribe. This central square was originally called the "market place" (now known as the Green)and it had the meeting house, the religious centre at its very heart in accordance to the position of the tabernacle in the original divine plan. As in Ezekiel's description, the meeting house in all the early maps faces the east.[133] The school, the cemetery and most public buildings were located nearby, in the central square. While the society that created it—the Colony of New Haven, an absolute theocracy—can be criticised for its intolerance and exclusion, the physical configuration of the town has endured and stood the test of time. Proper governance ensured that the malleable nine-square grid was able to be reworked to adapt to changing priorities over time but worth maintaining in terms of its basic structure. The central Green in particular has always been the focus and a reflection of the entire city; as James Sexton writes:

> [...] as the town grew and changed, the appearance of its green mirrored these changes. The present day green is in many ways as good an illustration of the modern city of New Haven as the 17th century marketplace was of the early town. Where a single meeting house was the focus of the nascent theocracy, one now sees the religious pluralism of the present city symbolised by the three churches on the Green.[134]

The secularised modern city continues to flourish within and benefit from its original sacred framework.

24. (Top opposite) The town of New Haven in the foreground with the East and West rocks looming in the distance

Source: Old Maps, http://www.old-maps.com/ct/birdseye/NewHaven_1879_web.jpg, accessed 21 July 2013

25. (Botton right top) The Town of New Haven with all the buildings in 1748. Commissioned by the Hon Gen. Wadsworthy of Durham

Source: Barry Lawrence Ruderman Antique Maps Inc, http://www.raremaps.com/gallery/archivedetail/20308/_A_Plan_of_the_Town_of_New_Haven_With_all_the_Buildings_in_1748_Taken_by/Currier.html, accessed 21 July 2013

26. (Right botton) The central Green bordered by the three churches

Source: Italian Society of Yale Students and Affiliates, http://isysaa.wordpress.com/life-in-new-haven/new-haven-life/, accessed 21 July 2013

4.2. **Canadian Centre for Architecture (CCA) Sculpture Garden**

27. CCA building in the foreground with the sculpture gardens in the distance bordered by the two Ville-Marie auto route exit ramps

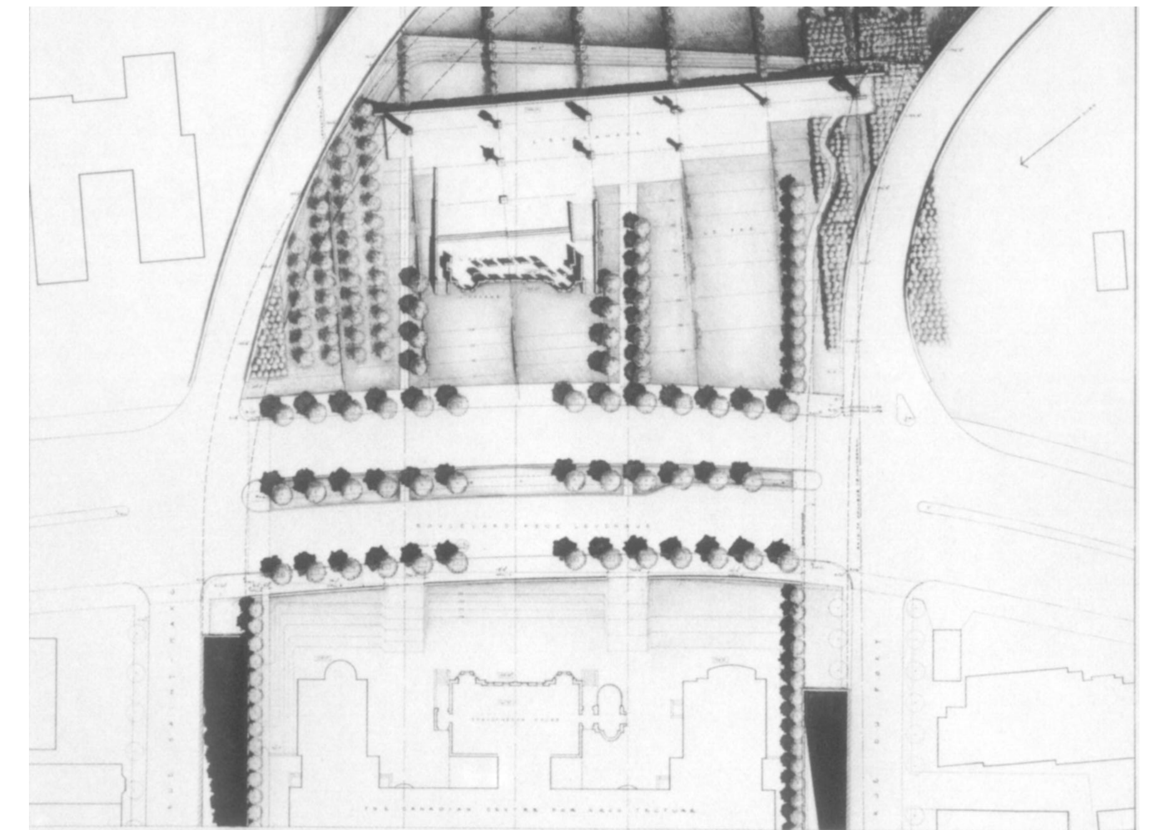
Source: CCA Collection, Photo by Michel Boulet

The design of the CCA sculpture garden is illustrative of the second kind of sacred space that offers a place of respite within the urban landscape and encourages one to reflect on the city and its collective memories. Designed by Melvin Charney in 1987-88, and funded by a Québec government program for the integration of art and architecture, the site faces the main CCA building across boulevard René-Lévesque. Before moving to the specifics of the garden itself, a brief background on Charney's philosophies is useful. Having developed an early romantic attachment to Montreal, he desired to make accessible to the public not grandiose architectural gestures but rather traditions of the city's vernacular architecture. As he once said, his projects sought to "render visible the city we live in" by unveiling layers of historical, social and political complexity that may not be apparent to the public and would otherwise eventually be lost over time. He did this by emphasising the need to deeply root the project in the context and, as the tribute by the CCA notes, by exploring celebratory as well as critical perspectives on the urban environment.[135] He was prominent for the manner in which he integrated art, architecture and urbanism, and he reinforced the idea that the street and public spaces were the primary resources of the city.

This garden is an excellent demonstration of a space that gathers the *genius loci* of the city. Within it, Charney has masterfully crystallised memories of the entire city—memories by which he had personally been deeply moved and with which he was intensely familiar. In creating a sanctuary, the design of the garden turns its back on typical anti-urban romanticism, building instead on Montreal's greatest asset: its rich urban history, as well as simultaneously revitalising the city fabric. The area was ravaged by postwar road-building and the site itself is wedged between two noisy access ramps for the Ville-Marie autoroute that physically isolate it from its surroundings. However, by focusing on the unique geographic location on the escarpment of the Dorchester Plateau that opens up the site to the city, Charney has managed to introduce a strong sense of continuity to the area: the garden connects to the museum by mirroring elements of the historic CCA building from 1874 (the Shaughnessy House) across the street, draws strongly from the history of the site it is located on and evokes memories of Montreal's historic industrial sector that it overlooks to the east.

Instead of detaching this public space from the intellectuality of the CCA, Charney has chosen to continue the narrative of the museum but allows more room for interpretation, reduces the enforced rigidity and makes it an outdoor museum that is open to every citizen and can be appreciated from multiple perspectives: passersby on foot and in vehicles can delight in the atmosphere and the visual composition, while scholars take pleasure in recognising the subtle "arcane references about references."[136] For its organisation and specific character, the garden derives greatly from classical formal gardens, using elements such as the Belvedere, Esplanade, Arcade and ornamental sculptures. However, within this classical framework it adds on additional layers of history by also fusing into the narrative the site's landscape as it was when farmed by the Sulpicians by adding "Orchards" and "Meadows" through the planting of apple trees and grass pastures, and stretches still further back in time by evoking its untouched state pre-European settlement days by integrating maples that once made up the indigenous forest on the site. The site is divided in a manner that reveals the historic cadastral divisions, delineated by low fieldstone walls; this feature is a direct nod to Montreal's distinctive street grid organisation and colonial system of land tenure. It also pays homage to yet another period of the site's history, the time when large row houses occupied it before being demolished during the mid-twentieth century only to be replaced by expressways that scarred the urban fabric.

The concepts of entry points, paths and *axis mundis* or centres as discussed earlier play a critical role in the spatiality of this garden. The three-part composition of the Orchard to the east and the Meadow to the west flanking the Arcade (which mirrors the Shaughnessy House) is one potential pathway. The Esplanade that looks over the city forms another possible pathway where as one travels, numerous *axis mundis* in the form of the ten allegorical columns are encountered. Each of these columns represents former landmarks of Montreal and historical archetypes, and has great depth to its conception. As Manon Regimbald writes when quoting Montaigne, these are in essence mirrors "in which we must look at ourselves in order to know ourselves" as a community.[137] The details and meanings of each are too intricate to go into in this brief analysis (the article by *The Massachusetts Review* goes into much greater depth).[138] Each

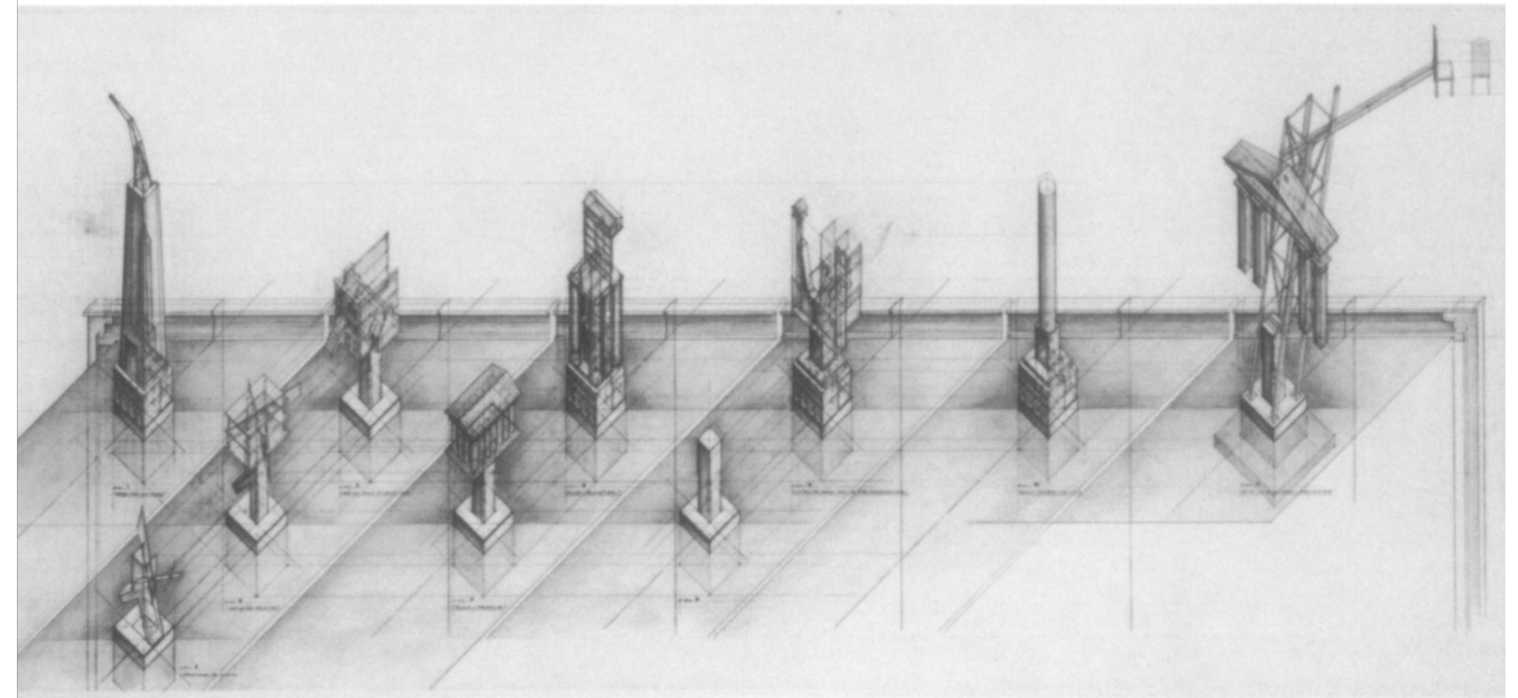


28. Plan of the CCA Garden with the CCA building on the bottom,1988.

Source: CCA Collection

column gives a cohesive historic account but when read as a whole, each row places these individual accounts into a larger narrative. The last row on the west side that contains a single column, “La Tribune”, connects the various threads spun by the rows and links them back to the garden’s site. It is the tallest sculpture, a steel constructivist structure (a component from the expressway over which the garden is built) that supports a neo-classical facade (a nod to the Collège de Montréal, a seminary further along the same axis). Extending above this facade is a steel strut from which dangles a metal chair, upon which rests a tiny house. The house on the chair concludes a subtext on the dwelling as an archetype that runs through the preceding rows, where this final house signifies the city as a collective dwelling.

Whether by understanding all the intricacies of underlying meanings, or just by immersing oneself in the atmosphere of the space, this garden is an excellent example of the kind of space that provides orientation to those who encounter it. Charney was a humanitarian whose every project, including this one, was in response to the human condition—our needs and how the quality of the urban environment affects us. A timeless piece, it has the ability to elicit deep emotions, in my own experience as well as noted by others.[139] As one person notes, and as I can attest, the space “imposes a sense of serenity and intimacy over a piece of an otherwise impersonal and hectic part of Montreal.”[140] It is paradoxical on many counts: a garden that is strongly urban with a sense of remoteness despite its central position at an inner-city location, rising magnificently yet very understated in the important role it plays in reconciling a scarred area. One of the most important ways in which it possesses a sense of the sacred is its mysteriousness—when I first discovered it, having no background on the purpose of the space, I recall experiencing the place with perplexity but pleasure, for it was unlike other public spaces I had encountered in Montreal, a hidden delight amidst otherwise impersonal city spaces with fast-moving traffic. Visually rich in its landscaping, open views, sculptures and the arcade (which to me appeared like well-maintained ruins), I recall it being a peculiar but comforting space. It possessed a noisy sort of silence where I was surrounded by the cumulation of the noises of the city but none of which were articulate enough to disturb my own thoughts. Charney has achieved a fine balance of detachment and surrealism while maintaining familiarity; there is a degree of enclosure but some aural and visual connections to the city are retained. It is a finely crafted space, and one that has graciously matured over the years and is the better for it—a mark of a true sacred space.



29. (Top) The Allegorical Columns, 1988.

Source: CCA Collection

30. (Bottom) Column No. 11, “La Tribune”, the final allegorical column in the series

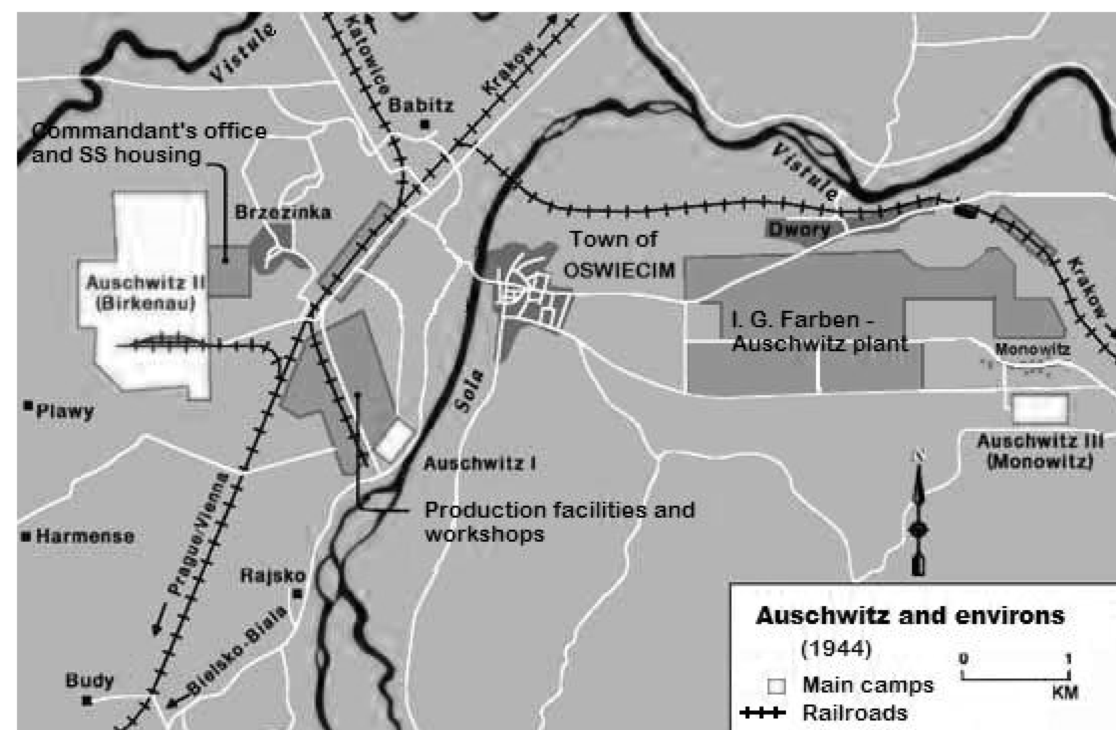
Source:: The Canadian Encyclopedia. Photo by Melvin Charney

4.3. **Auschwitz-Birkenau Concentration Camp**

The third category covers places that are not usually urban spaces and require an intentional journeying to. Typically, these places are associated with magnificent landscapes such as the Neolithic earthworks and stone circles at Avebury, England or the Acropolis of Athens—places that inspire awe and lift the spirit. However, it must be emphasised that sacred spaces should not be limited to those that elicit positive emotions. Feelings of grief and anger are as important to wholeness and an existential understanding of ourselves as happiness and joy, and to that end, we turn to a space that was designed for purposes as far removed from the sacred as possible: the Auschwitz-Birkenau concentration camp.

It is far beyond the scope of this discussion to understand the camp in its entirety with regard to all of its functions and layout, and to convey the full extent of the horrors. Rather, the aim here is to understand how a place that attempted to defy all sacredness stands today as possibly one of the most poignant places where one is forced to face the fragility of life and the depravity of which fellow human beings are capable. The camp, operated by the Third Reich in Polish areas annexed by the Nazis, was the largest in the network of death camps and consisted of Auschwitz I, the base camp; Auschwitz II-Birkenau, the extermination camp; Auschwitz III-Monowitz; and more than forty sub-camps. Located in the town of Oswiecim, between June 1941 and January 1945, over one million men, women and children perished having been either systematically murdered or worked to death. This carnage ended with the liberation by Soviet troops on 27 January 1945 following which the Polish government began planning a museum at the site almost immediately after the end of the war. In July 1947, the Polish parliament passed an act creating the Auschwitz-Birkenau State Museum which also ensured the inadmissibility of changes to the grounds. While some specific sites of the

31



31. Map of the three main camps: Auschwitz I, Auschwitz II-Birkenau, and Auschwitz II-Monowitz

killings were dismantled, such as a number of gas chambers and crematoriums by the Nazis in efforts to erase traces of their crimes, and majority of the barracks by Polish authorities following liberation, as one goes through these spaces, departure from historical truth is kept to the minimum.[141] This is not a place that speaks symbolically of the horrors. While memorials such as Peter Eisenmann's Memorial to the Murdered Jews in Berlin are important in reinforcing what one already knows of the Holocaust and for conveying specific notions (which in Eisenmann's design was of being lost in space and time), by opening access to the specific place of horror and the original instruments of death, and by recreating the journey the victims endured, there is another level of knowing. When one is faced with the raw, uncensored facts, there is no ambiguity—no denying or diluting the terror. Consequently, the associated emotions cannot be suppressed, diverted or underplayed. As described earlier, sacred spaces are those that are capable of eliciting deep emotions and bring a heightened sense of awareness; they urge one to explore their inner emotions, person beliefs and collective beliefs. If the emotions felt at Auschwitz are understood in terms of the model described earlier, Plutchik's Wheel of Emotions, "anger", "disgust" and "sadness" are (or certainly ought to be) the primary emotions felt by those who experience the site; however, one would expect that the range of secondary and tertiary emotions and their combinations will vary from person to person depending on their background and their specific life experiences. For instance, individuals who practice bigotry and intolerance may, upon viewing what can be wrought through such behaviour, experience "remorse" for their own actions; a person who has been personally affected by what transpired in the Nazi death camps might not only experience the primary emotions listed above but the same feelings with a heightened intensity in the form of "rage", "loathing" and "grief".

Along with allowing the public to see the tools of torture and death such as the Execution Wall, the Starvation Cells, the Crematory and the Gas Chambers, simple everyday objects such as suitcases, letters, pictures, shoes and a display case thirty metres long filled with human hair are also seen. These ordinary items are essential in telling the entire narrative because they allow social, collective memory to turn into individual memory.[142] These everyday items prevent one from distancing himself or herself from the reality of the horror; the camp ceases to be merely a representation of an event that

32, 33

32. (Left) Crematoriums

Source: BBC, http://www.bbc.co.uk/threecounties/content/image_galleries/poland_visit_gallery.shtml?10, accessed 27 August 2013

33. (Right) The Execution Wall

Source: BBC, http://www.bbc.co.uk/threecounties/content/image_galleries/poland_visit_gallery.shtml?16, accessed 27 August 2013

34. Publication by the Auschwitz-Birkenau State Museum showing photograph taken in the camp during its operation alongside picture of the same location today

Source: Auschwitz-Birkenau State Museum, photos by Pawel Sawicki

happened in the distant past but speaks instead of every individual who suffered greatly at the hand of the perpetrators. It is an extreme instant of when sacredness was banished from the landscape and society, and reminds one that when this happens, the possibility cannot be ruled out that "other societies in the future will [not] build concentration camps [and] gas chambers, nor [the] guarantee that the world will react any differently."[143]

By and large, the sacredness of this space comes not from later physical modifications but rather from preserving what once happened within it and presenting it in a comprehensive narrative that conveys the full extent of the atrocities. A sprawling site, Auschwitz I contains most of the exhibits and personal possessions of the victims juxtaposed with the sites of the events while Auschwitz II-Birkenau is more a memorial than a museum. It is a space of silent and typically shocked contemplation that one experiences after having earlier received specific details from the site of Auschwitz I. However, as it is evident, this space has not always been sacred—in fact, it can only be conceived as sacred from an outsider's point of view. As Pawel Sawicki, the photographer of a new publication that shows photographs taken in the camp during its operation alongside pictures of the same location today, notes, as he took and compiled the pictures, there was a "peculiar emptiness." "The people, who are the essence of the pictures [...] were missing. Today, they are not here anymore, only the place where they were murdered remains."[144] Despite the faithful depictions of the happenings, one as a visitor is far removed from the actual circumstances and the true terror felt by the victims; most can sympathise but very few can empathise. Nature has matured on the site, and time has, to a degree, softened the harshest of the structures. There is a desolation and eeriness to the site, it stirs up the deepest emotions. Nevertheless, one is fully aware that while the tools of torture are ever present, unlike the time of the Holocaust, they have ceased to turn and there is no immediate threat or danger.

The concept of ineffable spaces, spaces that conveyed expressions of longing and emotions too deep to be uttered, was discussed earlier but mostly in a positive sense. However, ineffability can have other connotations as well. The Auschwitz-Birkenau concentration camp space is also an ineffable space, but in a heart wrenching sense where the horrors are so great that one is left speechless.[145] The human conscience is awakened to the potential for human brutality in a manner that it could not have comprehended prior to experiencing this space. An honest experience of past crimes is critical in shaping human morality, and sacred spaces such as these bring to light the wrong and intensify the good and right in people by increased sensitivity.

CHAPTER 5
CONCLUSION

The framework created here for the generation of sacred collective spaces is intentionally loose. It is open for expansion and addition through future research, and more usefully, practical experimentation that tests the proposed ideas. While the means is open for improvement and advancement, the end has remained consistent throughout history: the aim is and has always been to create spaces with integrity—spaces that allow one to honestly explore emotions and feelings that exist in the subconscious.

Capturing something as immaterial as the sacred in terms of the physical has been a contradiction of sorts throughout the course of this paper—summarising it further in these concluding observations would simplify it even further. Instead, I would like to borrow the definition that has been articulated with regard to architecture of the sacred to describe the *effect* collective public spaces that are created in a sacred idiom have. These are spaces that prompt an exchange between the human and the environment, and enable a higher experience than that found in other "profane" spaces. Without any change in the life circumstances of the person, these spaces draw from within usually dormant expressions of awe, clarity, peacefulness and so forth. To serve secular civic purposes in an increasingly multicultural society, creators of sacred spaces play on shared but rarely recognised human needs and emotions rather than specific religious associations as in times past.

Some key recommendations for urban planners and designers include:

1. Understand that the sacred can only be framed when we as designers approach it in the right manner. Therefore, the process of introducing sacred spaces in our cities is as much about our approach and design philosophies as it is about the resultant physical forms. In fact, if our view of the public sphere was in keeping with the weight it received in historic times—if it was developed with similar devotion, care, and insight—the physicality would almost inevitably reflect it.
2. In designing spaces with sacred qualities, the ego of the designer should not overpower the spirit of the place; the forms should be dictated by the context and should fit into it naturally rather than being imposed with the stylistic sensibilities of the designer. Local strengths should be highlighted instead. Along the same lines, all the technicality and functioning of the space should be discrete. In an age of easily accessible knowledge where nearly all sources of enchantment can be explained away through logic and reasoning, this approach has the potential of reintroducing mystery and awe into segments of the city.
3. The demographics of the society should be carefully considered and all groups should find equal representation. On the large-scale, concerted efforts should be made to more consciously accommodate pluralism in the public sphere and in planning norms. At the scale of individual projects, designers should create with the awareness of finding a balance between benefiting from the cultural and historic richness of the society and addressing the contemporary complexities of pluralism. Pluralism can be addressed by either designing for multiple levels of interpretation, or by targeting common human feelings and beliefs that all users can identify with.
4. Existing or new sacred spaces can be made easily accessible, inviting and prominent in the urban landscape by softening edges between the sacred space and surrounding city spaces, by creating easy transitions between the two and by creating an easily mapped mental network of such spaces in the city.
5. Integral physical aspects include but are not limited to stimulation of the senses and perceptions—this typically includes emphasis on movement, spatial sequence and time as well as use of nature, high-quality craftmanship and use of authentic materials.

ENDNOTES

PROLOGUE

1. Sitte, Camillo, "The Meager and Unimaginative Character of Modern City Plans" and "Artistic Limitations of Modern City Planning," in The Urban Design Reader, eds. M. Larice & E. Macdonald (London and New York: Routledge, 2006), 35-42.

CHAPTER 1: INTRODUCTION

2. Kostof, Spiro. *The City Shaped: Urban Patterns and Meanings through History.* Bulfinch Press, 1991. 32.
3. Galbraith, John Kenneth. *The Affluent Society.* Mariner Books, 1998.
4. Glickman, Lawrence B., *Reviving a Public Spending Agenda* (Columbia: University of South Carolina, Department of History), accessed at http://www.history.ucsb.edu/projects/labor/documents/Glickman_revivingpublicspending.pdf on 20 August 2013.
5. Relph, Edward. *Place and Placelessness*. Pion Ltd, 1976.
6. Kunstler, James Howard. The *Geography of Nowhere: The Rise and Decline of America's Man-Made Landscape*. Free Press, 1994. Back cover.
7. Ibid., 113.
8. Mohammad A. Qadeer, "Pluralistic Planning for Multicultural Cities: The Canadian Practice" *Journal of the American Planning Association*, 63 (4): 481-494.
9. Walker, Andrew, and Aaron Kennedy. *Discovering t he Spirit in the City*. Continuum International Publishing Group, 2010. 12.
10. Allan Jacobs and Appleyard, Donald, "Towards an Urban Design Manifesto," *Journal of the American Planning Association*, 31 (2): 196-207, 1987.
11. Ibid,. 200.
12. Kotkin, Joel. *The City: A Global History*. New York: Modern Library, 2006. 116.
13. Lynch, Kevin. *A Theory of Good City Form*. The MIT Press, 1981. 8-9.
14. Ibid,. 79-81.
15. Rosenau, Helen. *The Ideal City: Its Architectural Evolution in Europe*. London: Routledge Kegan & Paul, 1983.
16. Gehl, Jan. *Life Between Buildings: Using Public Space*. 6th ed. Connecticut: Island Press, 2011. 45.
17. Sitte, *The Meager and Unimaginative Character of Modern City Plans* and *Artistic Limitations of Modern City Planning,* in *The Urban Design Reader.*
18. Cox, Harvey. *The Secular City*. The MacMillan Company, 1965. 21.
19. Kotkin, *The City: A Global History*, 4.
20. Spreiregen, Paul. *Urban Design: The Architecture of Towns and Cities*. Krieger Publishing Company, 1982. 4.
21. Pérez-Gómez, Alberto. *Built upon Love: Architectural Longing after Ethics and Aesthetics*. Cambridge: The MIT Press , 2008. 6.
22. Morris, A.E.J. *History of Urban Form: Before the Industrial Revolutions*. John Wiley & Sons Canada, Limited, 1979. 55.
23. Spreiregen, *Urban Design: The Architecture of Towns and Cities,* 6.
24. Kotkin, *The City: A Global History*, 36.
25. Ibid., 37.
26. Cox, *The Secular City*, 22.
27. Ibid., 23-24.
28. Morris, *History of Urban Form,* 102.
29. Eliade, Mircea. *The Sacred and the Profane: The Nature of Religion*. Houghton Mifflin Harcourt, 1959. 20-21.
30. Ibid., 32.
31. Kotkin, *The City: A Global History*, 38.
32. Livesey , Graham. "Narrative, Ephemerality and the Architecture of the Contemporary City." Diss. McGill University, 1991.
33. Smith, Thomas Roger. *Architecture: Gothic and Renaissance.* Society for Promoting Christian Knowledge, 1908. 154-155.
34. Klanten, Robert, and Lukas Feireiss. *Closer to God: Religious Architecture and Sacred Spaces*. Gestalten Verlag, 2010. 6.
35. Gehl, *Life Between Buildings: Using Public Space*, 41- 43.
36. Muir, Edward. *The Culture Wars of the Late Renaissance: Skeptics, Libertines, and Opera*. Harvard University Press, 2007.
37. Pérez-Gómez, *Built upon Love: Architectural Longing after Ethics and Aesthetics*, 21.
38. Sitte, *The Meager and Unimaginative Character of Modern City Plans* and *Artistic Limitations of Modern City Planning,* in *The Urban Design Reader,* 36.
39. Livesey, *Narrative, Ephemerality and the Architecture of the Contemporary City*, 21.
40. Stanford Encyclopedia of Philosophy, "Kant's Philosophy of Religion," http://plato.stanford.edu/entries/kant-religion/, 2009, accessed on 05 June 2013.
41. Ibid.
42. Lynch, *A Theory of Good City Form,*24-25.
43. Briggs, Asa. *Victorian Cities.* Penguin Group, 1990. 106.
44. Ellul, Jacques. *The Technological Society*. Toronto: Vintage Books, 1967.
45. Kostof, *The City Shaped,* 82.
46. Encyclopaedia Britannica, "Romanticism," http://www.britannica.com/EBchecked/topic/508675/Romanticism, accessed on 12 June 2013.
47. Gehl, *Life Between Buildings: Using Public Space*, 45.
48. Cloninger, C. Robert. *Feeling Good: The Science of Well-Being*. Oxford University Press, 2004. xix.
49. Lynch, *A Theory of Good City Form,*132.
50. Pérez-Gómez, *Built upon Love: Architectural Longing after Ethics and Aesthetics*, 24.
51. Ed Diener, Marissa Diener, Carol Diener, "Factors Predicting the Subjective Well-Being of Nations," *Journal of Personality and Social Psychology,* 69(5):851 -864, 1995.
52. Walker, and Kennedy, *Discovering the Spirit in the City*, 12.
53. Bouchard, Gérard, and Charles Taylor. *Building the Future: A Time for Reconciliation* (Gouvernement du Québec: Commission de consultation sur les pratiques d'accommodement reliées aux différences culturelles, 2008), accessed at *http://collections.banq.qc.ca/ark:/52327/bs1565996* on 03 February 2013.
54. Nagle, John. *Multiculturalism's Double Bind: Creating Inclusivity, Cosmopolitanism and Difference*. Ashgate Publishing, 2009. 169.
55. Hayden, Dolores. *The Power of Place: Urban Landscapes as Public History*. The MIT Press, 1995. 9.
56. Canadian Christianity, "Quebec Commission Calls for "Open Secularism," http://canadianchristianity.com/nationalupdates/2008/080604quebec.html, 2008, accessed on 28 March 2013
57. Ibid.
58. Sacks, Jonathan. *The Persistence of Faith: Religion, Morality and Society in a Secular Age*. Bloomsbury Academic, 2005. 10.
59. Dowd, Michael, *Honoring Our Inner and Outer Nature* (Chicago: Center for Humans & Nature), accessed at http://www.humansandnature.org/to-be-human---michael-dowd-response-24.php on 23 January 2013.
60. Walker, and Kennedy, *Discovering the Spirit in the City*, 12.
61. The Archbishop's Council, *Faithful Cities: A Call for Celebration, Vision and Justice* (London: The Report from the Commission on Urban Life and Faith, 2006).
62. Sandercock, Leonie. *Cosmopolis II: Mongrel Cities.* Continuum, 2003. 208.

CHAPTER 2: SACRED IN ARCHITECTURE

63. Otto, Randall, review of *Constructing the Ineffable: Contemporary Sacred Architecture*, by Karla Britton, in *Journal of Architectural Education* 62 (2): 73-74, 2008.
64. Plotinus. *The Enneads.* Faber and Faber Limited. Accessed at http://archive.org/stream/plotinustheennea033190mbp#page/n329/mode/2up on 09 May 2013. 270.
65. Eliade, Mircea, *The Sacred and the Profane*, 204-205.
66. "Sacred" Oxford English Dictionary. Second Edition. Clarendon Press: Oxford, 1989.
67. Hogrefe, Jeffrey. "Divine Interventions." *Interiors* 160 (4): 58-65, 2001.
68. Norberg-Schulz, Christian. *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, 1991. 10.
69. Ibid., 20.
70. Ibid,. 18.
71. Ibid.
72. Hogrefe, Divine Interventions, 2001.
73. Saieh, Nicole. "Multiplicity and Memory: Talking About Architecture with Peter Zumthor" (interview with Peter Zumthor). Accessed at http://www.archdaily.com/85656/multiplicity-and-memory-talking-about-architecture-with-peter-zumthor/ (ArchDaily), 02 November 2010.
74. Holl, Steve, Juhani Pallasmaa, and Alberto Perez-Gomez. *Questions of Perception: Phenomenology of Architecture*. William K Stout Books, 2007. 28
75. Ibid,. 41.
76. Blake, Chris. "The Nature of Beauty." Diss. University of Manchester. Accessed at http://issuu.com/cg_homer/docs/test_document on 11 January 2013.
77. The Pritzker Architecture Prize. "Ceremony Acceptance Speech: Luis Barragán," http://www.pritzkerprize.com/1980/ceremony_speech1, 1980. Accessed on 23 March 2013.
78. Pauly, Danièle. *Barragán Space and Shadow, Walls and Colour*. Birkhäuser Architecture, 2008. 9.
79. Zumthor, Peter. *Atmospheres.* Birkhäuser Architecture, 2006. 41-45.
80. Saieh, "Multiplicity and Memory: Talking About Architecture with Peter Zumthor."
81. Rossi, Aldo. *The Architecture of the City.* The MIT Press, 1984.
82. Memoria Abierta. *Architecture and Memory*. Buenos Aires, Argentina: Memoria Abierta, 2009. Accessed at http://www.memoriaabierta.org.ar/materiales/pdf/architectureandmemory.pdf on 08 June 2013.

CHAPTER 3: SACRED IN CITY PLANNING

83. Gehl, Jan. *Cities for People.* Island Press, 2010. 198.
84. Gehl, *Life Between Buildings,* 15.
85. Gehl, *Cities for People,* 195-196.
86. Certeau, Michel de. *The Practice of Everyday Life.* University of California Press*,* 1984. 92-93.
87. Andrew Crompton, "Scaling in a suburban street," *Environment and Planning- Part B* 32 (2): 191-197, 2005.
88. Ferrell, Jeff. *Tearing Down the Streets: Adventures in Urban Anarchy.* Palgrave Macmillan, 2001.
89. Lynch, Kevin. *Image of the City*. The Technology Press & Harvard University Press, 1960. 1-2.
90. Ibid,. 5.
91. Gehl, *Life Between Buildings,* 21.
92. Dana Kotter-Grühna, Maja Wiesta, Peter Paul Zureka, Susanne Scheibe, "What is it we are longing for? Psychological and demographic factors influencing the contents of Sehnsucht (life longings)," *Journal of*

Research in Personality, 43 (3): 428–437, 2009.
93. Pérez-Gómez, *Built upon Love,* 6.
94. Holl, Steve. *Urbanisms: Working with Doubt*. Princeton Architectural Press, 2009. 16.
95. Alexander, Christopher. *Timeless Way of Building*. Oxford University Press, 2003. 527.
96. Holl, Pallasmaa and Perez-Gomez, *Questions of Perception,* 122.
97. Peter Buchanan, "The Big Rethink: Lessons from Peter Zumthor and Other Living Masters," *The Architectural Review,* 28 August 2012. Accessed at http://www.architectural-review.com/confirmation?rtn=/the-big-rethink/the-big-rethink-lessons-from-peter-zumthor-and-other-living-masters/8634689.article on 16 June 2013.
98. Zumthor, *Atmospheres,* 27.
99. Hayden, *The Power of Place: Urban Landscapes as Public History*.
100. Gomez, *Built Upon Love*, 22.
101. Zumthor, Peter. *Thinking Architecture*. Birkhäuser Architecture, 2010. 8.
102. Alexander, *The Timeless way of Building*, 144-145.
103. Britton, Karla. *Constructing the Ineffable: Contemporary Sacred Architecture*. The Yale School of Architecture, 2011. 13.
104. Ibid,. 17.
105. Holl, Pallasmaa and Perez-Gomez, *Questions of Perception,* 29.
106. Rose Etherington, "Interview with Peter Zumthor at the Serpentine Gallery Pavilion 2011," *dezeen magazine,* 28 June 2011. Accessed at http://www.dezeen.com/2011/06/28/dezeen-screen-interview-with-peter-zumthor-at-the-serpentine-gallery-pavilion-2011/ on 11 June 2013.
107. Fabio Ferrario, "outside in: the infinite garden by meir lobaton corona + ulli heckmann," *designboom,* 17 May 2013. Accessed at http://www.designboom.com/art/outside-in-the-infinite-garden-by-meir-lobaton-corona-ulli-heckmann/ on 11 June 2013.
108. ailtireacht, "Aesthetics," http://philipmichaelryan.files.wordpress.com/2010/06/ailtireachtebook.pdf, accessed on 26 March 2013.
109. Boyer, M. Christine. *The City of Collective Memory.* The MIT Press, 1996. 16.
110. Christian Tschumi, "Between Tradition and Modernity: The Karesansui Gardens of Mirei Shigemori," *Landscape Journal*, 25 (1): 115, 2006.
111. Barrie, Thomas. *Spiritual Path, Sacred Place.* Shambhala, 1996. 51.
112. Lynch, *Image of the City*, 5-6.
113. Heschel, Abraham Joshua. *God in Search of Man: A Philosophy of Judaism.* Farrar, Straus and Giroux, 1976. 46.
114. Barrie, *Spiritual Path, Sacred Place*, 46.
115. Holl, Pallasmaa and Perez-Gomez, *Questions of Perception,* 31.
116. Cullen, Gordon. *Townscape.* The Architectural Press, 1961.
117. Owen, David. "The Dark Side: Making War on Light Pollution." *The New Yorker,* 20 August 2007.
118. Tanizaki, Junichiro. *In Praise of Shadows.* Leete's Island Books, 1977. 4.
119. Ibid,. 46.
120. Zumthor, *Atmospheres*, 61.
121. Barrie, *Spiritual Path, Sacred Space*, 40.
122. Hoffman, Douglas R. *Seeking the Sacred in Religious Contemporary Architecture.* Kent State University Press, 2010, 23.
123. Lawlor, Anthony. *The Temple in the House: Finding the Sacred in Everyday Architecture*. Tarcher, 1994. 44.
124. Barrie, *Spiritual Path, Sacred Space*, 49.
125. Norberg-Schulz, *Genius Loci: Towards a Phenomenology of Architecture,* 45.
126. Buenos Aires, "The 7 Principles of Zen Applied to Design," http://faenasphere.com/en/content/7-principles-zen-applied-design#!/, 2013, accessed on 09 June 2013.
127. Hoffman, *Seeking the Sacred in Religious Contemporary Architecture,* 17, 39.
128. Smarthistory, "Brunelleschi's Old Sacristy," http://smarthistory.khanacademy.org/brunelleschis-old-sacristy.html, 2012, accessed on 09 June 2013.
129. ailtireacht, *Aesthetics*, 27.
130. As defined in Walter, E.V. *Placeways: A Theory of the Human Environment.* Scholarly Book Services Inc, 2002. 215.
131. Britton, *Constructing the Ineffable: Contemporary Sacred Architecture*, 229.

CHAPTER 4: CASE STUDIES OF SACRED PUBLIC SPACES

132. Hersey, George L. *Architecture and Geometry in the Age of the Baroque*. University Of Chicago Press, 2002. 115.
133. Britton, *Constructing the Ineffable: Contemporary Sacred Architecture*, 28.
134. Town Greens, "Not a Park or Mere Pleasure Ground: a Case Study of the New Haven Green," http://www.towngreens.com/DOCUMENTS/tg_newhaven_case.pdf, 2001, accessed on 01 July 2013. 9.
135. CCA, "Tribute to Melvin Charney," http://www.cca.qc.ca/en/collection/1810-tribute-to-melvin-charney-1935-2012, 2012, accessed on 01 July 2013.
136. Jim Donaldson, "Melvin Charney" (interview with Melvin Charney), *McGill School of Architecture* accessed at http://www.mcgill.ca/architecture/aluminterviews/charney, June 1999.
137. Manon Regimbald, "1987, Melvin Charney: The Canadian Centre for Architecture Garden (1987-1990)," *Espace Sculpture* 81: 11, 2007. Accessed at http://www.erudit.org/culture/espace1041666/espace1050215/9266ac.pdf on 09 July 2013.
138. "Melvin Charney the Canadian Centre for Architecture Garden," *The Massachusetts Review* 31 (Spring): 201-212, 1990. Accessed at http://www.jstor.org/stable/25090166?seq=1 on 09 July 2013.
139. Elizabeth Wood, "Le Jardin du Centre Canadien d'Architecture: La Beauté Transversale" *Espace Sculpture* 31: 6-10, 1995. Accessed at http://www.erudit.org/culture/espace1041666/espace1046590/199ac.pdf on 09 July 2013.
140. The Archeffect, "CCA Sculpture Garden" http://www.archeffect.tumblr.com/sculpturegarden, accessed on 12 July 2013.
141. Memorial and Museum: Auschwitz-Birkenau. "From liberation to the opening of the Memorial", accessed at http://en.auschwitz.org/m/index.php?option=com_content&task=view&id=227&Itemid=13 on 04 August 2013.
142. Memoria Abierta, *Architecture and Memory* (Buenos Aires: Memoria Abierta, 2009), accessed at http://www.memoriaabierta.org.ar/materiales/pdf/architectureandmemory.pdf on 05 August 2013.
143. Barnett, Victoria J. *Bystanders: Conscience and Complicity During the Holocaust.* Praeger, 2010. 149.
144. BBC, "In Pictures: Auschwitz-Birkenau, Then and Now," http://www.bbc.co.uk/news/in-pictures-17095519, 2012, accessed on 05 August 2013.
145. Britton, *Constructing the Ineffable: Contemporary Sacred Architecture*, 17.

BIBLIOGRAPHY

Ailtireacht. "Aesthetics," http://philipmichaelryan.files.wordpress.com/2010/06/ailtireachtebook.pdf. Accessed on 26 March 2013.

Alexander, Christopher. *Timeless Way of Building.* Oxford University Press, 2003.

Barnett, Victoria J. *Bystanders: Conscience and Complicity During the Holocaust.* Praeger, 2010. 149.

Barrie, Thomas. *Spiritual Path, Sacred Place*. Shambhala Publications, 1996.

BBC. "In Pictures: Auschwitz-Birkenau, Then and Now," http://www.bbc.co.uk/news/in-pictures-17095519, 2012. Accessed on 05 August 2013.

Blake, Chris. "The Nature of Beauty." Diss. University of Manchester. Accessed at http://issuu.com/cg_homer/docs/test_document on 11 January 2013.

Bouchard, Gérard, and Charles Taylor. *Building the Future: A Time for Reconciliation*. Gouvernement du Québec: Commission de consultation sur les pratiques d'accommodement reliées aux différences culturelles, 2008. Accessed at http://collections.banq.qc.ca/ark:/52327/bs1565996 on 03 February 2013.

Boyer, M. Christine. *The City of Collective Memory.* The MIT Press, 1996.

Briggs, Asa. *Victorian Cities.* Penguin Group, 1990.

Britton, Karla. *Constructing the Ineffable: Contemporary Sacred Architecture*. The Yale School of Architecture, 2011.

Buchanan, Peter. "The Big Rethink: Lessons from Peter Zumthor and Other Living Masters." *The Architectural Review,* 28 August 2012. Accessed at http://www.architectural-review.com/confirmation?rtn=/the-big-rethink/the-big-rethink-lessons-from-peter-zumthor-and-other-living-masters/8634689.article on 16 June 2013.

Buenos Aires. "The 7 Principles of Zen Applied to Design," http://faenasphere.com/en/content/7-principles-zen-applied-design#!/ (2013). Accessed on 09 June 2013.

Canadian Christianity. "Quebec Commission Calls for "Open Secularism," http://canadianchristianity.com/nationalupdates/2008/080604quebec.html (2008). Accessed on 28 March 2013.

CCA. "Tribute to Melvin Charney," http://www.cca.qc.ca/en/collection/1810-tribute-to-melvin-charney-1935-2012 (2012). Accessed on 01 July 2013.

Certeau, Michel de. *The Practice of Everyday Life.* University of California Press, 1984.

Cloninger, C. Robert. *Feeling Good: The Science of Well-Being*. Oxford University Press, 2004.

Cox, Harvey. *The Secular City*. The MacMillan Company, 1965.

Crompton, Andrew. "Scaling in a suburban street." *Environment and Planning- Part B* 32 (2): 191-197, 2005.

Cullen, Gordon. *Townscape.* The Architectural Press, 1961.

Diener, Ed, Marissa Diener and Carol Diener. "Factors Predicting the Subjective Well-Being of Nations," *Journal of Personality and Social Psychology,* 69(5):851 -864, 1995.

Donaldson, Jim. "Melvin Charney" (interview with Melvin Charney). *McGill School of Architecture,* 1999. Accessed at http://www.mcgill.ca/architecture/aluminterviews/charney on 10 August 2013.

Dowd, Michael. *Honoring Our Inner and Outer Nature.* Chicago: Center for Humans & Nature. Accessed at http://www.humansandnature.org/to-be-human---michael-dowd-response-24.php on 23 January 2013.

Eliade, Mircea. *The Sacred and the Profane: The Nature of Religion*. Houghton Mifflin Harcourt, 1959.

Ellul, Jacques. *The Technological Society*. Toronto: Vintage Books, 1967.

Etherington, Rose. "Interview with Peter Zumthor at the Serpentine Gallery Pavilion 2011." *dezeen magazine,* 28 June 2011. Accessed at http://www.dezeen.com/2011/06/28/dezeen-screen-interview-with-peter-zumthor-at-the-serpentine-gallery-pavilion-2011/ on 11 June 2013.

Ferrario, Fabio. "outside in: the infinite garden by meir lobaton corona + ulli heckmann." *designboom,* 17 May 2013. Accessed at http://www.designboom.com/art/outside-in-the-infinite-garden-by-meir-lobaton-corona-ulli-heckmann/ on 11 June 2013.

Ferrell, Jeff. *Tearing Down the Streets: Adventures in Urban Anarchy.* Palgrave Macmillan, 2001.

Galbraith, John Kenneth. *The Affluent Society.* Mariner Books, 1998.

Gehl, Jan. *Cities for People.* Island Press, 2010.

Gehl, Jan. *Life Between Buildings: Using Public Space*. 6th ed. Connecticut: Island Press, 2011.

Glickman, Lawrence B. *Reviving a Public Spending Agenda.* Columbia: University of South Carolina, Department of History. Accessed at http://www.history.ucsb.edu/projects/labor/documents/Glickman_revivingpublicspending.pdf on 20 August 2013.

Hayden, Dolores. *The Power of Place: Urban Landscapes as Public Histo*ry. The MIT Press, 1995.

Hersey, George L. *Architecture and Geometry in the Age of the Baroque*. University Of Chicago Press, 2002.

Heschel, Abraham Joshua. *God in Search of Man: A Philosophy of Judaism.* Farrar, Straus and Giroux, 1976.

Hoffman, Douglas R. *Seeking the Sacred in Religious Contemporary Architecture.* Kent State University Press, 2010.

Hogrefe, Jeffrey. "Divine Interventions." *Interiors* 160 (4): 58-65, 2001.

Holl, Steve, Juhani Pallasmaa, and Alberto Perez-Gomez. *Questions of Perception: Phenomenology of Architecture*. William K Stout Books, 2007.

Holl, Steve. *Urbanisms: Working with Doubt*. Princeton Architectural Press, 2009.

Jacobs, Allan, and Donald Appleyard. "Towards an Urban Design Manifesto," *Journal of the American Planning Association*, 31 (2): 196-207, 1987.

"**K**ant's Philosophy of Religion" Stanford Encyclopaedia of Philosophy. Accessed at http://

plato.stanford.edu/entries/kant-religion/ on 05 June 2013.

Klanten, Robert, and Lukas Feireiss. *Closer to God: Religious Architecture and Sacred Spaces*. Gestalten Verlag, 2010.

Kostof, Spiro. *The City Shaped: Urban Patterns and Meanings through History.* Bulfinch Press, 1991.

Kotkin, Joel. *The City: A Global History*. New York: Modern Library, 2006.

Kotter-Grühna, Dana, Maja Wiesta, Peter Paul Zureka, and Susanne Scheibe. "What is it we are longing for? Psychological and demographic factors influencing the contents of Sehnsucht (life longings)," *Journal of Research in Personality,* 43 (3): 428–437, 2009.

Kunstler, James Howard. The *Geography of Nowhere: The Rise and Decline of America's Man-Made Landscape*. Free Press, 1994.

Lawlor, Anthony. *The Temple in the House: Finding the Sacred in Everyday Architecture*. Tarcher, 1994.

Livesey , Graham. "Narrative, Ephemerality and the Architecture of the Contemporary City." Diss. McGill University, 1991.

Lynch, Kevin. *Image of the City*. The Technology Press & Harvard University Press, 1960.

Lynch, Kevin. *A Theory of Good City Form*. The MIT Press, 1981.

"**M**elvin Charney the Canadian Centre for Architecture Garden," *The Massachusetts Review 31 (Spring): 201-212, 1990. Accessed at* http://www.jstor.org/stable/25090166?seq=1 on 09 July 2013.

Memoria Abierta. *Architecture and Memory*. Buenos Aires, Argentina: Memoria Abierta, 2009. Accessed at http://www.memoriaabierta.org.ar/materiales/pdf/architectureandmemory.pdf on 08 June 2013.

Memorial and Museum: Auschwitz-Birkenau. "From liberation to the opening of the Memorial". Accessed at http://en.auschwitz.org/m/index.php?option=com_content&task=view&id=227&Itemid=13 on 19 August 2013.

Morris, A.E.J. *History of Urban Form: Before the Industrial Revolutions*. John Wiley & Sons Canada, Limited, 1979.

Muir, Edward. *The Culture Wars of the Late Renaissance: Skeptics, Libertines, and Opera*. Harvard University Press, 2007.

Nagle, John. *Multiculturalism's Double Bind: Creating Inclusivity, Cosmopolitanism and Difference*. Ashgate Publishing, 2009.

Norberg-Schulz, Christian. *Genius Loci: Towards a Phenomenology of Architecture.* Rizzoli, 1991.

Otto, Randall, review of *Constructing the Ineffable: Contemporary Sacred Architecture*, by Karla Britton, in *Journal of Architectural Education* 62 (2): 73-74, 2008.

Owen, David. "The Dark Side: Making war on light pollution." *The New Yorker,* 20 August 2007.

Pauly, Danièle. *Barragán Space and Shadow, Walls and Colour*. Birkhäuser Architecture, 2008.

Pérez-Gómez, Alberto. *Built upon Love: Architectural Longing after Ethics and Aesthetics*. Cambridge: The MIT Press , 2008.

Plotinus. *The Enneads*. Faber and Faber Limited. Accessed at http://archive.org/stream/plotinustheennea033190mbp#page/n329/mode/2up on 09 May 2013. 270.

Qadeer, Mohammad A. "Pluralistic Planning for Multicultural Cities: The Canadian Practice," *Journal of the American Planning Association*, 63:4, 481-494.

Regimbald, Manon. "1987, Melvin Charney: The Canadian Centre for Architecture Garden (1987-1990)," *Espace Sculpture* 81: 11, 2007. Accessed at http://www.erudit.org/culture/espace1041666/espace1050215/9266ac.pdf on 09 July 2013.

Relph, Edward. *Place and Placelessness*. Pion Ltd, 1976.

Rosenau, Helen. *The Ideal City: Its Architectural Evolution in Europe*. London: Routledge Kegan & Paul, 1983.

Rossi, Aldo. *The Architecture of the City.* The MIT Press, 1984.

Sacks, Jonathan. *The Persistence of Faith: Religion, Morality and Society in a Secular Age*. Bloomsbury Academic, 2005.

"Sacred" Oxford English Dictionary. Second Edition. Clarendon Press: Oxford, 1989.

Saieh, Nicole. "Multiplicity and Memory: Talking About Architecture with Peter Zumthor" (interview with Peter Zumthor). Accessed at http://www.archdaily.com/85656/multiplicity-and-memory-talking-about-architecture-with-peter-zumthor/ (ArchDaily), 02 November 2010.

Sandercock, Leonie. *Cosmopolis II: Mongrel Cities.* Continuum, 2003.

Sitte, Camillo, "The Meager and Unimaginative Character of Modern City Plans" and "Artistic Limitations of Modern City Planning," in *The Urban Design Reader*, eds. M. Larice & E. Macdonald (London and New York: Routledge, 2006), 35-42.

Smarthistory, "Brunelleschi's Old Sacristy," http://smarthistory.khanacademy.org/brunelleschis-old-sacristy.html, 2012, accessed on 09 June 2013.

Smith, Thomas Roger. *Architecture: Gothic and Renaissance.* Society for Promoting Christian Knowledge, 1908.

Spreiregen, Paul. *Urban Design: The Architecture of Towns and Cities*. Krieger Publishing Company, 1982.

Tanizaki, Junichiro. *In Praise of Shadows.* Leete's Island Books, 1977.

The Archbishop's Council, *Faithful Cities: A Call for Celebration, Vision and Justice* (London:

The Report from the Commission on Urban Life and Faith, 2006).

The Archeffect, "CCA Sculpture Garden" http://www.archeffect.tumblr.com/sculpturegarden, accessed on 12 July 2013.

The Pritzker Architecture Prize. "Ceremony Acceptance Speech: Luis Barragán," http://www.pritzkerprize.com/1980/ceremony_speech1, 1980. Accessed on 23 March 2013.

Town Greens, "Not a Park or Mere Pleasure Ground: a Case Study of the New Haven Green," http://www.towngreens.com/DOCUMENTS/tg_newhaven_case.pdf, 2001, accessed on 01 July 2013.

Tschumi, Christian. "Between Tradition and Modernity: The Karesansui Gardens of Mirei Shigemori," *Landscape Journal*, 25 (1): 115, 2006.

Walker, Andrew, and Aaron Kennedy. *Discovering the Spirit in the City*. Continuum International Publishing Group, 2010.

Walter, E.V. *Placeways: A Theory of the Human Environment.* Scholarly Book Services Inc, 2002.

Wood, Elizabeth. "Le Jardin du Centre Canadien d'Architecture: La Beauté Transversale" Espace Sculpture 31: 6-10, 1995. Accessed at http://www.erudit.org/culture/espace1041666/espace1046590/199ac.pdf on 09 July 2013.

Zumthor, Peter. Atmospheres. Birkhäuser Architecture, 2006.

Zumthor, Peter. Thinking Architecture. Birkhäuser Architecture, 2010.