

A COMPARATIVE ANALYSIS OF KENNETH FRAMPTON'S CRITICAL REGIONALISM
AND WILLIAM J. R. CURTIS'S AUTHENTIC REGIONALISM AS A MEANS FOR
EVALUATING TWO HOUSES BY MEXICAN ARCHITECT LUIS BARRAGAN

by

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Abstract

This thesis examines the notion of regional identity and connection to place as a means for developing countries to use their cultural heritage, traditional construction methods, and everyday life patterns to create a built environment appropriate for contemporary needs. Regional identity expressed through architectural form not only establishes a connection between people and the space they inhabit but also contributes to conserving the natural environment and strengthening people's attachment to place.

To support this claim, the thesis focuses on two design thinkers who have examined placemaking from a regional perspective: Architectural theorist Kenneth Frampton and his theory of critical regionalism (Frampton 1983, 1987); and architectural theorist William J.R. Curtis and his theory of authentic regionalism (1986). Using criteria derived from Frampton's and Curtis's theories, this thesis analyses two Mexico City houses designed by Mexican architect Luis Barragan: his home and studio, built in 1947; and the Eduardo Prieto Lopez house, built in 1950. Using contrasting criteria from Frampton and Curtis, I examine these two houses' relative success in evoking a sense of regional identity. I argue that my analysis of the two houses, first, offers possibilities for clarifying Curtis's and Frampton's understandings of good regional architecture; and second, indicates how local tradition might be adequately integrated with global modernity, while at the same time providing a unique sense of place.

Keywords: Kenneth Frampton, William J. R. Curtis, Luis Barragan, critical regionalism, authentic regionalism, placemaking, regional identity.

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Dedication

To Heidi, my inspiration, my love, my everything, and in loving memory of my grandmother Alba Teresa de Orozco.

Chapter 1 - Kenneth Frampton's Critical Regionalism and William Curtis's Authentic Regionalism

Introduction

In modern culture, there is an ever-growing emphasis on responding to global needs yet retaining a sense of local sustainability. In architecture, there has been a gradual shift towards a built environment more respectful to site, resource consumption, and environmental well being. The need to create regional integration within our dwelling spaces becomes imperative as our world is consumed by inhuman mechanical places and poorly planned human settlements.

As the effort to find an adequate contemporary architecture many developing countries are still seeking to find a voice, an identity, and a way to compete with world architectural tendencies while at the same time maintaining connections to their culture and to economic reality. As many architects and urban theorists are beginning to realize, an authentic connection to place is imperative in creating an architecture that not only responds to the basic needs of people in specific geographic locations but is also an extension of local identity and a reflection of cultural heritage. The concept of regionalism in architecture contributes to establishing a strong sense of place for developing countries and may prove crucial in shaping their social structure, environmental awareness, and economic stability. This thesis argues that, to create a truly sustainable environment, profound links must exist between people, nature, and the built environment. In addition, this architecture must remain relevant to the ever-changing realities of the modern world.

Architectural theorists Kenneth Frampton (1983, 1987, 1992) and William J. R. Curtis (1982, 1987, 1996) propose theories that could serve to establish a renewed connection to place while complying with contemporary needs. This thesis compares, contrasts, and evaluates these two theorist's ideas, striving for an integration that might offer comprehensive guidelines for sustainable regional placemaking.

Specifically, this thesis uses evaluative criteria derived from Kenneth Frampton's critical regionalism (Frampton 1983, 1987, 1992) and William Curtis's authentic regionalism (Curtis 1987) to analyze two Mexico City houses designed by Mexican architect Luis Barragan: Barragan's home and studio built in 1948; and the Prieto Lopez house, built in 1950. My aim is to examine these two houses' relative success in evoking a sense of regional identity by drawing on the contrasting criteria of Frampton and Curtis. I argue that my analysis of the two houses: (1) offers possibilities for clarifying Curtis's and Frampton's understandings of good regional architecture; and (2) provides an indication as to how local tradition might be adequately integrated in relation to global modernity, while at the same time being able to provide a unique sense of place.

The thesis is comprised of four chapters. This first chapter reviews Frampton's critical regionalism and Curtis's authentic regionalism as well as providing a comparative analysis of the two points of view. Chapter 2 presents Luis Barragan's architecture, considered in terms of the Mexican context, including the design of the two houses. Chapter 3 evaluates the two houses from Frampton's and Curtis's perspectives, exploring their meanings of and connections with place. Finally Chapter 4 presents concluding thoughts in regard to Barragan's integration of local tradition and global modernity as a valid means of creating place, and on the combination of Frampton's and Curtis's theories as a frame of reference for an integrated regional and place based architecture in tune with modern needs.

The next section of this first chapter reviews Kenneth Frampton's theory of critical regionalism, followed by a section reviewing William Curtis's theory of authentic regionalism.

Frampton's Critical Regionalism

Kenneth Frampton was born in 1930 in Woking, England. He was trained as an architect at the Architectural Association School of Architecture in London. He has worked as an architect, architectural historian, and critic. He is currently the Ware Professor at the Graduate School of Architecture, Planning, and Preservation at Columbia University in New York City. Frampton is the author of many books and essays on modern and contemporary architecture (Frampton 1980, 1985, 1992) and his thoughts on the evolution and interpretation of architecture are utilized in this thesis to acquire a better understanding of placemaking, cultural identity, and contemporary architectural demands.

Frampton's book length works includes *Modern Architecture: A Critical History* (Frampton 1992) and *Studies in Tectonic Culture* (Frampton 1995). His concept of critical regionalism, the main focus in this thesis, was first presented in "Towards a Critical Regionalism: Six Points for an Architecture of Resistance" in 1983 (Frampton 1983) and then revised in 1987 as "Ten Points on Architecture of Regionalism: A Provisional Polemic" (Frampton 1987).

Although Frampton's concept of critical regionalism is detailed in these two essays, the starting point for its full understanding is his *Modern Architecture: A Critical History*, specifically chapter 5, "Critical Regionalism: Modern Architecture and Cultural Identity." In this chapter, Frampton establishes the importance of both rootedness to place and also modern innovation when creating a new work of architecture. Frampton uses philosopher Paul Ricoeur's essay "*Universal Civilizations and National Cultures*" (Ricoeur 1961) to make his argument. For Ricoeur, the universalization of human culture has been imposed around the globe, and with the rise of a single-world civilization comes the loss of diversity and the disappearance of local traditional cultures that are the creative nucleus for defining place. This phenomenon becomes

more palpable in developing countries, as their pursuit of a better built environment requires a delicate balance between rootedness to place and the ability to participate in modern civilization. The imposition of universal culture is inevitable however, diminishing if not completely extinguishing the links to the cultural past (Frampton 1992, p.314). For both Ricoeur and Frampton, in order for architecture to retain its social value, the built environment must strive to preserve meanings of the past but also comply with the demands of the future.

Frampton emphasizes however, that his critical regionalism is not synonymous with vernacular architecture. The climatic conditions, culture, myth, and craft of a region are not to be reduced to indigenous forms. Both ancient and modern cultures are not the product of a single heritage, but rather hybrids of several cultures found in a region's past. A global modernization continues to reduce the relevance of agrarian-based culture, and our connection to past ways of life is broken, as the presence of a universal world culture overpowers regionalist tendencies. Therefore, regional culture must not be taken for granted as automatically imposed by place but, rather, cultivated and presented through the built environment. This is why, according to Frampton, Ricoeur implies that regional or national cultures today must be locally inflected manifestations of world culture (Frampton 1992, p.315).

While Frampton does critique the uniformity of modernism, he does not dismiss the technical value and cultural possibilities that a century of modernism has contributed to human settlements. Rather, Frampton seeks an architectural language that reinterprets indigenous solutions and also reflects the technological capacities of modernity. Through its tectonic form, adaptability to location, social relevance, and architectural vocabulary, a building may reinterpret old traditions in a modern setting (Frampton 1992). For Frampton, this metaphorical representation of the past reinvigorated through modern techniques and local material has been accomplished in the works of several international architects, and it is useful to review some of these designers here.

One example is Danish architect Jorn Utzon's Bagsvaerd Church, located in a suburb in the outskirts of Copenhagen and built in 1976. Frampton explains how Utzon uses pre-cast concrete standard components in the church design and combines them on site with reinforced shell vaults (Frampton 1992, p. 315) to create building volumes that provide a sense of sacred monumentality. Outside towards the street, the church retains a certain industrial imagery grounded in contemporary materials that include concrete walls, and aluminum-glass roofs

(<http://www.arcspace.com/architects/utzon/bagsvaerd.html>). The church's modular assembly and construction efficiency reflect the principles of global culture, yet Utzon uses the folded concrete shell as a way to allude to Nordic vernacular architecture, reinterpreting the barn form found in rural Scandinavian landscapes (Frampton 1992, p. 315).

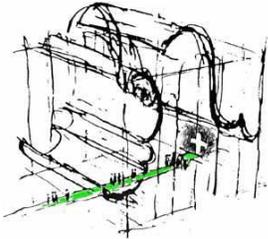


Figure 1.1 Sketch of Bagsvaerd church by Utzon Architects

<http://www.arcspace.com/architects/utzon/bagsvaerd.html>



Figure 1.2 (<http://www.arcspace.com/architects/utzon/bagsvaerd.html>)



Figure 1.3 Interior of Bagsvaerd church

<http://www.arcspace.com/architects/utzon/bagsvaerd.html>

Frampton also uses the work of Tadao Ando to exemplify critical regionalism. (Frampton 1992, p. 324) argues that Ando applies the vocabulary and techniques developed by modernism to express individual lifestyles and regional differentiation. Yet Frampton claims that Ando also stresses the difficulties in expressing the specific sensibilities, customs and aesthetic awareness, distinctive culture, and social traditions of a given cultural group by means of modernist vocabulary. (Frampton 1992, p. 324) Frampton explains that Ando's frequent delimitation of space through concrete walls, while abstract and geometrically simple, evokes certain environmental and cultural qualities that add intimacy and identity to his buildings. Ando's work often features small urban houses that encircle courtyard spaces. He utilizes the surface of concrete rather than its mass to emphasize spatial details within precise geometric forms providing intense shadows and bouncing light off surfaces to enrich the experience of place. For example, Ando (Frampton 1992, p. 325) describes his Koshino House:

"Light changes expressions with time, I believe that the architectural materials do not end with wood and concrete that have tangible forms but go beyond to include light and wind which appeals to the senses...Detail exists as the most important element in expressing identity...thus to me, the detail is an element which achieves the physical composition of architecture, but at the same time is a generator of an image of architecture."



Figure 1.4 Koshino House, Hyogo Prefecture, Japan (1981) -

<http://www.minimalismic.com/blog/2010/11/tadao-ando-uncovered/>

While not every aspect of Frampton's theory is taken into account by Ando and Utzon, their works provide a frame of reference for creating connections to regional factors and cultural heritage in accordance with the current universalized civilization. In this sense, one can summarize Frampton's critical regionalism, not as a style, but as a process of assimilation, a critical category that determines common features or attitudes (Frampton 1992, p. 325) that embrace and emphasize specific characteristics of site, climatic conditions, geographic positioning, environmental context, and local cultural background expressed through unique structural compositions utilizing a contemporary architectural language, thus strengthening regional identity and contributing to the creation of place.

Points for a Critical Regionalism

As the previous section explained, Frampton's critical regionalism serves to counteract the loss of regional culture imposed by global development. In his article, "Towards a Critical Regionalism: Six Points for an Architecture of Resistance," Frampton addresses the degenerative condition of traditional culture and the way in which our current technocratic world has shifted society to the universalization of civilization (Frampton 1983). Because of this phenomenon, Frampton seeks a new type of architecture that synthesizes the identity, history, and culture of a region with contemporary demands and an image of prosperity—in short architecture of resistance. To achieve this process of integration between tradition and modernity, Frampton devised a theoretical framework of specific features that represent critical regionalism, resulting in the points listed in Table 1.

1. *Culture and Civilization*
2. *The rise and fall of the Avant-Garde*
3. *Critical Regionalism and World culture*
4. *The resistance of the Place Form*
5. *Culture Versus nature: Topography, Context, climate, light and Tectonic Form.*
6. *The Visual Versus the Tactile*

Table 1.1 . Frampton's six points of a Critical Architecture (Frampton 1983).

Each of these points addresses specific issues that evolve around the concept of creating place under contemporary circumstances. While Frampton argues that each of these are fundamental features that must be considered in creating an architecture of resistance, he does not intend these points to be a step-by-step recipe for regional design but rather broad conceptual guidelines for establishing good regional practice and integrating a sense of place within architectural spaces.

While the six points of Table 1 set the groundwork of his critical theory on the current architectural tendencies of society, this thesis will use Frampton's later article, “Ten Points on an Architecture of Regionalism: A Provisional Polemic” (Frampton 1987), as a source for evaluation criteria for Barragan's two houses. This article features the same basic precepts previously established in his six points, but reads as a more detailed conceptual proposal of critical regionalism, serving more comprehensively as a starting points for critical analysis of a particular building. Frampton's ten points of a critical regionalism are listed in table 2

1. *Critical Regionalism and Vernacular Form*
2. *The Modern Movement*
3. *The Myth and Reality of the Region*
4. *Information and Experience.*
5. *Space/Place*
6. *Typology and Topography*
7. *Architectural Scenography*
8. *Artificial Vs Natural*
9. *Visual / Tactile*
10. *Post Modernism and Regionalism: A summation.*

Table 1.2 Frampton's ten points of a Critical Architecture (Frampton 1983).

Although each of these points may be fundamental in the creation of a new, regionally appropriate built environment, not all of them will be utilized in this thesis for the analysis of the two Barragan houses. This decision is due to the fact that some of these points are not applicable in the context of Mexico or in the time period in which the houses were built. For example in Point 4, "Information and Experience", Frampton describes the negative effects on the manipulation of a place's image by the mass media and its distortion in the perception of a particular building. This distortion causes a misrepresentation of certain places due to media over-exposure, modifying the place's local meanings and greatly reducing our place experience. For Frampton, this causes architecture to become a sequence of scenic views rather than a multisensory experience expressed in tectonic form. This is why he emphasizes differentiating between information and actual experience of place. Yet in the case of both houses by Barragan, mass media did not and has not caused a radically different perception of place, nor has it modified the buildings underlining meanings. During the time the houses were built, the late 1940s and early 1950s, this point wasn't even relevant in the design thought process. For these reasons, I abstain from referring to Information and experience as part of the evaluation of the two houses.

I have also chosen not to include Point 10, "Post Modernism and Regionalism," in my interpretation of the two Barragan houses. This point is basically a summary of critical regionalism and the possible directions architecture may take in the future. In this point,

Frampton identifies protagonists of post-modernity and divides them into two groups: the "neo-historics" and the "neo-avant-gardists." The neo-historians believe that the avant-garde is no longer adequate and seek to find new meanings in architecture through revival of old traditions, while the neo-avant-gardists break with all connections to traditional values and seek instead an entirely new dialect (Frampton 1987).

Neither of these directions is an issue in Barragan's architecture. With the rich cultural identity found in both Mexico's modernist revolutionary art and historical robustness of the built environment, this point is mostly irrelevant as an evaluation criterion. Also post-modernism in this region has not been truly developed, and the economic and social structure of the country does not yet allow for it to flourish. Some of these issues will be discussed in this thesis last chapter as part of my concluding thoughts on critical regionalism applied to Mexico and my home country of Guatemala. Therefore Point 10 is not taken into account for evaluating Barragan's two houses. In summary, I will utilize only eight of Frampton's ten points. These eight points are listed in table 3 as evaluation criterion for Barragan's two houses.

<ol style="list-style-type: none">1. <i>Critical Regionalism and Vernacular Form</i>2. <i>The Modern Movement</i>3. <i>The Myth and Reality of the Region</i>4. <i>Space/Place</i>5. <i>Typology and Topography</i>6. <i>Architectural Scenography</i>7. <i>Artificial Vs Natural</i>8. <i>Visual / Tactile</i>

Table 1.3. Eight points derived from Frampton's Critical Architecture by author. (Frampton 1983).

By examining these eight points, I can determine how critical regionalism addresses the design and construction issues needed to establish regional identity, social relevance, and universal appeal when creating new built environments, specifically in the context of a

developing country like Guatemala. These particular eight points are also best suited for evaluating Luis Barragan's two houses in terms of their regional characteristics as well as their cultural, environmental and social response through a Mexican perspective. In the next section I will discuss each point in detail.

1. Critical Regionalism and the Vernacular

Frampton's first point, "critical regionalism and the vernacular," establishes the role that vernacular architecture plays in defining regional identity and retaining roots to the past within the built environment. In this point, Frampton claims a distinct separation of "regionalism" from "critical regionalism." For Frampton, regionalism is often associated with a sentimental return to the vernacular, resulting in an architectural form that seems primitive, outdated, or irrelevant to current global demands. While Frampton suggests that the vernacular is a cultural construct that was generated in the past and possibly imposed by necessity to serve for a purely functional reasons with no real artistic philosophy behind it, he believes in taking a lesson from the indigenous solutions of the past (Frampton 1987). Critical regionalism infers that the value of tradition in the built environment is not only impregnated in its architectural history, but also in the acknowledgement of the specific characteristics of site and climate to which it creates adequate response.

Critical regionalism promotes an architectural form that stands as a support for the late modern world, reflecting the evolution of function into a pleasing aesthetic form with relevance to current context. To Frampton, this can be achieved through an adequate use of regional materials and construction methods as well as through the analysis of the vernacular in its response to climate and topography. The main approach for architects who attempt to actualize Frampton's first point is to read, interpret, and redefine the vernacular style of a region, so that contemporary built environments maintain their roots to place by using vernacular references to create a modern and regional reflection of local cultural identity.

I intend to apply this point in evaluating Barragan's vernacular tendencies expressed in his buildings and the manner in which he makes an adequate representation of México's past, considering whether he uses the forms found in colonial and pre-Columbian history in a literal

or abstract manner. This in turn will help define the adequate use of vernacular elements in reinterpreting architectural heritage to create a contemporary living space.

2. The Modern Movement

Frampton's second point, "the modern movement," acknowledges the importance of modernism when creating new architecture and searches for an appropriate use of its concepts in regard to critical regionalism. In this point, Frampton seeks an adequate use of modernist concepts and technologies in his critical regionalism, which seeks to relate to global realities, present universal appeal, and compliance with contemporary needs. While modernism is often criticized for its detachment from people and place, referencing the machine, lacking human features, and eliminating lively spaces, Frampton believes that modernism still provides relevant cultural references for a new architecture. The cultural heritage in modernism is still of value in regard to current global tendencies. Frampton argues that it would be a mistake to dismiss a century of tradition because of the misuse of modernist concepts. There are cases where critical regionalism truly shines as a complex cultural construct as, for example, in the work of Frank Lloyd Wright, who according to Frampton, represents one of the few credible attempts to create something with a sense of place and self. Wright's work stands out in his use of shape and scales, while at the same time incorporating social and environmental sensitivity (Frampton 1987, p.22).

It is important to emphasize that, though Frampton interprets modernism as a point of departure for new architectural development, he believes that an adequate analysis and critique of functionalism and pure forms found in modern architecture can be redefined in a way that enhances regional Identity. The use of structural rationalism is also important to Frampton, as construction and structure should be easily understood in order to be recognized and acknowledged as part of a regional culture. For Frampton, architecture is cultural politics, and modernism remains relevant because of its cultural legacy and its conceptual validity towards creation of place (Frampton 1987).

In regard to this thesis, precedents of modern architecture can be found in the urban landscape of Mexico City, and a rationalist approach is used in the design of several governmental buildings and low-income housing complexes. Later I will evaluate how modernist concepts and protagonists of the modern movement influence Barragan's designs, and how he

adapts modernism's functionalism to cultural behavioral patterns found in this region's everyday life. We shall see how this point relates to Barragan's ability to incorporate contemporary language into his two houses.

3. A Region's Myth and Reality

In this third point, Frampton seeks to establish the limits of a region and its institutional status. This point explores how region as an institution, both formal and informal, influences regional image and experience of place, as well as function and form of local architecture. To Frampton, it's erroneous to assume that a region is conceived only in terms of locality and climate, although they do shape the architectural form. Frampton refers to the importance of region as an institution, by this he means that it belongs to a school of thought, typology of architecture, and typical local culture.

There are two main non-physical characteristics to be considered: "Discourse", meaning "school" or cultural constructs that serve as a path for a region to become associated with local culture; and "client," meaning that cultural significance can only be reached if the inhabitants of a region allow it (Frampton 1987).

Frampton believes that, for critical regionalism to be successful, "schools" must be created. These schools are conceptual cultural institutions that are considered myths. The word "myth" to Frampton is not to be associated negatively with fake, untrue or unlikely, but rather with the importance of glorified precedents and association with grandeur of a region. Even if, in reality, regions are far more complex and often defined by political boundaries, myths can serve as a catalyst for positive change in placemaking. It must be clarified that Frampton is not suggesting replicating a stereotypical perception of place, but rather using "myths" as references and incorporating unique cultural identity and quality of place to a new development in a specific region. In regard to Barragan's two houses, Mexico's rich history becomes a reason to explore what forms are true to the schools established by a region and which have lost their authentic value and become mere stereotypical representations of place, I will use this third point to determine how Barragan deals with Mexico's historic heritage and expresses it in a way that it does not become a pastiche version of colonial or pre-Columbian architecture.

4. Space and Place

In point 4, "space and place," Frampton explores the living and social spaces of a building and the interrelation of these spaces with the greater context of place. For Frampton, a work of architecture must not be perceived as a free standing object, but rather as connected and defined by the characteristics of place, such as local livelihood, distinctive social structure, and the character of its people. In this fourth point, Frampton notes that there is a difference between the physical space of a region and the place where life and community interaction occurs. When utilizing critical regionalism in design, architecture cannot be limited by physical space, and identity of place cannot be contained by an independent building. Although architecture may enclose spaces, its boundaries should not be seen as the end of place, but rather the beginning.

Frampton criticizes the megalopolis type of urban development, agreeing with Melvin Webber that there is a proliferation of "communities without propinquity," or a "non-place urban realm" referring to the lack of regional values in the growth and creation of cities (Frampton 1987). Critical regionalism seeks to promote regional value through a dynamic flow between space and place that permits an integration of architecture to its surrounding urban context. Frampton emphasizes the need to examine the spatial layout of a building and to analyze how it encloses space, connects various areas, distributes circulation, allows access, creates exits, and manages its structural composition to open up to the exterior values of place.

For this point, I will examine Barragan's way of integrating his buildings with the surrounding context. I ask if his work manages to capture the vitality of Mexico's social character within the building interior and exterior spaces. I will establish how his unique architectural spaces create a link between each other, reflect local regional values, and establish a deep connection to the surrounding environmental and socio-cultural context.

5. Typology and Topography

In point 5, "typology and topography," Frampton identifies and defines these two elements, stating that they are important factors necessary for creating an architectural structure that relates to regional cultural background while at the same time responding adequately to the demands of the physical landscape. Both typology and topography intricately affect the shape and form of the built environment, and in turn establish a regional identity.

Typology, for Frampton, is derived from civilization and culture. It reflects the cultural evolution of human settlements as they adapt to place and react to certain regional qualities, with a vernacular principle being passed down through time and becoming an iconic element identified with place. Topography, on the other hand, is site-specific and relates to the inherent shape of the existing natural environment as it becomes a defining characteristic of a particular place.

As people establish their dwelling space upon the natural landscape, typology and topography must be adequately integrated in order to create an architectural element that is not a free standing object but rather cultivates a strong relationship to its surrounding context. The geographic location and cultural legacy of the region will determine the ecological, and climatologically, and symbolic aspects of place. This then establishes a "place-form" balance between the natural environment and the cultural heritage which defines a societies identity.

In the case of Mexico, there is a wide range of topographies and multi-ethnic groups across the country. Although the entire nation shares similar cultural background, much diversity is found in both geological form and local traditions. This provides vastly different urban and rural landscapes throughout the country, which makes typology and topography a fundamental part of Mexico's identity. In this thesis, I will use Frampton's fifth point to examine Barragan's integration of local architectural forms, regional customs, and cultural sensibilities with specific geographic landforms.

6. Architectural/Scenography

In point six, "architectural/scenography," Frampton establishes the importance of architecture to be appreciated as a structural form, acknowledging its assembly and artistic composition as a whole not just as an aesthetic sequential scenes. This point seeks to understand the merits of architecture as an integrated experience, a whole greater than the sum of its parts, and how to create effective building in synch with place, instead of creating opportunity for shallow vistas.

Frampton refers to the generic term "architectonic" not only as the technical means of supporting a building, but also as the mythic reality of this structural achievement (Frampton 1987). For Frampton a building should exhibit the way in which its different components come

together and interact with nature, revealing its capacity to resist climate and time. Scenography, on the other hand, is described by Frampton as deriving from the Latin word "scena," meaning scene, and thus being essentially representative in nature (Frampton 1987).

Frampton reveals how these concepts can be perceived as contrasting elements, with "architectonic" referring to a human-made structure that adapts to its environment versus scenography, which is considered a picturesque perception of the natural landscape. In this sense, Frampton criticizes the current tendencies that reduce architecture to a series of aesthetically pleasing scenes rather than presenting it as a structural composition that carries deep human value and awareness of its surrounding natural environment. Frampton believes that architecture should be appreciated as a structural achievement that integrates itself to the surrounding context to provide a deeper awareness of place. For this point, I will explore how Barragan manages the structural composition of his buildings to showcase traditional culture, regional values, and complement the natural landscape without reducing his architectural to a series of scenic sequences.

7. Artificial vs. Natural

In point 7, "artificial vs. natural," Frampton's goal is to identify what artificial and natural elements are most adequate when creating a regionally sensitive architecture and how they are best utilized to improve the formal and functional qualities of the building. He not only looks at what design premises are most beneficial for incorporating and addressing local climatic conditions, but also seeks a balance that provides both connection to place and comfort that creates better quality of life for its users.

Frampton makes a point about our dependency upon technology to establish the most adequate living environment, retaining a global culture of artificial comfort that eliminate nature's diversity and denies the opportunity for different experiences of place according to region. We have created a global standard for how our immediate landscape should be experienced, constantly eliminating natural topography by replacing it with easily accessible flat floors and eliminating climatic experience of place by enclosing spaces to establish a controlled climate. As Lisa Hescong (1979) suggests in *Thermal Delight*, our perception of the thermal environment gives us a wide range of emotional connections to place. To replace the climatic

qualities of a region with universal thermal standards is to completely remove ourselves from a place.

Frampton emphasizes that the built environment needs direct connection to nature and its surrounding context, and how a building utilizes natural and artificial light can speak volumes regarding its regional location. However, Frampton argues not for the complete elimination of artificial lighting, air-conditioning, and other modern technologies, but rather the balance between the techniques of universal civilization that soothe extreme weathers and rooted cultural forms that adequately address climatic variations of a region and enhance our experience of place. In relation to Barragan's two houses, I will explore his embrace of nature within architectural spaces, how climatic conditions of the region are addressed, and what natural and artificial elements are incorporated in his design premises.

8. Visual and Tactile

In point eight, "visual and tactile," Frampton considers incorporating the use of the various human senses to enhance experience of place, therefore creating an architecture of depth and uniqueness. For Frampton, our current society has an overemphasis on visual response and, although it plays an important part in how we perceive the world around us, we must realize the potential for the body to read the environment and experience it using all the senses. Much like Juhani Pallasma suggests in *The Eyes of the Skin*, we must find "a new vision and sensory balance"(Pallasma 1996, p.35). For Frampton, a multisensory, bodily experience creates a deeper relationship with the built environment, and these experiential opportunities not only establish the uniqueness of place but also help the rejection of a technocratic global mindset.

To fully exploit regional qualities, all senses must be incorporated in the experience of a building belonging to a specific place. Critical regionalism acknowledges and embraces this concept; it promotes the use of materials that have certain local affinities, structures that provide certain bodily response, and the regional seasonal changes that permit diverse emotional reactions. Diverse sensory experiences presented in the context of modern buildings may create new, unique and local experience of place. Using the eighth point, I will explore Barragan's efforts to enhance the ways in which his architecture is experienced. I will identify what

particular elements appeal to the visual, and how he uses geometric shapes, cultural patterns, material and unique climate of the region to give a wide range of sensory encounters upon place.

Finally, Frampton's overall perspective on integrating modernism and tradition is relevant not only to today's universal and global world views, but also to Mexico's regional condition. Frampton's theory creates the opportunity for reflecting culture in an adequate contemporary way as to be seen and respected at an international level, without the loss of identity and cultural heritage. This is the core value of critical regionalism and becomes the distinctive theme in Barragan's work, which seems to reflect a deep connection to place, while at the same time displaying a profound knowledge of contemporary techniques, art forms and social realities.

William J.R. Curtis and Authentic Regionalism

Having overviewed Frampton's theory of critical regionalism, I next turn to William Curtis's authentic regionalism. William J.R. Curtis was born in 1948 in Birchington, Kent, England. He studied at the Courtauld Institute of Art in London and later at Harvard University. He has taught the history of architecture and theories of design at universities in England, the United States, Australia, and Mexico. His books include *Le Corbusier: Ideas and Forms* (Curtis 1986), *Le Corbusier at Work* (Curtis 1978), and several monograms and exhibition catalogues. His most recognized book is *Modern Architecture since 1900* (Curtis 1996). Curtis's views on modernism with a regional conscience are best explained in *Architecture since 1900*, especially in chapter 31, "Modernity, Tradition and Identity in the Developing World." This next section will help set the tone for Curtis's approach to placemaking, and my thesis will use his perspective, along with Frampton's, to evaluate of Barragan two Mexico City houses.

Curtis explains how modernist architecture was the result of a progressive mindset that fostered industrial development and, in turn, led to a gradual shift in the social and economic conditions of the West. In the 1940s and 1950s, modernism began to have an impact on less developed countries, which began to seek an architectural form that reflected a shifting stature in the modern world (Curtis 1996). However, because of this rapid change, developing countries did not represent the true meanings and depth of modernism in their built environment. Where industrialized nations had over a century of theoretical and practical evolution of their built

environment (culminating in modernist architecture), developing countries wanted quick, cheap, "carbon copies" of an industrial image and did not fully understand the functional and structural qualities of modernism. The result was stereotypical concrete-and-glass boxes that symbolized greater economic capacity but were often very much detached from the realities of place.

As developing countries continued to expand their global reach, the irrelevance of local building methods, social structure, and climatic conditions was more noticeable in third-world architecture, and a search for a new identity started. One solution was to combine indigenous and imported qualities, so as to merge heritage with future prospects. However, this proved complicated, as the techniques, design process, and construction in developing countries typically were greatly different from industrial nations and many contemporary methods were irrelevant. The result was the same concrete-and-glass boxes with a few traditional elements pasted on the surface. One regularly finds a type of fake-regionalism that, while taking certain vernacular forms into account, does not adequately translate them into modern architectural language (Curtis 1996, p. 568).

Curtis points out that there were other problems with combining modernism and traditional vernacular (Curtis 1996, p. 568). Not only did these new forms conflict with century-old building traditions, but they were also often irrelevant for a country's culture, natural landscape, and regional climatic conditions. A conflict occurred as imported technologies were accompanied by the imposition of alien social theories, especially in the field of housing (Curtis 1996, p. 569). While the new paradigm was to provide habitable space for growing urban settlements, it tended to ignore traditional building methods, imposing industrialized modern structures that usually lacked any connection to the local way of life. Curtis uses Egyptian architect Hassan Fathy (1969) as an example of one advocate for the practical logic of traditional building models. Fathy argued that the low-cost concrete-frame housing schemes used in Europe were not only inappropriate in his home country Egypt, but were also likely to be more expensive in terms of money transport costs and salaries than local, traditional self-build models (Fathy 1969).

While Curtis does acknowledge the importance of finding adequate responses to particular places, cultures, and climates through regionalist ideals, he also sees the need for architecture to remain relevant to the modern paradigm. Yet the question remains: How, if we

are designing according to a specific place, can we seek to have traces of international and standardized architecture within our designs? (Curtis 1986).

Curtis suggests that this problem of integrating tradition and modernity is especially relevant in third-world countries, where vernacular architecture is often composed of an eclectic mix of local structural solutions and imposed foreign styles. He infers that developing nations utilize regionalism as a way of identity that brings together local tradition and global needs. For Curtis regionalism looks for sustaining spiritual forces and refuses to accept that a tradition is a fixed set of devices and images (Curtis 1986, p. 24). Yet he does argue that it is not merely about repetitive forms over the course of the ages. Rather he looks at tradition as an evolution of culture and social structure which must be experienced in the built environment (Curtis 1987, p. 25).

In his work, Curtis proposes an authentic regionalism, which aims to understand indigenous archetypes and how they might be adapted to imported architectural types while retaining local values (Curtis 1986, p.25). But how do we read local tradition, which elements are valid and which are just romantic expressions of the past? According to Curtis, we must look beyond a particular element or form, and try to see the type, the general rule, and the originating principle. The vernacular reflects the manner in which local indigenous tradition deals with environmental and cultural qualities, so these principles must be translated into building functions of modern technologies (Curtis 1986, p. 25). In other words, if we are to fuse modernity with tradition, the meanings must come from the genuine core values of society, and basic needs must be met using regional solutions and local symbolic representations but drawing on new building technologies.

For Curtis, the word "regional", may range from geographic to climatic features, from ethnic groups to political boundaries (Curtis 1986, p.25). These factors have a greater importance in third-world countries, where sometimes it becomes difficult to separate true architecture born from cultural and social properties from national political propaganda infused in the meanings of the built environment. Also it's not about adapting to the background of a geographic location through long-lost vernacular but seeking the best solution based on how the vernacular principles solved a region's climatic issues in accordance with cultural values. Much like Frampton, Curtis does not look to the past with nostalgic sentiment, but rather with a critical eye for understanding the evolution of architectural form and cultural value. For Curtis, tradition is important for its

lasting humane and artistic values, not as a source for a picturesque scenography (Curtis 1986, p. 25).

One of Curtis's most interesting points is his reference to regionalism's contrast with urban development, trying to make a statement by maintaining tradition and rejecting industrialism (Curtis 1986, p. 28). To Curtis, regionalism may represent the continuing conflict between country and city, where the architectural form of the countryside seems to maintain roots to the vernacular and the city seeks to adapt to a global style. He goes further to suggest that regionalism may be born from the idea of incorporating industrial commodities to rural philosophies (Curtis 1986, p. 28). Unfortunately, this may result in problems of valid meanings in the architectural form, with banal representation of regional identity through farm tools or other objects found in the countryside. Vernacular figures are integrated without function to the new form, resulting in a cityscape with irrelevant indigenous figures or a country houses with glass facades. Curtis's authentic regionalism seeks to establish a philosophy that reinvigorates and re-imagines traditional values and then integrates such values to modern buildings without having to resort to questionable ornamentation.

Curtis's critique of modernism is that the "International Style" of the 1950s and 1960s established a norm of concrete structures and air-conditioning as an image of social-economic prosperity, which eliminated local building responses to specific climates, and the loss of visible regional cultural values. Curtis strongly opposes the simple reproduction of American or European trends in the context of developing countries. Similar to Frampton, Curtis believes that by eliminating the ability to experience regional climatic qualities, the sense of place is lost. Post-modernism does not escape criticism from Curtis, at least in this context, because it simply does not create architecture of depth or relevance to place. For Curtis, the time is right to create a new language in architecture: "Authentic regionalism tries to penetrate to what is of lasting worth in the present culture and in tradition, arbitrariness and superficiality are its enemies" (Curtis 1986, p. 26).

But Curtis, like Frampton, does make the clarification that not all modernism is devoid of meaning or relevance to place: "some of the best buildings have been based on fundamentals extracted from the past" (Curtis 1986, p.26). He applauds Frank Lloyd Wright in his use of adobe on his buildings thus using local materials and colors to connect to a region, Curtis also cites

Alvar Aalto's interpretation of village layouts and Luis Barragan's use of monumental shapes, Curtis thoughts on Barragan's architecture will be further explored shortly.

Going back to his theory of authentic regionalism, a key point for Curtis is the integration of modern and traditional design through the use of "principles". Once we return to the core values of both modern functionality and tradition's connection to cultural heritage, we can then create an architecture that uses modernity's simple interpretation of the past, with traditional building methods according to the specifics to place, interrelating culture and environment to define identity.

Most broadly, the main objective of Curtis's authentic regionalism is thus to provide place-based solutions to current society's technocratic and globalized needs through vernacular-originating principles; especially seeking design values and well-suited to locale and to climate, without falling into nostalgic sentimentality. The formal result will depend on the environmental context, and on the architectural history of the region. Curtis suggests looking at the past to find spatial distribution and scale of monumental buildings, which serve to establish a new language that might adapt to the current social structure. Authentic regionalism becomes the integration of old and new that is born from socio-cultural evolution, and from adaptability to current global tendencies (Curtis 1986).

In the evaluation of Barragan's two houses, the use of authentic regionalism becomes more complex, due to the fact that, while Frampton states specific points, Curtis's authentic regionalism is structured as an essay. However, this thesis makes use of the four main "points" of Curtis's theory as listed in table 5. I will use these four points, in conjunction with Frampton's eight points of table 4, to evaluate Barragan's two houses. The next section discusses each of these four points as I have distilled them from Curtis's broader discussion of authentic regionalism.

1. *The Evolution of Rural vs. Urban Form*
2. *Vernacular Principles*
3. *Regional Construction and Environmental Response*
4. *Traditional and Modern Values*

Table 4. Four points of Curtis's authentic regionalism (as identified by author, drawing on Curtis 1986, pp. 24-31; 1996, pp. 567-87) for evaluating Barragan's two houses.

1. The Evolution of Rural vs. Urban Form

By making this point central in Curtis's work, I give attention to his emphasis on how certain architectural elements in current urban settings have evolved from a rural background to provide regional identity: "Regionalism is inevitably involved in the struggle between city and country, industry and handicraft, peasant values and the up-rootedness of metropolis" (Curtis 1986, p.25). This point suggests that a continuing conflict remains between country and city, which reflects how society can draw to its countryside for regional roots but also draw on current urban images to establish more powerful architectural prestige. This contrast becomes part of an authentic regionalism, with certain traditional elements that emulate a rural past projected on to modern building structures in an urban setting. However the result must be an adequate balance between urban and rural, presenting a cohesive building that relates to modern living while connecting to the cultural heritage found in the countryside.

In pointing toward the possibility of a shift from traditional architecture to regional modernism, Curtis seeks to avoid superficial regional components mounted on contemporary buildings as a form of regional architecture. Any type of regional form found in contemporary buildings must be the result of an evolution of its function or cultural meaning, not merely for aesthetic or nostalgic reasons. Curtis emphasizes that these meanings must come from the genuine core values of a society as well as from regional solutions for addressing environmental issues. He stresses the importance of incorporating local cultural behaviors and social realities into the reasons behind any type of new architectural language, and he looks for basic needs being met using regional solutions and local symbolism, often found in the countryside.

In using this first point , I will explore the traces of rural memories found in Barragan's two houses, showing how he adapted these elements to the Mexico City urban fabric. I will also examine how he solved environmental challenges using traditional techniques adapted to fit current socio-political conditions.

2. Vernacular Principles

In identifying this point, I refer to Curtis's originating principle of architectural elements found in regionally sensitive architecture. Curtis argues for the use of vernacular principles to adequately address climatic and regional conditions, with traditional building forms reinterpreted and simplified using modernism concepts to have a universal appeal. For Curtis, an originating principle refers to the original form or element which was used in traditional architecture and is then abstracted or transformed to serve contemporary purposes (Curtis 1986, p.25).

For Curtis, authentic regionalism must have real connections to its cultural heritage and must be a reflection of the spatial distribution that addresses social behavior in a specific region. Curtis emphasizes the need to locate a type or general rule or unique element of traditional cultural used to solve a regional issues and modifiable for contemporary needs. By utilizing this vernacular, a contemporary regional architecture might acquire depths of meaning, becoming an appropriate combination of tradition and modernity. This second point differs from the first one because it does not only look towards the rural landscape for its inspiration, but also refers to the collective architectural history of a region.

Using this point, I look for an originating principle in Barragan's houses with specific symbolic references. This will not only include the analysis of the geometric forms found in the two houses, but also the study of the spatial distribution and scale of references he might make to Mexico's rich vernacular history.

3. Regional Construction and Environmental Response

In developing this third point, I refer to Curtis concern with how the use of local building methodology generates an architecture that enhances regional identity. Curtis argues that regional architecture should not only incorporate cultural references, structural elements, and spatial layouts found in the vernacular, but also make use of local construction methods, regional

materials, and indigenous craftsmanship. This third point will also aid in establishing a deeper link to the environmental surroundings, as traditional methods dictate more place-based approaches to dealing with local climatic conditions and ecological context. For Curtis, to create a valid regional architecture, we must consider not only cultural heritage but also building tradition, craftsmanship, and practicality in the construction process as a source of regional value (Curtis 1996, p. 569).

For Curtis, regional identity is not only found in the architectural landscape and social patterns within the built environment, but also in the way in which people of a certain region design, build, and incorporate local craftsmanship and materials in the creation of human settlements: "When the vernacular is in a healthy state it certainly does not need interference of architects, for its tradition is a living one in which there is a happy consensus between user and builder, past and present, mind and hand" (Curtis 1986, p. 27)." According to Curtis, authentic regionalism will allow a given building to establish roots to place from its conceptual stage all the way to its construction, built by and for the people of a particular region.

By acknowledging local building patterns, Curtis believes that this will allow a more adequate response to the climatic variables of a specific region and its return to a past way of life that embraces nature and returns to rural sources: "Regionalism is a restorative philosophy in favor of supposed rural harmony between people, their artifacts and nature" (Curtis 1986, p. 25). What is key in this third point is integrating local building methods, regional materials, and traditional vernacular elements to create architecture that adapts and complements the surrounding natural environment. For Curtis, traditional vernacular not only links people to their cultural heritage but also allows a connection to local ecology.

For this point, I will explore how Barragan uses traditional building methods and materials in his two houses to enhance regional identity. I examine whether local construction techniques, craftsmanship, and regional material help provide better solutions for Mexico's distinct regional climatic conditions and if these elements provide harmony with the ecological background.

4. Traditional and Modern Values

In developing this last point, I refer to Curtis's efforts to identify the value that both tradition and modernism provide for regional architecture, both individually and combined. For Curtis "tradition is penetrated for lasting humane, cultural and artistic values not as a source for a picturesque scenography" (Curtis 1986, p. 25). Authentic regionalism must recognize the value of human history and cultural diversity impregnated in the built environment. Curtis argues that the value of tradition is not found in nostalgic aesthetic qualities, but in its cultural heritage, serving as evidence of human achievement and providing precedents for establishing architectural identity of a region.

While Curtis applauds traditional architecture and mostly criticizes modernity, he does not dismiss its importance in current global context, and draws positive lessons from its functionality and poetic representation of space, but most importantly acknowledges it as a step in improving the built environment: "Modernism still provides lessons, and not all modernist architecture should be considered rootless, purely functional, and anti-symbolic....The best buildings have been based upon fundamentals abstracted from the past, some even provide valuable sign-posts towards authentic regionalism" (Curtis 1986, p. 26). While Curtis doesn't address the issue thoroughly, he still regards modernism as part of human evolution within place, reflecting a response to the shifting social-cultural demands of the modern world. Most broadly, Curtis suggests that the traditional values found in vernacular architecture combined with the abstract, poetic concepts of modernity can provide a new type that architecture, one that evokes a deep cultural meaning featuring a universal language: "Rigorous modernity and a rigorous understanding of the vernacular can be powerful allies in that search for a non arbitrary architecture" (Curtis 1986, p27).

For this fourth point I will explore what elements of Mexico's history are used in Barragan's two houses, and how he combined them with modernist elements and motifs to create a new architectural language. I will explore the human artistic qualities that are found in the 2 houses and how more broadly his architecture reflects the social and political values of both traditional and contemporary Mexico.

Comparing and Contrasting Frampton and Curtis

Having examined both Frampton and Curtis, and having established the main points of their theories, I now compare and contrast those points in order to understand where the two architectural thinkers overlap and where they differ. I analyze how they complement each other and how integrating their ideas provides a more thorough evaluative stance for understanding Barragan's two houses. This analysis will be focused on comparing Frampton's eight points of critical regionalism with Curtis's four points of authentic regionalism. The result is eight integrated points, drawing on each theory and will serve as the main structure for evaluating each of the two Mexico City homes by Luis Barragan.

1. *Applying the Vernacular in Contemporary Design*
2. *Reconciling Modernism and Place*
3. *Regional Myths*
4. *Quality of Place*
5. *Regional Type and Natural Landscape*
6. *Architecture as a Cultural and Technological Reflection*
7. *Nature and the built environment*
8. *Architecture of the senses*

Table 1.4 Eight points derived from integrating Frampton and Curtis's theories structured into an evaluation criteria (As identified by author, drawing on Frampton 1987, and Curtis 1986, pp. 24-31; 1996, pp. 567-87).

1. Applying the Vernacular in Contemporary Design

In Frampton's first point, "critical regionalism and the vernacular," he establishes vernacular architecture as a source of inspiration for creating new regionally sensitive buildings, drawing from indigenous solutions relating to climatic and site characteristics. Frampton also argues that critical regionalism is not a sentimental representation of the vernacular, but rather a re-interpretation attuned to contemporary conditions (Frampton 1987). Frampton's first point parallels Curtis's second point, "vernacular principles," which also draws from lessons of traditional architecture to find place-based solutions.

Both Frampton and Curtis reject a nostalgic use of traditional architecture. Curtis goes deeper, in the sense that his theory seeks the origin of an element behind a region's architectural history, identifying the specific component and general rule that reflects local heritage related to cultural, climatic, and site conditions specific to place (Curtis 1986). By seeking to locate the type or general rule, he hopes to understand what the original use was for a specific regional element, and if it was created for aesthetic or functional reasons. Whereas Frampton seeks to learn in a broad way from the vernacular solution, Curtis wants to fully understand the origins and evolution of regional components in architecture. I will use Frampton's theory to find and identify the elements from vernacular past, and I will use Curtis's to find its original and authentic value.

2. Reconciling Modernism and Place

In his second point, "the modern movement," Frampton looks at what modern principles are essential in creating new regional architecture, and draws heavily from modernism's functionalism and technology to address contemporary demands. Frampton's critical regionalism promotes embracing the past through modern architecture (Frampton 1987). In a similar way, Curtis states the importance of modernism in his fourth point, "traditional and modern value" (Curtis 1986). Both Frampton and Curtis recognize the relevance of modernism in the global paradigm but, at the same time, both thinkers reject the proliferation of the International Style without regard to place. Their approach to placemaking is to utilize a modernism that adequately addresses culture, landscape, and climatic conditions of a region to establish an architectural identity.

However, Frampton leans more towards modernism, relying heavily on it as the source for a new architectural language relevant to contemporary conditions. Curtis seems to have more affinity towards traditional architecture, as he seeks to fully understand the vernacular before combining it with modernity to establish a new regionalism. The key to Frampton's argument is that he rejects both a complete return to the past and a full shift towards a technocratic future, finding a balance between both modernism and tradition by reinterpreting tradition with modern language. Curtis, on the other hand, states that modernism is most valuable when combined with traditional architecture. While modernism adds a universal appeal, it is the use of tradition that defines place and evokes a sense of past ways of life. Curtis also notes that the integration of rich

local heritage found in developing countries combined with abstract and poetic concepts of modernism can provide a unique and rich architecture that better relates to the surrounding natural environment.

For establishing an evaluative criterion for Barragan's two houses, I will utilize Frampton's critical regionalism to examine Barragan's re-interpretation of tradition with modern language, as well as the influences modern architecture and architects have on Barragan's architecture. This in turn, will be complemented by Curtis concepts of adequate use of modern and traditional values.

3. Regional Myths

In his third point, "a region's myth and reality," Frampton establishes the limits of a region and its institutional status. He also defines schools of thought that are associated with local culture. As residents of a region embrace these schools of thought, they become important architectural icons that promote regional identity (Frampton 1987). This point is not explicitly addressed by Curtis, yet there are certain similarities to be found in his first point, "evolution of rural vs. urban form." Authentic regionalism establishes certain limits of a region, mostly to rural vs. urban (Curtis 1987). Much like Frampton's use of "myths" to serve as catalysts for positive change in placemaking (Frampton 1986), Curtis might also use the myth of rural tradition to provide roots to new buildings in an urban context. Curtis examines how rural elements evolved to be incorporated in the urban landscape, thus establishing their acceptance as elements connected to the region's rural past. The difference between the two thinkers' points of view is that, while Frampton specifically addresses this issue of myths and realities, he doesn't explicitly define what myths may be involved in shaping a region. On the other hand, Curtis does not really mention the myths and realities of a region; he automatically establishes the countryside as the main school of thought to be drawn from in regional design.

When examining Barragan's two houses, I will focus on Frampton's third point, establishing Mexico's schools of thought (urban, rural or both) and how they are embraced by the Mexican people as contributing to regional architectural identity. I will then analyze how these myths are incorporated in Barragan's two houses to promote regional design. Curtis's rural and urban contrast will not only help identify certain regional myths found in the countryside but also

offer clues as to the evolution of these rural elements as they fit into a contemporary urban image and are accepted as part of local identity. Curtis's concept of evolution of form will be most useful in exploring how Mexican society evolved from an agrarian-based to an urban-based culture, and how that change is reflected in contemporary architecture.

4. Quality of Place

Frampton's fourth point, "space and place," examines the functions of architectural space within the context of place. Frampton establishes architecture not as a free-standing object but, rather, as part of a region's social fabric, becoming another component of the livelihood and everyday experience of place. Thus critical regionalism seeks to promote a dynamic flow between architecture, people, and place by examining architectural circulation, access, exits and enclosures in relation to the surrounding context (Frampton 1987). Curtis also seeks an integration of local social structure and the built environment in regards to his first point, "the evolution of rural vs. urban form" and thus also seeks to integrate rural behavioral patterns and the spatial layouts in relation to new urban development (Curtis 1986).

Yet in his third point, "regional construction and environmental response," Curtis seeks a deeper connection to local customs and way of life by not only expressing their importance in the finished product but also in the construction process. Curtis suggests utilizing local building methodology, regional materials, and indigenous craftsmanship to enhance the link of architecture with the social-cultural fabric of a region. This creates a connection to place not only in the function of the new built environment, but also in regard to cultural and environmental issues involved in the creation of place. Furthermore, this acknowledgement of traditional wisdom and its incorporation in the contemporary building process allows society to become more aware and conscious of the past and respect for the natural environment. This enhances both a connection to regional vernacular heritage (building process and finished structure) and to environmental context.

Frampton draws from the vernacular's responses to cultural and environmental issues according to place and, while Curtis does the same in his authentic regionalism, he goes further by exploring vernacular wisdom in the process of construction, and how such wisdom creates a deeper connection to regional identity. In the evaluation of Barragan's two houses, I will use

Frampton's fourth point to explore the use of both Mexico's social and cultural characteristics expressed in architectural space and their connection to the surrounding context. This will be complemented by considering whether the respect for local labor and building techniques emphasized by Curtis was utilized to improve the regional identity of the two houses.

5. Regional Type and Natural Landscape

In his fifth point, "typology and topography," Frampton establishes that both these elements are critical in creating the architectural identity of a region. He defines typology as the result of civilization and culture creating a habitable space, and topography as the physical characteristics of the landscape (Frampton 1987). Like Frampton, Curtis also recognizes typology as playing a fundamental role in creating place, as is explored in his second point, "the vernacular principle" (Curtis 1986). A difference between Frampton and Curtis is that Curtis not only focuses on finding a typology but also looks for the reason behind that structural element or "type" and examines how that type has evolved to become relevant in contemporary architecture.

In the case of "topography," Curtis does not specifically address the issue, but he does believe that the integration with the surrounding environment is essential, and the respect for the ecological context can often be found in the way vernacular buildings solve regional issues. Both Frampton and Curtis overlap in their perspectives on the need for utilizing a type or element that was born of cultural heritage to establish regional identity. They both also recognize that having the built environment adapt, interact, and complement the natural landscape becomes an intricate part of good regional architecture.

Using these overlapping themes, I will utilize Frampton's fifth point to examine the integration of local architectural forms along with specific topographical qualities in Luis Barragan's two houses. Also, as previously commented, I will use Curtis to understand the origin behind structural elements and spatial layouts used by Barragan's in his two houses.

6. Architecture as a Cultural and Technological Reflection

Frampton's sixth point of critical regionalism, "architectural/scenography," establishes the importance of appreciating architecture as a structural accomplishment, composed of elements

that create a complex and rich composition. Frampton rejects experiencing architecture as a series of aesthetic scenes. Much like Frampton, Curtis recognizes the value of human ingenuity and its structures upon place. As presented in his point fourth point, "traditional and modern value," Curtis believes that tradition is not the source of picturesque scenography, but rather fundamental for its lasting humane, cultural, and artistic values. He also acknowledges modernism as an important source of human artistic value as well as its poetry of space and abstract form for providing tools for creating architecture of deep meaning.

For both Frampton and Curtis, architecture is a reflection of human development throughout time and upon place. In the evaluation of Barragan's two houses, I will use Frampton's sixth point, "architectural/scenography," to examine traditional culture and modernist concepts used by Barragan in his two houses and how their integration provides a rich and complex regional architecture that offers more than scenic experiences. I will use Curtis's fourth point, "tradition and modern value," to broadly explore how the two houses reflect the human artistic values of both traditional and modern Mexico.

7 Nature and the built environment

In his seventh point, "artificial vs. natural," Frampton seeks a balance between the use of artificial technologies to enhance the quality of life in the built environment, and incorporating local regional climatic conditions in a building to enhance a sense of place. Like Frampton, Curtis seeks an adequate solution to natural climatic conditions of a region, mostly through examining vernacular solutions.

The difference is that, while Frampton seeks a balance between artificial and natural in his critical regionalism (Frampton 1987), Curtis argues for vernacular principles addressing natural conditions as the most adequate way for solving climatic issues and does not rely much on artificial solutions. Authentic regionalism seeks a response that is more about the restorative capacity between people and culture that promotes a return to the source (Curtis 1986). In contrast to Frampton balancing of artificial and natural, Curtis focuses on the harmony between people, culture, and nature by embracing past ways of life and respect for the environment.

For my analysis of Barragan's two houses, I will use Frampton's seventh point to explore how the two dwellings make use of the natural environment to enhance a connection to place and

resolve specific environmental issues. I will consider the houses' use of natural light, ventilation, and vegetation as well as identify any artificial components present within the buildings. On the other hand, I will use Curtis's ideas to examine whether traditional methods and vernacular principles were employed in Barragan's two houses and if these principles contributed to establishing harmony between local culture and ecological background.

8. Architecture of the Senses

In his eighth point, "visual and tactile," Frampton explores the use of the human senses to enrich the experience of architecture and place. Curtis, however, does not address this issue, and while he does mention the use of regional materials and cultural elements to enhance experience of place, he does not specifically mention the importance of involving all senses to enrich architecture. Frampton is more explicit in exploring the various possibilities in terms of materiality and sensations in the built environment. Frampton believes that, by incorporating all the senses, regional qualities are better exploited, promoting unique bodily responses and emotional connections to place through sensory diversity. As mentioned earlier, Frampton's eighth point will be used to evaluate how Barragan uses local materiality and diverse sensory experiences to enhance regional qualities in his two houses.

Conclusion

Frampton and Curtis provide many inter-relating and complementary points. Their architectural theories seek an integration of tradition and modernity that strengthens local identity while at the same time promotes modern development. Both Frampton and Curtis advocate awareness of architecture in relation to a wider context and incorporate environmental and cultural surroundings to establish a deep connection to place.

Both critical regionalism and authentic regionalism are reactions against a globalized culture, providing an alternative solution for the built environment based on local qualities that can compete in the world market while at the same time retained identity and sense of place. Both Frampton and Curtis emphasize the importance of regional climate, landscape, and culture, though in different ways. Their theories overlap in seeking an architecture of deeper meanings

that has connection to local culture, historic relevance, and the use of modern principles. Their theories do not promote an architecture based on nostalgia for the past or a traditional vernacular glorified without function, but rather a redefined regional identity. They have a clear idea regarding the importance of place and achieving continuity of tradition reinvigorated through modernity. Finally, both Frampton and Curtis acknowledge that, when seeking to present local tradition impregnated in a modern environment, there is no set recipe (Frampton 1987, Curtis 1986). However, by considering the issues raised in their two theories, a new, regionally responsible architecture perhaps can be born.

Having compared and contrasted Frampton's and Curtis's theories, I next must present Luis Barragan as an architect and describe the two Mexico City Houses. I will interpret his work from Frampton's and Curtis's regional perspectives.

Chapter 2 - Architecture of Luis Barragan and the two Mexico City houses

Having reviewed compared and contrasted Frampton's and Curtis's theories in chapter 1, I now discuss Luis Barragan and the two Mexico City houses to be evaluated from Frampton's and Curtis's perspectives. This chapter examines Barragan's history, connections to Mexico, and his effort to blend tradition and modernity to create a new architectural language sensitive to place. This background will provide a descriptive base in Chapter 3 for using Frampton's critical regionalism and Curtis's authentic regionalism to evaluate the two houses.

Barragan and Mexico

Luis Barragan (1902-1988) was born in Guadalajara Mexico, the capital of the state of Jalisco. He came from a family of landowners who farmed and raised cattle in the vast rural area in the center of Mexico. During his youth, Barragan was immersed in the customs and activities of the countryside. His experience of local traditions as a way of life rather than as a distant history created an awareness of place rarely appreciated by most modern architects of the time (Zanco 2001).

Barragan retained unforgettable images of his childhood years which heavily influenced his architectural ideals. His upbringing in Jalisco gave him a personal connection to the Mexican countryside, not only in terms of local customs and social life, but also of the distinct natural environment. Barragan's home region showcased vernacular buildings in rugged, but green, terrains, surrounded by mountainous landscape and affected by distinct weather and climate. All these factors provided him with a sense of place (Pauly 2002, p. 15).

Barragan's professional education took place in the region in which he had grown up. He earned his degree in engineering in 1925 at the *Escuela Libre de Ingenieria* (Free School of Engineering) in Guadalajara, founded in 1901 by architect Ambrosio Ulloa. While his education took place during the nationalist cultural policy in Mexico's architecture of the early 1920s, he took little from these ferments, and his architecture focused more on motifs enhancing the vernacular architecture of his native countryside and modernist tendencies from Europe.

During his time living in Guadalajara in the late 1920s and early 1930s, Barragan travelled from Jalisco to Michoacán. During this trip, he took photographs of cloisters, churches, country dwellings, and scenes of village life. He grew more attached to the vernacular and rural lifestyle found in this region. The weather, architectural forms, and landscape reminded him of his childhood and rekindled his appreciation of the rural landscape. Barragan was drawn to folk architecture, and during this trip he acquired two sensibilities that were central to shaping his life and architecture: color and texture. In his own words, Barragan explains: “The interest in architecture that was gradually awakening really came alive when visiting the villages of Mexico and the houses of the people. I think traditional dwellings are incredibly beautiful in Mexico, particularly in the State of Michoacán. This is the state, that in my opinion, has the nicest Traditional architecture [...] for me [those visits] aroused a love of architecture and the desire to apply traditional features to a modern house” (Pauly 2001, pp. 22-23).

Barragan was fascinated by the simple exterior volumes of the vernacular homes of Michoacan. There was a unique quaintness in the interior patios and "corredores" which gave the dwellings pleasant intimate spaces that responded to social customs and activities (Pauly 2001, p. 23). He appreciated vernacular elements, noting how the wide overhangs and tiled roofs gave a distinct character to the domestic buildings and responded to the region's intense sun and strong rainy season. The adobe walls enclosed patios that served to bring light and ventilation to the interior of dwellings as well as provide circulation through the different spaces. Some of these dwellings were painted white and presented a sober and tranquil image of rural life, others were covered in bright colors reminiscent of the pre-Columbian and Spanish heritage. These unique images, colors, textures, materials, functions, and distinct characteristics found in traditional housing served as an inspiration for Barragan, cultivating his love and appreciation for the humble beauty and cultural complexity of Mexico's vernacular past.

Barragan's perception of traditional architecture found in Mexico's countryside served as the main point of reference for his later design concepts of contemporary houses. The vernacular's geometric simplicity and functional qualities could be adequately translated to fit modernist principles. Barragan also learned that the importance of using local materials and buildings techniques as a way of enhancing a sense of place. While Barragan believed that vernacular architecture reflected regional folklore through its structural elements, spatial layouts, building materials and awareness of its surrounding environmental qualities, it was the colors

found on the wall of houses, on the clothes of its people, and in nature itself that gave the landscape its vibrant image. Barragan identified color as the epitome of Mexican tradition, rich with cultural heritage as it drew from pre-Columbian and Spanish heritage, and was very much a part of Mexico's history and everyday life (Pauly 2001, p.24).

More than anything, Barragan was able to perceive the essence of place through vernacular solutions to human settlements found in Mexico's rural landscape that, while seemingly primitive, provided the built environment with a palpable reference to culture, history, and local identity. His unique experience of Mexico helped define his architectural language and regional sensibilities, providing him with deep roots to place.

Social Context

During Barragan's formative years, Mexico was going through one of its most turbulent periods, namely the revolution of 1910, which divided the country for a decade. Then during the mid-1920s, Mexico experienced another civil war caused by religious conflicts. Both events had a deep impact on the social-political structure of Mexico. In the 1930s, after these major events shifted the country's social-political ideals, the Mexican government, under the Presidency of General Cárdenas, guided the country towards industrialized development and fostered nationalism. This, in turn, promoted social cohesion and the embrace of national traditional values. Consequently, the influences of vernacular and pre-Columbian art began to replace European historicism styles that had marked the architecture of the nineteenth century and early twentieth century (Pauly 2001, pp.18-19). This becomes relevant in Barragan's personal history because, as the architectural paradigm of the time was gradually changing to support a more progressive national style, Barragan was forming his own architectural theory that favored an architecture reflecting rural values integrated with modern principles, while at the same time evoking a clear regional identity.

Besides an appreciation and emotional connection to traditional architecture, Barragan had an understanding of the social-political reality of Mexico. In the 1930s and 1940s, Mexico City was an international melting pot of intellectual and artistic talent. When he moved to Mexico City in the 1940s, he became familiar with the work of revolutionary artists such as Diego Rivera, Gerardo Murillo (who signed his work "Dr. Atl"), and Jesus Chucho Reyes, all of

whom were political activists expressing themselves through art. Barragan met these artists and became good friends with Jesus Chuchó Reyes, whose art strongly influenced Barragan's architectural design. But more than the political nationalism that this art provided was the strong sense of Mexican culture reflected in the colors, shadows, and forms of the artwork. These artists' works could be perceived as art with regional identity. This made Barragan passionate about his cultural heritage and grounded him in his Mexican background. This exposure to local and modern art forms created a link in Barragan's mind between the traditional Mexican landscape he had experienced throughout his life and the realities of contemporary Mexico, both factors playing important roles in his architectural language (Pauly 2001, pp. 25-26).

What is important to understand about Barragan is that, while he was concerned with the architectural integration of the natural environment, cultural patterns, and vernacular principles, he was also aware of the social-political realities of his country. He sought not only harmony between culture and nature, but he also hoped to represent the national values associated with Mexico's new social conditions.

Foreign and Modern Influences

While his experiences of place and his awareness of Mexico's social and political condition shaped his sensibilities to place, there were other influences that contributed in defining Barragan's architectural expression. Many of these influences were foreign.

Barragan was first exposed to Europe during his trip in 1924-25, and was drawn to the works of several young members of the avant-garde, such as Le Corbusier, Robert Mallet-Stevens, Frederick Kiesler, and Konstantin Melnikov (Zanco 2001 p. 45). However in this first trip, it was his encounter with the writings of French landscape architect and illustrator Ferdinand Bac that truly captivated him. Bac's two books, *Jardins Enchatles* and *Les Colombières* (Zanco 2001 p. 46), focused on the meanings behind gardens and their connection to human culture. The contemplative qualities of gardens and their integration to the built environment thought history paralleled Barragan's own passion for Mexico's picturesque natural landscape complementing the local vernacular: "Between modernism's reaching for innovation and the normative acceptance of historic styles, Bac claimed the existence of a

cultural tradition—that of Mediterranean Art—intimately connected with the land from which it had sprung, detached from our view of the flow of history" (Zanco 2001, pp. 45-46) .

Bac gave Barragan a new perspective on people's ancestral relationship to gardens. He now viewed them as a fundamental source of natural beauty that connects people to the surrounding environment and add unique aesthetic qualities to a building. Gardens incorporated climate and vegetation in the architectural design, while at the same time enhancing the experience of space. Bac argued that gardens provided a connection to nature and a sense of spirituality in the built environment (Zanco 2001). Barragan would use these concepts in the exterior spaces of his own Mexican architecture.

However, it was Bac's rejection of the element of nostalgia and over-ornamentation as a source of historic reference that provided opportunities for his themes to be incorporated into Barragan's modern designs. Barragan drew from these lessons not to recreate a lost ancient architecture, but to use the spiritual links that gardens provided to place and integrate them with geometric forms to create architecture. He could then provide a universal appeal not just through a current architectural language, but through the aesthetic and sacred qualities of a building's outdoor spaces. When Barragan returned to Mexico, he sought to incorporate his new ideas and experiences in his architecture. While most of the buildings he designed during this time were not highly recognized, they still served as an experimental phase and contributed to Barragan's conceptual growth.

While Barragan's first trip to Europe introduced him briefly to the works of Le Corbusier, it was not until his second trip in 1931 that he truly embraced Le Corbusier's theories. He acquired a copy of Le Corbusier's *Vers un Architecture*, which was already an element of influence in contemporary Mexican architecture (Pauly 2001, p. 102). Barragan met with Le Corbusier, and although it was a brief encounter, Le Corbusier suggested that Barragan visit some of his works, specifically those most representative of his ideals—the Villa Savoye in Poissy Savoye, the Stein de Monzie House in Garches, and the Salvation Army's Cite du Refuge on Rue Cantagrel (Pauly, 2011 p. 102). The sculptural forms, geometric precision, use of light, shadows, and new technologies found in Le Corbusier work greatly impressed Barragan, as did Corbusier's theoretical conception of modernism. From this experience and knowledge, Barragan became appreciative of modernist architecture. But more than just appreciating the physical

form, Barragan understood the meanings behind this architectural language and mastered its concepts, which would later be reflected in his architecture.

Another strong influence on Barragan was Heinrich Kulka's monograph on Adolf Loos, explaining the concept of the *Raumplan* (Pauly, 2011 p. 103). Kulka argued that the "spatial plan" is grounded in a rational distribution of the spatial cube relative to volumes of different heights, rather than being based on horizontal planes (Pauly 2001, p. 102). This is relevant in Barragan architecture because he used the concept of "economy of space" to create small spaces that were perceived as intimate but part of a larger whole, interconnecting all the elements that composed his buildings. He explored Loos' efforts to provide several rooms in a limited surface under the same roof by creating physical divisions, visual changes, and shifting planar levels in the interior. He maximized the use of spaces through the vertical layout of the building and complemented their size by showcasing their interrelationships. Drawing on these concepts, he created unique architecture. Barragan uses what he refers to as a fifth façade, complementing the four that the user experiences. The four others refer to the main views displayed by a cube (front, left, right and back). This fifth façade was expressed through floors, roof, terrace, and even the sky, incorporating each space, structure and background of the building.

On his return to Mexico in 1935, with enhanced knowledge of modernism and its conceptual depth, Barragan decided to move to Mexico City. He was captured by the city's vigorous life buzzing with culture and artistic innovation. Although functionalism and rationalism dominated the architectural context during this time, Barragan would establish himself as a main advocate for regionally sensitive architecture, and Mexico City would serve as a stage to cultivate his hopes for a new Mexican architecture (Pauly 2001).

Evolution of Architectural Identity

From 1935 to 1940, Barragan built many private homes in Mexico City. He experimented with mass-production techniques and the use of modern materials, (Zanco 2001, p. 17). The style of many of these houses regularly reflected the dominant reality of modernism, functionalism, and rationalism that was proliferating in the architectural context of the time. Barragan also employed many of Le Corbusier concepts in his spatial layout and use of natural light. In addition, he used concrete and glass in his main facades, integrating a building's image to the

contemporary urban context. Various collaborations with engineer Jose Creixel and architect Max Cetto (Zanco 2001, p. 17) gave Barragan greater perspective on the practical applications of modernism as well as contemporary spatial layouts within the functionality of modern homes.

Barragan designed many recognized apartment and residential buildings during the late 1930s. Some of the most representative are the two Family Houses (1936), a two-story apartment building on Avenida Parque Mexico with traces of functionalism in its form and interior circulation that showcased the surrounding landscape, with strategically placed windows to provide panoramic vistas and natural lighting (Rispa 2003 p. 80); the Pizarro Suarez House (1937-1938) in which he showed a clear preference for modern syntax with simple shapes on the building's facade and little reference to traditional architecture (Pauly 2001, p118); a house built for Eduardo Villaseñor (1940) which saw him return and confirm his previous embrace of the vernacular through different structural elements; and his Figueroa Uriza Dwellings (1940) in Mexico City that provided adequate habitable space for contemporary needs (Pauly 2001, p. 121). These and the other buildings he constructed during this period helped Barragan reach a better understanding of modernism applied in a Mexican context, and ultimately, reach cohesion in the integration of traditional regional values.

After only four years immersed in the profession of architecture, Barragan became frustrated with his constant dealing with the individual tastes of his clients, most of the times opposing his own. In his words: "I am sick of listening to clients talking about their tastes. I am quitting with all my clients. From now on, I am going to work for one client only: myself" (Zanco 2001, p. 17). In the early 1940s, Barragan abandoned conventional practice, and sought new directions in his artistic expression through the design of gardens, landscape architecture, and urban design. He looked to provide a counterpoint to modern Mexican architecture by creating green open spaces that showcase Mexico's diverse natural environment.

During this period, Barragan worked as a consultant and designer for the garden and wooden areas of the *Ciudad Universitaria Campus* (1949-54). Although not much is documented on his involvement, his principles are reflected in the use of specific vegetation and materials representative of his design principles. Barragan also developed a large property called *El Cabrio* to the south of Mexico City, where he sought to re-recreate a sense of wild nature adapted to human needs, focusing on reflection and meditation as the main themes (Rispa 2003, p. 93-95). In this stage of Barragan's career, he was able to apply what he learned from Ferdinand Bac in a

very regional context, and express his own artistic views through the composition and manipulation of the natural environment. Some elements of his Garden landscapes would later serve to compliment his architectural designs.

His most passionate undertaking during this period was most likely *Jardines del Pedregal*, where he wanted to incorporate the natural landscape with residences, and was able to expand his theory on to urban design. This site would also become an area in which some of his houses would be built, one of which will be later analyzed in detail. On this site he was able to achieve a symbiotic relationship between culture and the natural landscape, using intimate simple spaces with minimal number of elements and textures (Rispa 2001). This process helped him mature in his architectural conception and develop his regional perspective on the future of Mexican architecture.

From his many experiences, both lived and from his readings, Barragan now had a completely formed view on what Mexican architecture should exemplify. His architectural ideals are perhaps best reflected in his modern homes. From his House and Studio (1947) to his final project, Barbara Mayer's house (1981), his works reflect the lessons learned from his travels and experiences, as he employed geometric simplicity and functional vigor from modernism, created interior spaces with ample local vegetation reminiscent of great Mediterranean gardens, and retained roots to place by utilizing building techniques of vernacular architecture in roofs and walls. He gave Mexican architecture a new architectural dialect that could be clearly associated with regional culture; at the same time, this architecture expresses a capacity to stand out as architectural accomplishments in a modern society.

In the next section, I describe two houses by Barragan: His home and studio; and the Eduardo Prieto Lopez house, both located in Mexico City. In chapter 3, these two houses will be examined from both Frampton's and Curtis perspective, to provide insight into the adequate use of modern architecture in a regional context.

Luis Barragan's Home and Studio

Barragan has had an immense impact on Mexican architecture, with many of his buildings becoming icons in defining national identity. When deciding to focus on particular dwellings, it becomes difficult to select examples that can summarize his theories and ideals on architecture. I start with Barragan's home and studio, which express the eclectic knowledge of his previous works and the culmination of his design thought process, providing an ideal case study for understanding his conceptual theories on architecture, and evaluating his work through Frampton's and Curtis's perspective. Barragan's work usually consisted in learning and understanding the everyday life of his clients, then representing that life in a physical spatial manner, seeking to evoke a traditional Mexican lifestyle in a modern setting (Pauly 2002). His home is his own manifesto on architecture, incorporating techniques, materials, and spaces that come not only from his experience of an indigenous lifestyle and the commodities of modern living, but also becomes an extension of his life, his social-political ideals, and his understanding of space and place.

While Barragan was developing the *Jardines del Pedregal* project at the end of the 1940s, he began to build his permanent residence. Barragan's home and Studio was built in 1947, and is located at 14 *General Francisco Ramirez, Colonia Tacubaly*, Mexico City (Figure 2.1). The 100-square-meter, rectangular lot borders on *Calzada Maderos* on which shortly before Barragan had designed his first gardens and establishes his residence (Zanco 2002, p. 31).

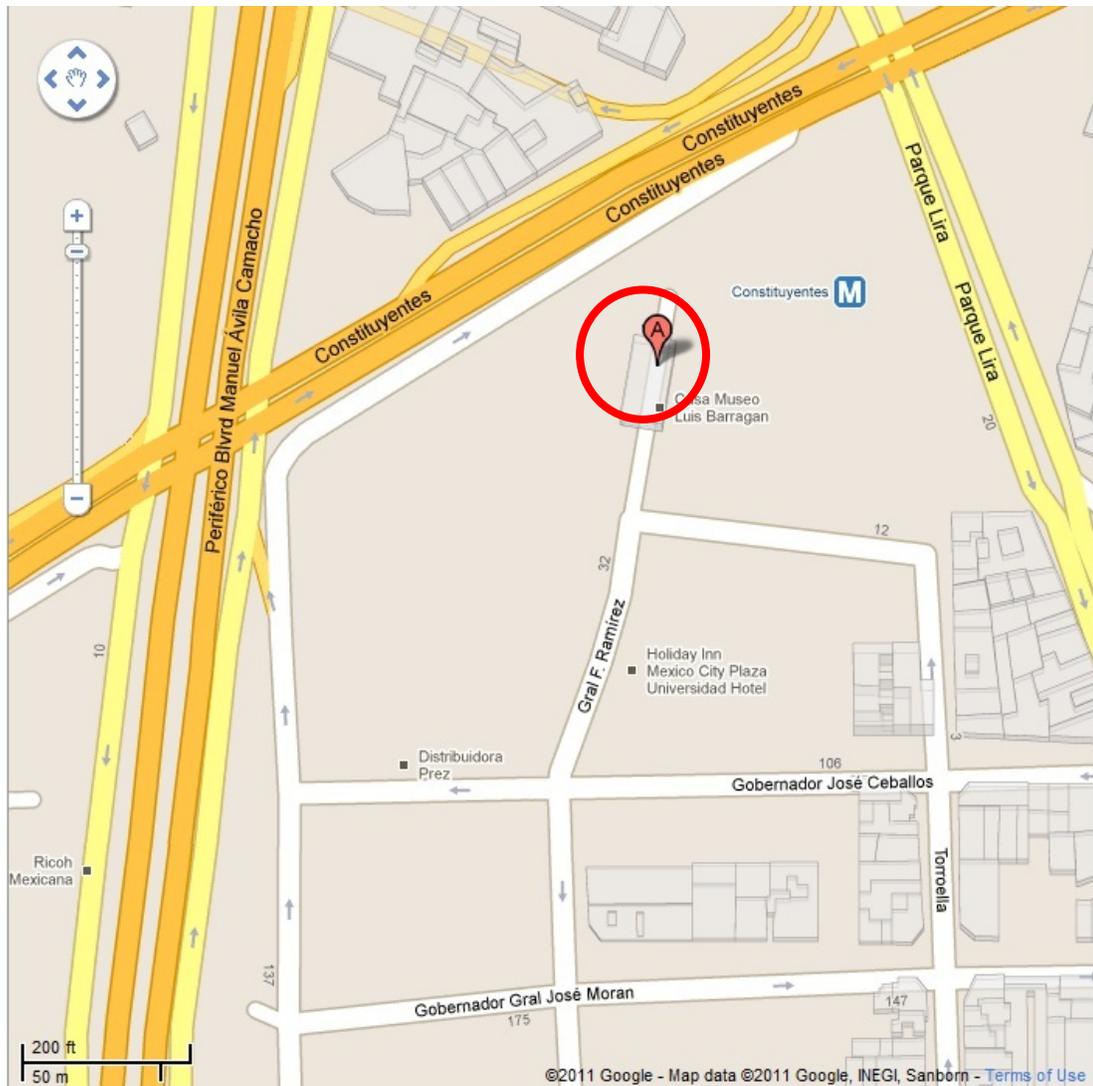


Figure 2.1 Location of Luis Barragan's Home and Studio in Mexico City.

http://maps.google.com/maps?hl=en&rlz=1G1SNNT_ENUS413&q=Calle+francisco+ramirez+14+colonia+tacubaya,+mexico+city&um=1&ie=UTF-8&sa=N&tab=wl

The surrounding context of Barragan's home is a key to its exterior formal expression. While the interior is full of life and cultural significance, the exterior is of a subtle and humble form, serving to respect the external urban space. The building's facade, which is placed facing the south west, consists of a bare wall turned to the street with few openings and an access point that seem to be randomly placed (Figure 2.2) (Zanco 2002). While its exterior composition adjusts to the modest surroundings, one could argue that it lacks presence and an adequate aesthetic form. However, the building facade serves as a transition from the intimidating exterior

streets towards a more protective domestic core. The building adequately blends in with its surrounding elements and remains relevant to the Mexican cityscape, while creating a sense of privacy and intimacy when inside the dwelling. This would become common characteristic in Barragan's work.



Figure 2.2. Street view from Front Facade (Photograph by Steve Silverman, 2010
http://www.flickr.com/photos/pov_steve/)



Figure 2.3 Drawing of Front Facade
<http://www.casaluisbarragan.org/planos/fachadas.html>)

While the exterior form can be considered lacking in charisma, the overall plan of the home and studio is what characterizes it as a masterpiece of its time. The building featured a spatial layout that was focused on a typically Mexican lifestyle, while at the same time providing personal spaces that were of contemporary function. Barragan also presented many innovative

natural lighting solutions that gave the rooms more character and depth. The house was meant to create a sequential experience that unfolded within itself, having layer upon layer to be discovered by the user through self/space exploration, promoting meditation and awareness of one's inner self (Pauly 2001, p. 170).

The construction components of the home relate to Mexico's vernacular past through the use of adobe walls, plastered partitioning, wooded paneling, beams, and staircases of both wood and stone. The house is composed of four main areas: living space and bedrooms, Gardens and open spaces, workspace, a service area and terrace. They are placed on different levels and connected through various hallways and stairs which help foster a desire for exploration and provide diverse sensory experiences (figure 2.4-2.6).

The house is designed so that each room is adequate for its particular type of activity, be it resting, working, reading, listening to music, drawing, or meditation. The rooms are intimate spaces separated by walls, changing floor levels, staircases, and screens, yet providing opportunities to explore the continuing space through various openings and hallways. The sense of openness was not created by large interior spaces, but rather by having some of the most significant rooms open to exterior gardens, terraces and patios as well as manipulating light to complement each space. I now present the various spaces of the home and studio.

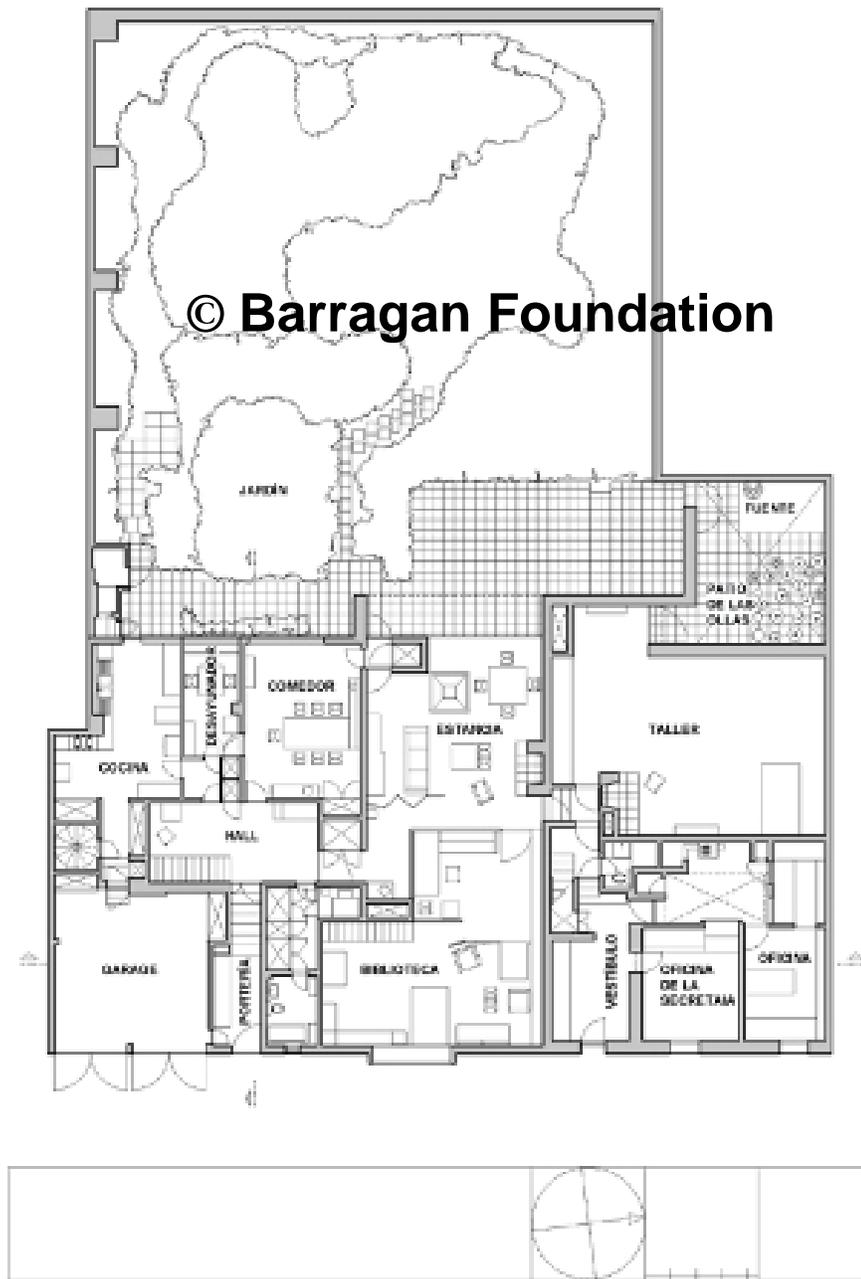


Figure 2.4 House Plan -First Floor.

http://www.casaluisbarragan.org/planos/primer_a_planta.html

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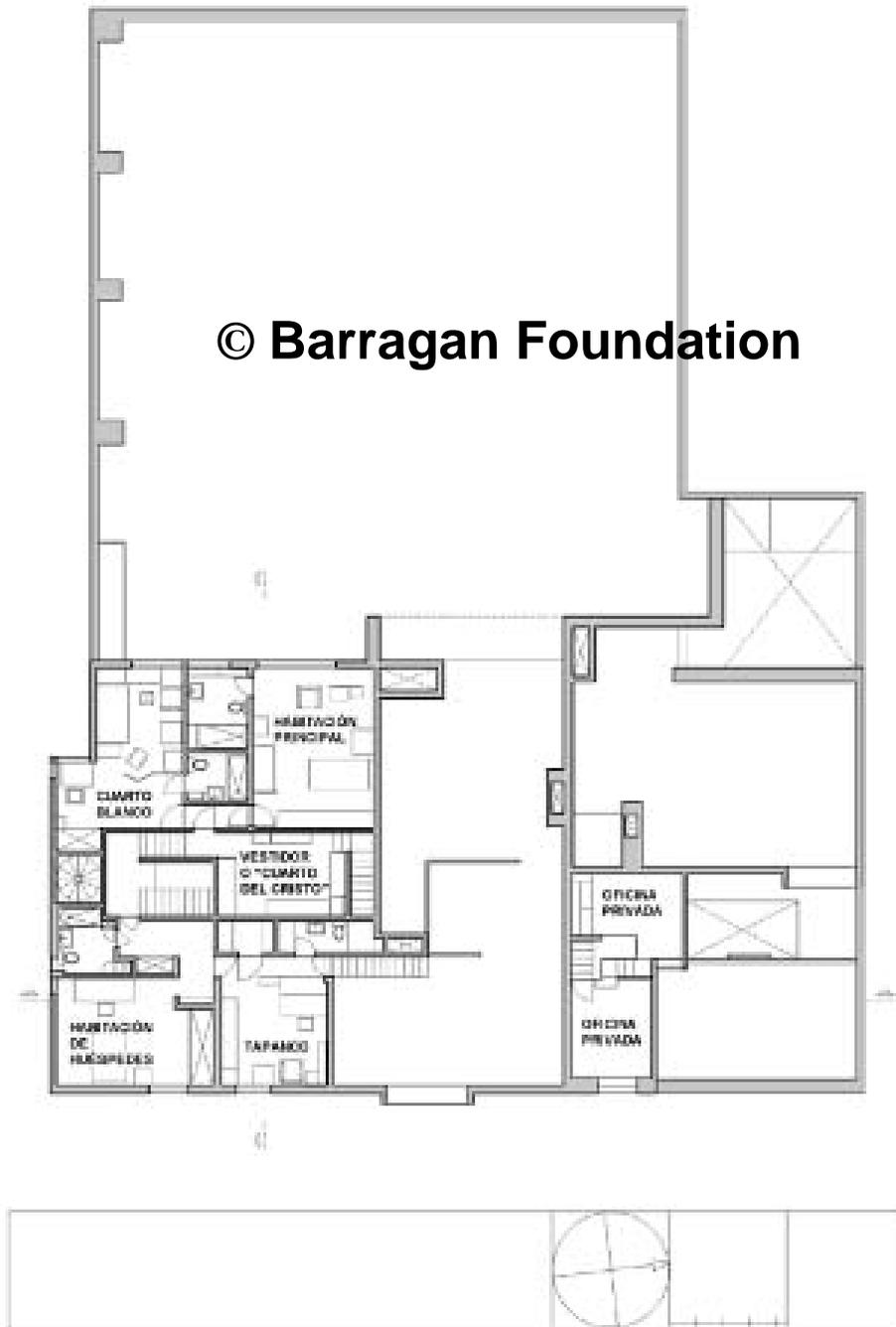


Figure 2.5 House Plan -Second Floor.

http://www.casaluisbarragan.org/planos/segunda_planta.html

© Barragan Foundation

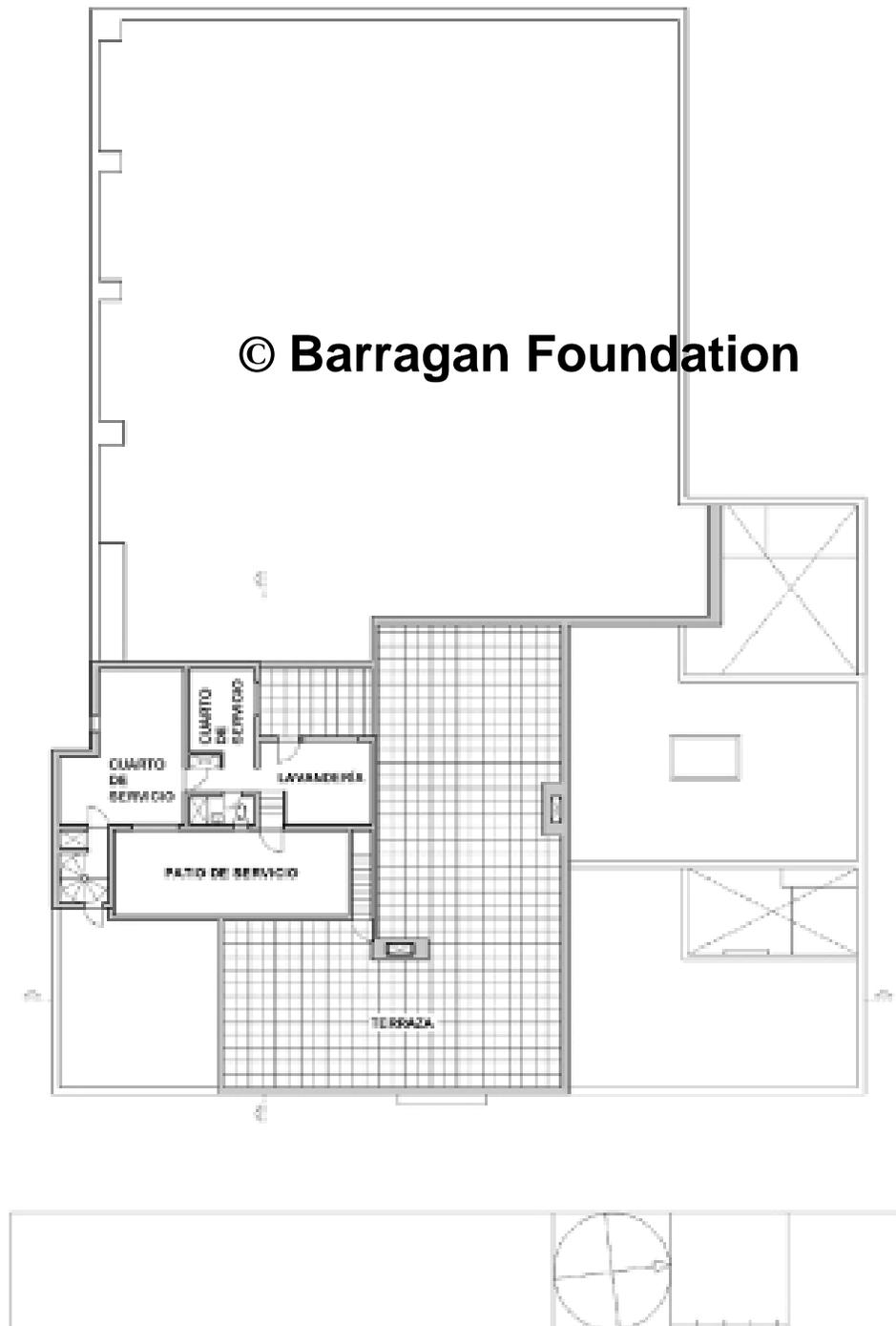


Figure 2.6 House Plan -Second Floor.

http://www.casaluisbarragan.org/planos/tercera_planta.html

Living Space and Bedrooms

At the entrance of the house, a narrow, dimly-lit corridor leads to a central vestibule (figure 2.7). This entry space serves as a transition from the indifferent exterior towards an intimate and artistic interior. The light in this space is filtered by a yellow glass that heightens materials and shapes. The entry serves as a sort of waiting space and at the same time subtly prepares the senses for upcoming changing scenes.



Figure 2.7 Main Entrance hallway.

<http://www.casaluisbarragan.org/lacasa/porteriaf.html>

The entry space leads to a vestibule that drastically changes the ambience, switching from a low-lighted entrance to an intensely lit hall. The volcanic stone used in the floor helps accentuate the brightly colored walls and clear-cut volumes in the stairs, illuminated by the overhead light (Figure 2.8). This vestibule allows vertical movement towards the second floor and access to the dining room and main living room (Figure 2.9). The compact hallways allows for the main rooms to give an impression of spaciousness, enhanced by a series of dividing walls that fragment the space without impeding a unified perception of the volume (Zanco 2002, p.106).



Figure 2.8. Stairs in Vestibule. (<http://www.casaluisbarragan.org/lacasa/vestibulof.html>)



Figure 2.9 Hall with access to multiple rooms.
(<http://www.casaluisbarragan.org/lacasa/vestibulof.html>)

The living room and the studio living room are placed in a split-level, double-height space, which is divided by low walls that do not interrupt the continuity of the ceiling beams (Rispa 2001, p. 113) (Figure 2.10-2.11). The dividing walls and slight change of levels allow a movement of shadows, and the enclosed spaces provide privacy and warmth in each individual space. The materials used seem to reflect traditional regional architecture. By manipulating light, however, Barragan allows them to be perceived in new a modern way. This room also allows a

connection to outdoor space through a large square window. The square window is divided into four quadrants by slender cruciform mullions, allowing light to flow inside and visual access to a luscious interior garden (Figure 2.12). While the window does not open, there is a small lateral door to access the exterior space (Zanco 2002).



Figure 2.10 Main living room. (<http://www.casaluisbarragan.org/lacasa/estancia2f.html>)



Figure 2.11 Second vista of main living room.
(<http://www.casaluisbarragan.org/lacasa/estancia2f.html>)



Figure 2.12 Window in main living room looking towards the garden.
(<http://www.casaluisbarragan.org/lacasa/estancia1f.html>)

On the opposite side of the house, towards the street, the library is illuminated by a large square window set high in the wall to impede a direct view in or out, creating a well lit space that remains private (Figure 2.13). On the other side of the library is a straight, cantilevered staircase of solid wood (reminiscent of Le Corbusier's design for the Beistegui attic), which leads to a mezzanine through a small wooden door in the corner of a medium-height white wall (Figure 2.14) (Zanco 2002, p. 106). Again, low segmented walls appear, providing intimate spaces that receive adequate lighting and often play with shadows. Like the house's other rooms, Barragan creates modern structural elements with local materials.



Figure 2.13 View of library (<http://www.casaluisbarragan.org/lacasa/biblioteca2f.html>)



Figure 2.14 wooden stairs heading up to the mezzanine
(<http://www.casaluisbarragan.org/lacasa/biblioteca3f.html>)

Along the garden side of the ground floor, moving away from the living room, are the dining room, a breakfast area and the kitchen. The kitchen has a spiral staircase that leads to servant quarters and a top-floor laundry area. (Zanco 2002, p. 108). With slightly more elevated windows, these rooms feature the garden's foliage as overhanging picturesque views, allowing a contemplative appreciation of the rich vegetation in the immediate exterior, as well as allowing sufficient sunlight to illuminate the space (figures 2.15-2.16). The garden can be physically accessed through a kitchen door. The kitchen also includes a spiral staircase that leads to the servant quarters.



Figure 2.15 Dining room with view towards garden
(<http://www.casaluisbarragan.org/lacasa/comedor1f.html>)



Figure 2.16 Kitchen (<http://www.casaluisbarragan.org/lacasa/comedor2f.html>)

On the second floor, we find the mezzanine level, which is built over the lower level of the entrance and garage, and is the final landing of the main staircase from the library (Zanco 2002, p. 108). This room also has direct access to the guest bedroom (Figure 2.17). Both spaces have windows towards the street, and face the strongest sun of the afternoon. Barragan designed a type of wooden casement window, divided into four parts to manage the light in these rooms. This window detail is a reference to vernacular elements found in traditional Mexican houses, allowing an alternative to a metal-and-glass window.



Figure 2.17 Guest bedroom (<http://www.casaluisbarragan.org/lacasa/huespedesf.html>).

The two main bedrooms and their service areas are also located on the second floor overlooking the garden. The entrance to both bedrooms is provided by a vestibule open to the main staircase (Zanco 2002, p. 108). These rooms are Barragan's private quarters (Figure 2.18) and also include another bedroom that Barragan referred to as the "white room." This room has qualities similar to those of the private living room below (Figures 2.19-2.19). All the rooms in the house make the best use of natural light provided by the intense Mexican sun. Barragan did not place a central light bulb on the ceiling in any of them (except for the breakfast room), and only made use of artificial lighting during the night through intimate small lamps (Figure 2.20).



Figure 2.18 Barragan's private bedroom.

<http://www.casaluisbarragan.org/lacasa/principalf.html>



Figure 2.19 View of white room

<http://www.casaluisbarragan.org/lacasa/cuartoblancolf.html>



Figure 2.20 White room or private living room
(<http://www.casaluisbarragan.org/lacasa/cuartoblanco2f.html>).

Barragan also had a strong commitment to his Catholic faith, and his home reflects this throughout. Perhaps the biggest statement of his faith is reflected in a room that is referred to as *Cuarto del Cristo* (room of the Christ), which serves as prelude to the reflective experience found on the terrace, which is immediately accessed through the wooden stairs (Figure 2.21). While the main objective is to allow fluidity between the second floor and the third floor outdoor terrace, this space provides contemplative qualities of a spiritual nature. By using a figure of Christ hung on a white wall, with wooden furniture filling up the corners and light filling up the space, Barragan gives a church-like quality to the room. While this space is designed and referred to as a lounge, its function is much more complex as are the sensory experience that this space provides.



Figure 2.21. Cuarto del Cristo (room of Christ)
(<http://www.casaluisbarragan.org/lacasa/cuartodelcristof.html>)

Service Area and Terrace

From the second-level *Cuarto del Cristo* (Christ room), a narrow staircase leads to a large roof terrace. Located on the third floor, this space is composed of the vertical volumes of the two chimney stacks and a tower containing a service staircase and water tank. This space features a high wall—erected at different periods—that provides complete privacy (Zanco 2002, p. 108). This space has a distinct contemplative quality, providing an area for meditation surrounded by linear geometric forms covered by intense colors and that create sharp shadows (Figure 2.22-2.23). This part of the house has one of Barragan's most emblematic design elements: a facade looking skywards (Figure 2.24). This third floor also contains the servants quarters that are accessed through a spiral staircase that comes from the kitchen in the first floor.



Figure 2.22 Second view of white room

<http://www.casaluisbarragan.org/lacasa/terrazza3f.html>



Figure 2.23 Second view of white room

<http://www.casaluisbarragan.org/lacasa/terrazza2f.html>



Figure 2.24 Second view of white room

<http://www.casaluisbarragan.org/lacasa/terrazaf.html>

Studio and workspace

Immediately adjacent to the house and connected to it, but with an independent entrance, is Barragan's studio, the facade of which extends for eleven meters along *Calle Ramirez*. The studio is connected to the living room through a door on one side of the chimney, and with a garden through the transition space of the jar-filled and high-walled patio (Zanco 2002, p. 110) While the studio can be accessed through the house, it functions as an independent space and has its own access from the street, office space, and service areas. The wide space of the workshop/studio is illuminated by a window that looks east and by openings in the ceiling (Figures 2.25-2.26)



Figure 2.25 Studio/ workshop view (<http://www.casaluisbarragan.org/lacasa/taller2f.html>)



Figure 2.26 Studio/workshop view (<http://www.casaluisbarragan.org/lacasa/taller1f.html>)

Gardens and Open Spaces

The garden of Barragan's house and studio unfolds outward, like a void enclosed with walls—an open air room forming spatial sequences (Zanco 2002, p. 108). Although the garden seems to overpower the house, it's purposely left in a natural state to create a connection to nature despite the urban surroundings (figures 2.27-2.28). The garden provides panoramic views from various points in the house, as well as an escape from the monotony of the urban surroundings. Barragan's experience in landscape design allowed him to use various textures and regional plants to design this garden, providing the house with roots to place not only thorough vernacular references of the building but also by establishing a strong presence of nature. This allows a symbiotic relationship between the built environment and the natural environment, with vegetation complementing geometric forms, and structural elements providing an aesthetic contrast to the lush foliage.



Figure 2.27 Garden view (<http://www.casaluisbarragan.org/lacasa/jardin2f.html>)



Figure 2.28 Garden view (<http://www.casaluisbarragan.org/lacasa/patioollas2f.html>)

In a corner of the house, next to the workshop space, a small patio offers an exit from Barragan's studio into the garden. This arrangement is the result of a series of modifications from the original project that helps separate the garden from the workshop by eliminating a floor to ceiling window in the east facade towards the garden (<http://www.casaluisbarragan.org/>). This small space is surrounded by tall, brightly colored walls, white and pink, and serves to evoke a sense of the rural past by including a small fountain surrounded by jars, typically found in the Mexican countryside, while the volcanic rock used in the fountain floor projects a rustic quality (Figure 2.29). While these elements pay homage to traditional customs, the surrounding geometric volumes and vegetation provide contrast and modern appeal. The fountain incorporates a certain tranquility and provides an abstract interpretation of Mexico's rural past in an urban setting (Figure 2.30).



Figure 2.29 Patio with Jars view 1

(<http://www.casaluisbarragan.org/lacasa/patioollasf.html>)



Figure 2.30 Patio with Jars view 2

<http://www.casaluisbarragan.org/lacasa/patioollas2f.html>

Design Integration

The house, garden, and studio join to create an artistic composition that reflects the evolution of Barragan's design process. The structural arrangement of the building echos modernist tendencies, yet the use of materials, colors, furniture, and references to vernacular architecture provide a strong connection to Mexico's cultural heritage. The building also has an intimate relationship with the exterior garden that not only works aesthetically but also provides a profound respect for nature.

While Barragan's home and studio have a strong sense of place and distinct regional character, they provided a certain familiarity, not only because of the universal appeal of the modernist language but also because there is a sense of home. When visiting Barragan's house, Louis I. Kahn explained that "His house is not just a house, it is the house, everyone can feel at home there. Its materials are traditional, and its character eternal" (Pauly 2001, p. 170). Through intimate spaces and attention to detail, Barragan provides an emotional connection to each space in the house, which is also reflective of his ideals, thoughts, and artistic values. His architecture creates an intimacy and gives people a sense of belonging and linkage to place.

Barragan's home and studio transcends a particular type of style and generates spirituality, depth of meaning, and humanity rarely found in the built environment, especially in modern buildings. Barragan's home reflects his developing architectural conception through which he creates an acute sense of place and evokes a new dialect that can be clearly associated with regional culture. At the same time, his house manages to stand out as an architectural accomplishment in modern society.

The Eduardo Prieto Lopez House

Barragan's work often features simple facades and flat surfaces that seek integration with their surrounding urban context. Most of his buildings seemed underwhelming from an exterior perspective because of the modest neighborhoods in which they were originally built. For this reason the other project that I use as a case study in this thesis is the Eduardo Prieto Lopez house, which has a more striking facade than his home and studio and is built in a more natural setting. In this house Barragan continues to use simple geometric forms and a color palette heavily influenced by regional modern art, while at the same time he integrates the house into the surrounding natural landscape. This unique topography complements the building and provides a unique sense of place

The Eduardo Prieto Lopez house was built in 1950 and is located on *Avenida Las Fuentes 180 Colonia Jardines del Pedregal, Mexico City* (figure 2.31.). Barragan began this house while the *Jardines del Pedregal* development was still in progress, and the site did not have any supporting infrastructure at the time. Barragan incorporated natural elements of the site into his design by taking rocks from the surrounding landscape to construct the outer walls of the house and its garden (Rispa 1996, p. 125).

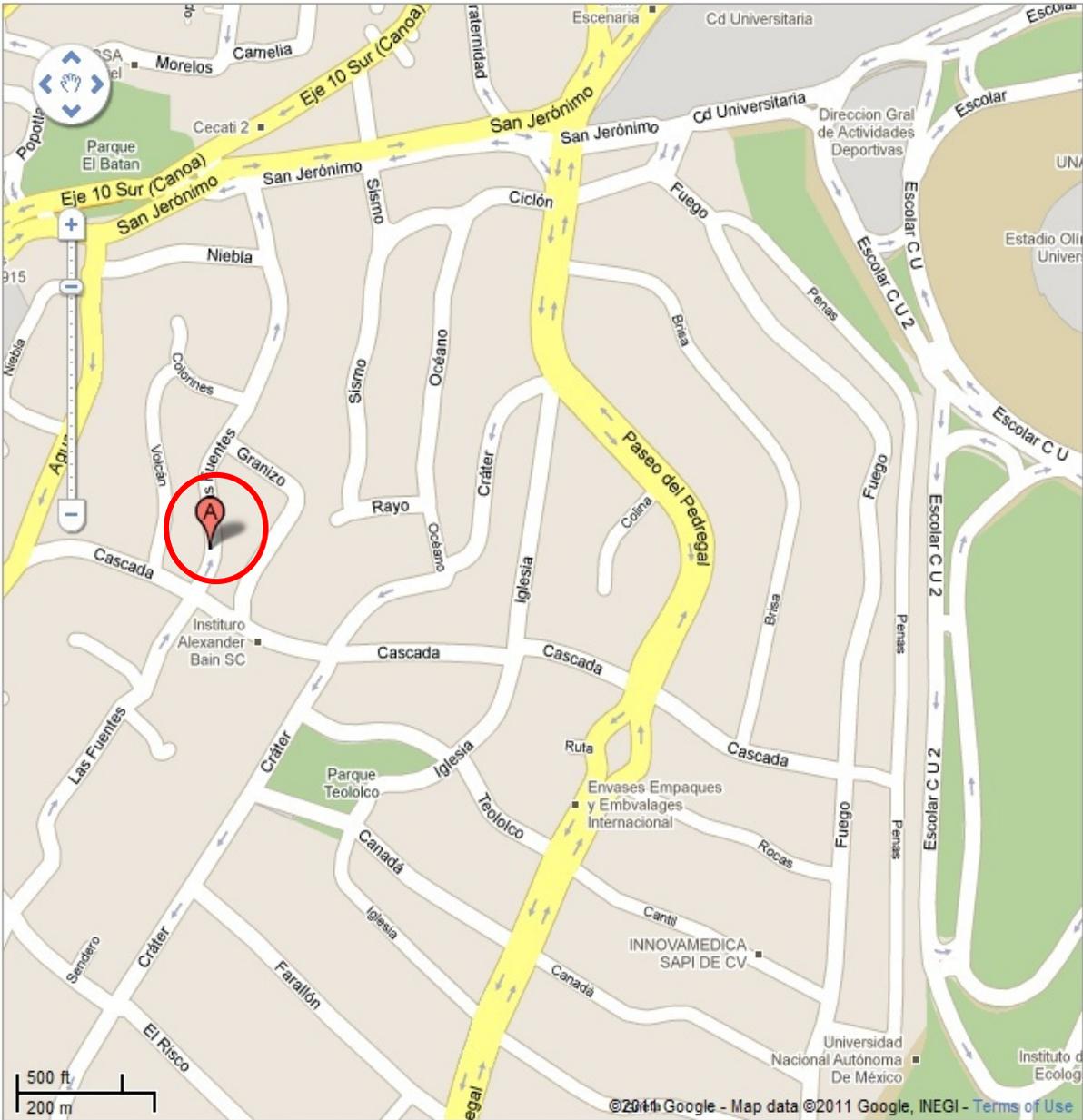
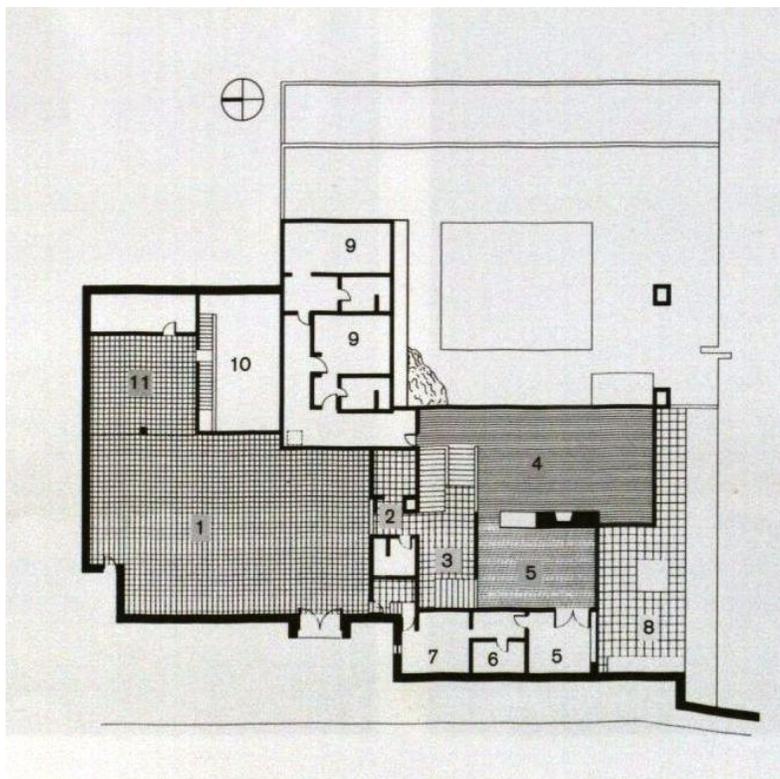


Figure 2.31 Location of Eduardo Prieto Lopez House in Colonia Jardinez del Pedregal, Mexico city.

http://maps.google.com/maps?hl=en&rlz=1G1SNNT_ENUS413&q=180+avenida+de+las+fuentes,+casa+eduardo+prieto+lopez&um=1&ie=UTF-8&sa=N&tab=wl

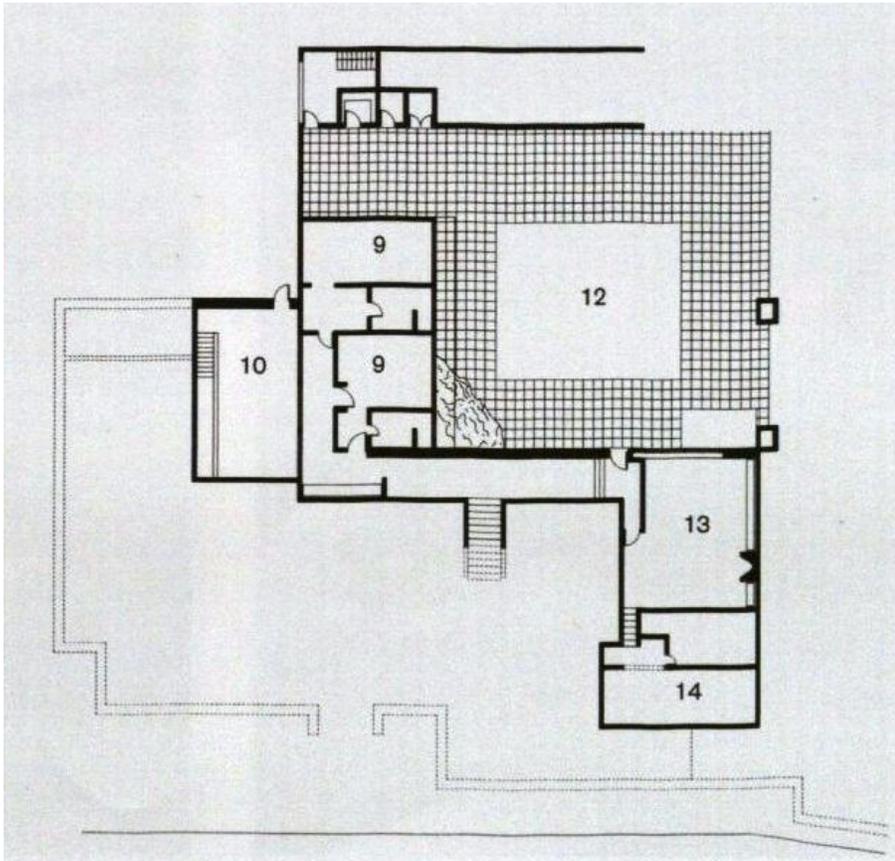
The Eduardo Prieto Lopez house was one of the first buildings erected in the volcanic fields of *El Pedregal*. The building is laid out on various levels that follow the natural terrain,

with the living area in the upper floor and the bedrooms and study below (Zanco 2002). The natural shape of the site helps shape distinct spaces, for example, gardens enclosing the living areas in the upper terrace and a swimming pool on the lower floor integrated with the lava rock (figure 2.32.-2.33.). The house features simple but elegant exterior forms, and its gardens and rock formations show respect for the native terrain. On the side street of the house, a high wall of volcanic stone encloses an entrance patio (Figure 2.34.) composed sharp geometric shapes arranged around a garden, which respects the lava bed and is planted with a variety of local vegetation (Zanco 2002, p 127). The house entrance displays simple volumes with bright colors erected over a stone floor, creating perfect contrast and stimulating the user to experience the interior space. Barragan uses this minimalist exterior to set the tone of elegance and tranquility within the house (Figure 2.35.).



First-floor and basement plans.
 1. Entrance courtyard, 2. Lobby, 3. Hall,
 4. Lounge, 5. Dining room, 6. Pantry,
 7. Kitchen, 8. Terrace, 9. Bedroom,
 10. Utility room, 11. Garage,
 12. Swimming pool, 13. Library,
 14. Wine cellar.

Figure 2.32 Floor Plans Plans - upper level (Pauly, 2002, p. 106)



First-floor and basement plans.
1. Entrance courtyard, 2. Lobby, 3. Hall,
4. Lounge, 5. Dining room, 6. Pantry,
7. Kitchen, 8. Terrace, 9. Bedroom,
10. Utility room, 11. Garage,
12. Swimming pool, 13. Library,
14. Wine cellar.

Figure 2.33 Second Floor Plans - Lower level (Pauly 2002, p. 106).



Figure 2.34 Exterior gate of Eduardo Prieto Lopez House. (Photograph by Steve Silverman, 2004 http://www.flickr.com/photos/pov_steve/)



Figure 2.35 Entrance Eduardo Prieto Lopez House. (Photograph by Steve Silverman, 2004 http://www.flickr.com/photos/pov_steve/)

From the entrance, the house reveals a vestibule that leads into a level that sits just below the living and eating areas but shares common ceiling beams, resulting in a single space that spreads out to create interesting vistas (Rispa 2002). The upper living room and dining room can be accessed through wooden steps on the corner of the vestibule (Figure 2.36.). On the opposite side of these small stairs, this vestibule also has a connection with the main stairway that goes down to the lower level (figure 2.37.). As one continues up the wooden steps of the vestibule, the space opens to a living space, which includes the main dining room (2.38), a smaller dining room (2.39), a living room (2.40) and kitchen (2.41). These main rooms give views on to a garden on a

terrace through large openings framed with ironwork (Zanco 2002, p 128). The result is living areas with sweeping vistas and ample natural lighting.



Figure 2.36 Vestibule with steps towards the upper level. (Photograph by Steve Silverman, 2004 http://www.flickr.com/photos/pov_steve/)



Figure 2.37 Stairway to lower level (Photograph by Steve Silverman, 2004 http://www.flickr.com/photos/pov_steve/)



**Figure 2.38 Main Dining room (Photograph by Steve Silverman, 2004
http://www.flickr.com/photos/pov_steve/)**



**Figure 2.39 Large windows in small dining room with views towards the garden
(Photograph by Steve Silverman, 2004 http://www.flickr.com/photos/pov_steve/)**



Figure 2.40 Main living room (Photograph by Steve Silverman, 2004
http://www.flickr.com/photos/pov_steve/)



Figure 2.41 Kitchen (Photograph by Steve Silverman, 2004,
http://www.flickr.com/photos/pov_steve/).

While the living and eating areas are spacious, they are quite humble. Barragan makes use of exposed ceiling beams and pinewood floorboards to evoke meanings from the past

through vernacular materials, yet maintains minimalist forms (figure 2.42.). The simple furniture also integrates well with the minimal style of Barragan's architecture, creating a harmony between form and function. The rooms have large windows that give visual and physical access to attractive exterior spaces (figure 2.43). The divided levels, the gardens, small stone walls and foliage give the house a sense of timelessness in an apparently endless space (Rispa 2002).



Figure 2.42 Living room on upper level (Photograph by Steve Silverman, 2004, http://www.flickr.com/photos/pov_steve/).



Figure 2.43 upper level access to the terrace and garden (Photograph by Steve Silverman, 2004, http://www.flickr.com/photos/pov_steve/).

On the lower level of the house sit the bedrooms and study area. These spaces have access to a swimming pool, one of the most distinctive areas of the house. The swimming pool is surrounded by the volcanic stone of the natural landscape (figure 2.44.). Barragan uses this

natural element to add further contrast to the house, placing the rich foliage next to the clean-cut architectural volumes of the house.



Figure 2.44 Lower level swimming pool (Photograph by Steve Silverman, 2004, http://www.flickr.com/photos/pov_steve/).

The swimming pool surrounded by volcanic stone, and the upper-level with lush vegetation serve to enhance the building's sharp edges and colorful volumes. The use of natural materials creates a link not only to the cultural heritage of Mexico but also to the area's ecological diversity (Figure 2.45). The Black volcanic stone, baked clay, rustic plastering, and a wide range of terracotta colors contrast with the luscious foliage around the house, evoking a deep connection to place. At the same time, the interior spaces are filled with character and life as shadows and light shift according to the time of day (Figure 2.46).



Figure 2.45 Outdoor space looking towards garden(Photograph by Steve Silverman, 2004, http://www.flickr.com/photos/pov_steve/).



Figure 2.46 Light and shadows in staircase area(Photograph by Steve Silverman, 2004, http://www.flickr.com/photos/pov_steve/).

The house provides a series of sequential architectural experiences adapted to site, as the house opens level to level. These experiences start from the exterior wall, followed by the minimal sharp volumes of the front entry, then into the intimacy of the home surrounded by contemplative garden spaces, and finally with the swimming pool on the lower level. The view

from the lower level can be said to reflect an integration between the natural environment, modern architectural volumes, and local regional identity.



Figure 2.47 panoramic view of house from the lower level (<http://www.barragan-foundation.org/> - photograph by Armando Salas Portugal).

Chapter 3 - Evaluation of the Two Mexico City Houses from Frampton's and Curtis's Perspective

This third chapter interprets Barragan's two Mexico City houses, drawing on the perspectives of Frampton and Curtis as outlined in chapter 1. As evaluation criteria, I use the eight points derived from my comparison and contrast of critical regionalism and authentic regionalism (Table 3.1). In regard to Frampton's and Curtis's theories applied to Barragan's home and studio and the Eduardo Prieto Lopez house, I demonstrate how many issues from both theorists surface in several themes related to the two buildings.

1. *Applying the Vernacular in Contemporary Design*
2. *Reconciling Modernism and Place*
3. *Regional Myths*
4. *Quality of Place*
5. *Regional Type and Natural Landscape*
6. *Architecture as Cultural and Technological Reflection*
7. *Nature and the built environment*
8. *Architecture of the senses*

Table 3.1. Author's eight points (as distilled from Frampton and Curtis) used to interpret Luis Barragan's two houses

Point 1: Applying the Vernacular in contemporary Design

As previously discussed in chapter 1, both Frampton and Curtis address the use of the vernacular in regional architecture, though both reject the use of elements found in traditional architecture as purely a form of romantic aesthetic reference or superficial ornamentation. Yet their use of the vernacular differs in the sense that Frampton's critical regionalism suggests the vernacular as a source of inspiration providing modern solutions to regional issues, while Curtis's authentic regionalism emphasizes the originating principles behind a vernacular element.

Point 1 and Barragan's Home and Studio

When analyzing Barragan's house and studio from Frampton's perspective, one can identify several elements in the home that pay tribute to the local vernacular yet remain relevant to modern architecture. The exterior volumes refer to traditional architecture through square facades with simple, flat surfaces that provide a defensive wall, while enclosing intimate and private spaces. In addition, Barragan uses materials found in the vernacular, but reconfigures them to fit a modernist space. Frampton notes, for example, how the timber rafters on the ceiling of most rooms in the house allude to traditional Mexican architecture, and how the mode of space evoked in the house echoes the legacy of cubism (Zanco 2002, p.22).

Frampton also interprets the vernacular as solutions to regional climatic issues and as expressions of local social patterns. In his house and studio, Barragan draws from the patios and hallways of Mexican rural houses to create spaces that function to channel light, provide ventilation, and create circulation through the house. However, he does not duplicate the exact spatial layout of these traditional dwellings, which mostly reflect a strong influence of colonial architecture through rooms surrounding a courtyard. Rather, Barragan draws from the vernacular use of natural lighting, ventilation, and providing transitions spaces between rooms. He adapts those traditional elements to his specific architectural layout and generates a more modern arrangement.

While the colors and volumes of his home and studio seem reminiscent of Mexico's Pre-Columbian past, Barragan offers an abstract interpretation of that heritage. He does not dwell on

a lost architectural dialect that is no longer relevant to modern life. He does, however, integrate those vernacular elements with colonial themes, such as stone stairs against a thick adobe wall, wooden window frames, large wooden doors, and religious icons and figures, which, when combined, express a clear regional identity without falling back on stereotypical cultural representations. Barragan's home and studio comply with Frampton's concept of re-interpretation of the vernacular without exactly replicating its form. Barragan manages to alter the perception of certain components found in traditional Mexican architecture by applying the sculptural character of modernism and thus creating a new architectural dialect that strikes a delicate balance between contemporary and traditional.

In terms of the authentic value of those vernacular elements and motifs, Curtis's vernacular principle comes into play. Barragan did not merely use references to the vernacular past based on history or romanticized pictures of traditional Mexican villages. Instead, Barragan used his profound knowledge of rural lifestyles to incorporate vernacular elements into his contemporary designs. This nexus of provincial life that Barragan gained as a child provided him with an acute awareness of Mexico's vernacular architecture, but an awareness that goes deeper than just the image of the landscape. Rather, he gained experience of the everyday life and essential traditional meanings behind it.

An example is found in Barragan's use of casement windows. In traditional Mexican dwellings, the originating principle for this type of window is protection from the intense sun and rain, as well as providing privacy and protection from a sometimes hostile exterior. Barragan looked for the main motives behind this window and then adapted it to fit contemporary design. The result is a four-part casement window that manages the amount of outside light, and creates a wide range of possibilities in terms of experiencing the entry of light. This window also provides protection and privacy if required.

Barragan also drew on traditional hallways and patios and applied them to his house design. Their original purpose is to connect rooms and provide efficient circulation. In addition, they provide natural light and ventilation to each interior space. Barragan incorporates that principle into his design, arranging the house to mimic this functionality. However, he does not

arrange each room around a main hall or patio like the traditional dwellings but, rather, connects and distributes a series of patios and halls in such a way that each house space receives enough natural lighting and ventilation, while at the same time interconnects with other rooms to generate a multi-sensory experience — a sense of discovery as one transitions from one space to another.

Point 1 and Barragan's Eduardo Prieto Lopez House

In his design of the Eduardo Prieto Lopez house, Barragan draws on the vernacular in a manner similar to his home and studio, using materials and vernacular solutions that are derived from rural dwellings and applying them in a contemporary urban setting. From Frampton's perspective, Barragan takes inspiration from old haciendas and their great dimensions of spaces; he reinterprets those wide spaces in the main living areas of the house. He emphasizes the reference to the vernacular in those spaces by using traditional materials, such as wooden beams in the ceiling, stone stairs, large bare walls, and wooden floors. Large windows and wide doors provide ample light and access to outdoor spaces filled with vegetation, referencing the functional qualities of openings in big ranches.

Another element drawn from the vernacular is a roof overhang in the upper levels, protecting the large windows facing the terrace garden from intense sun and rain. In this detail, Barragan mimics the overhang found in traditional Mexican architecture, mostly in hallways that lead to patios or courtyards. However, Barragan does not use sloped roofs as the vernacular dictates; rather, he adapts that concept to flat roofs, making it relevant with the geometric planes created by the building's form.

In relation to of Curtis's perspective, Barragan is able to incorporate the originating principle of large windows and large interior spaces of the old haciendas into his contemporary design. Having grown up in that environment, Barragan understood that those generous spaces in living rooms and dining rooms gave certain prestige in a rural setting; he also understood that rural people take advantage of the fields and green spaces around the country house to create a direct link to the surrounding landscape. The immediate accesses to fresh air, tranquility, and removal from the busy city life are defining elements of ranches found in the rural Mexican

landscape. Barragan saw these qualities as vernacular principles to be incorporated into his designs. He achieved this integration by providing the main living areas with generous dimensions and connecting them to outdoor spaces that evoked a connection to nature. The gardens reflect regional identity by using diverse local vegetation. He also provided isolation and tranquility from the exterior through the use of stone walls, granting privacy to the interior gardens and architectural spaces.

Curtis would find many manifestations of vernacular principles in the Eduardo Prieto Lopez home, not only in certain structural elements around the house, but also in the spatial layout of certain areas. This goes beyond replicating simple functional qualities of the vernacular, and creates experiences that are typically found when living in rural parts of Mexico. Barragan achieves this by establishing living areas connected to lush gardens and bedrooms having access to picturesque vistas of the surrounding green spaces. Barragan also provides intimate and contemplative spaces within the house, as well as elegant yet simple rooms that pay homage to old haciendas.

Point 2: Modernism

Modernism's cultural legacy for contemporary civilization is recognized by both Frampton and Curtis. For Frampton, modernism's monumentality, functionalism, and technology are essential in providing a regional architecture with contemporary relevance. Frampton's critical regionalism relies more on modernism than tradition for its formal expression and seeks a balance between contemporary technologies and traditional solutions. On the other hand, Curtis considers traditional architecture as the main source of good regional design.

Point 2 and Barragan's Home and Studio

Though there is a clear connection to the vernacular in Barragan's home and studio, it is essentially a modern house. In examining the modernist concepts that Barragan incorporated into the design of his home and studio, Frampton's perspective serves to identify those concepts and their sources. Barragan's exposure to modernist theories and his collaboration with architect

Max Cetto provided him with a deep knowledge of modernist tendencies. One example is in the library staircase that leads to the mezzanine, which mimics the concrete stairs of Le Corbusier's Beistegui Penthouse. In this sense, Barragan used vernacular materials and created modern functions and forms.

In addition, Barragan used the abstract volumes found in pre-Columbian and colonial architecture to create a new architectural dialect that relates to modern design. He understood the sculptural qualities of modernism and displayed them throughout the house. These qualities are exemplified in the exterior volumes, planar white surfaces, variant wall levels, enclosed terrace, and stairways. Furthermore, he used light and shadows to enhance distinct linear shapes.

While Barragan alluded to colonial architecture in his use of patios and hallways, he did not follow a traditional layout of colonial houses, with a main courtyard surrounded by a hallway that connects with every room of the house. Instead, Barragan used the concept of interrelation between rooms and connection to outdoor space derived from colonial architecture, but he transformed this pattern into cubist space. Barragan's home reflects architect Heinrich Kulka's "spatial plan," grounded in a rational distribution of the spatial cube relative to volumes of different heights, rather than being based on horizontal planes (Pauly 2001, p. 102). This concept is used in his home and studio as Barragan created multiple rooms at different levels under the same surface and shifts wall heights. There is a sense of privacy, while, at the same time, there is a continuing expansion through various interconnecting spaces of the house.

Although Barragan took inspiration from modern values, he critiqued modernism as applied to Mexico's unique regional qualities. This critique is in tune with Curtis's distrust of the "International Style" and relies more on traditional architecture as a main source of good regional design. Barragan believed that industrialized society could do much harm to the quality of urban life and that the misuse of modernism could result in the loss of cultural identity (Pauly 2002).

Although most modern houses of the time utilized floor-to-ceiling glass walls, Barragan saw this architectural element not only as incompatible with Mexico's climatic conditions but also as irrelevant to local lifestyles. He identified open glass walls as inappropriate in the context

of Mexico, due to the intense light that fills the country, and the need for privacy in everyday life. To Barragan, architect Richard Neutra's teaching of everything being open and made of glass, if misunderstood, could be dangerous and lead to uninhabitable spaces. For his home and studio, Instead of using massive uninterrupted open spaces incorporating glass walls, Barragan sectioned and enclosed various living spaces to create intimate, private areas responding to the activities of contemporary Mexican lifestyles.

Point 2 and Barragan's Eduardo Prieto Lopez House

The Eduardo Prieto Lopez House expresses a more contemporary image than Barragan's home and studio. While his home and studio's best architectural qualities are experienced in the interior spaces, the Eduardo Prieto Lopez house provides interesting vistas from both inside and outside the building. Barragan's collaboration with German architect Max Cetto in other neighboring houses of *Colonia Pedregal* during the same period no doubt influenced Barragan's use of modernism. From Frampton's perspective, it could be said that Cetto's familiarity with the language of modern architecture motivated Barragan to create more appealing facades. He achieved this in the Eduardo Prieto Lopez home through the use of rectangular shapes and minimalist forms that showcased the verticality of the building. The house features large square windows and flat roofs typically found in modernist buildings, with the balcony's facing the swimming pool as a major expression of a contemporary image. Barragan also emphasized the geometric volumes in exterior spaces by contrasting them with the natural lava-rock formations of the site, while the clear water from the pool reflects the sharp-edged planar surfaces of the buildings, giving the overall structural composition a modernist dimension.

From Curtis's perspective, a central aspect of the house's design can be said to be its homage to the *old haciendas*. Barragan captured the essence of traditional architecture by using minimalist and sculptural qualities of modern architecture to reinterpret rural values and experiences found in the Mexican countryside. Barragan provided a spatial layout that allows the user to experience the various qualities of old haciendas, such as spacious living areas, the immediate connection to nature, and the appealing vistas in an urban setting. Barragan created

modern elements such as white planar surfaces, clear cut volumes, and partitioned walls. He used materials and colors found in traditional architecture to give a unique regional quality to the home's contemporary design.

While the interior spaces have generous dimensions and large windows that allow light and fresh air to fill the rooms, Barragan did not depend on large curtain walls imposed by the "International Style." Instead, he divided these rooms using alternating planar walls, keeping them as independent intimate spaces. He also placed windows in a way to maintain privacy, while providing pleasing outside vistas. The layout of the house connects the rooms through openings and changing levels that sustain user's habitual activities. This respect for intimacy, while providing adequate circulation, connects Barragan's architecture to the emotional qualities of rural dwellings.

Point 3: Regional Myths

This point recognizes the limits of a region and its institutional status as important for establishing regional architectural identity. The word "myth" is taken from Frampton's definition as being a school of thought that influences the typology or architecture of a region. If this type is then accepted by the local population, it becomes representative of their cultural image. While Curtis does not specifically mention schools of thought in his theory of authentic regionalism, he does define a conflict between rural and urban ideologies. He infers that regionally sensitive buildings in an urban context derive from the evolution of rural elements. In other words, Curtis establishes the countryside as an inspiration for developing modern regional architecture.

In Barragan's case, there are various schools of thought that influenced his design. From Frampton's perspective, the most important would be pre-Colombian and colonial architecture, which are generally associated with countries colonized by Spain. Barragan's interpretation of these "myths" allowed his architecture to have a connection to Mexico's cultural heritage through the recognized forms and colors found in regional history. From Curtis's perspective, Barragan

used elements and patterns found in the rural landscape and applied them in an urban setting. This provides a connection to tradition and nature that also adapts to a modern design.

Point 3 and Barragan's Home and Studio

Barragan's home and studio incorporates several elements of the region's "myths" into the design. From Frampton's perspective, Barragan abstracted the monumental and rectangular forms found in pre-Columbian architecture. This abstraction is visible in the exterior volumes of his home and studio. The most significant representation is found on the third-floor terrace as sharp, rectangular volumes are juxtaposed, making use of pre-Colombian myths to create a new architectural language. Barragan also incorporated the "myths" of colonial architecture into the design of his home and studio, using the most recognized elements of traditional architecture, such as wooden beams, wooden floors, stone stairs, textured walls, chimneys, and a general interior decor. The walls also make a strong reference to colonial architecture in their thick plaster coating, creating a solid palpable texture.

Another important element in Barragan's home is the use of color. In the Mexican landscape, colors are distinct and have strong local cultural roots from both pre-Colombian and Spanish heritages. Barragan sought to incorporate these colors in his architecture, with textures and designs that enhance the tradition of pre-Columbian cultures. Barragan's color scheme also includes several colors used in traditional Mexican art, such as bright pink, golden yellow, ochre, indigo, cobalt blue and purple. This is a clear example of using "myths" of place as incentives for architecture with regional identity.

From Curtis's perspective, Barragan incorporated several elements of rural life into the design of his home and studio. As the rooms open up vistas to the exterior gardens, they provide a connection to nature rarely found in an urban setting, and recreate experiences found in traditional Mexican villages. Barragan's concept of enclosing intimate spaces while contemplating lush gardens allows an escape or refuge from the hubbub of modern urban life, providing rural experiences in an urban setting.

Barragan also alluded to traditional rural elements and scenes, as for instance, in the patios, hallways, and gardens of his home and studio. An example of this is the jar-filled patio just outside his workshop, featuring a small space enclosed by brightly colored walls with volcanic rock used for the floor and a fountain surrounded by different sized jars. This space creates an image of tranquility and serenity often found in the rural landscape. Barragan's home and studio recreates pastoral scenes and alludes to past ways of life.

Point 3 and Barragan's Eduardo Prieto Lopez House

In examining the Eduardo Prieto Lopez house, from Frampton's perspective, one notes how Barragan related to pre-Columbian architecture through the verticality of the building, as the rectangular shapes arise from a foliage covered site. The volumes in the main entrances that serve to provide transition from exterior to interior space also reference Mexico's cultural heritage through the intense colors of the simple geometric volumes. The main living rooms have a distinctive simplicity and spaciousness, enhanced by white planar surfaces, which relate to colonial architecture. The use of vernacular materials and interior decor also suggests a colonial reference. Barragan used the region's familiarity with both pre-Columbian and colonial elements to create a link between the building and local history.

From Curtis's perspective, one can say that Barragan used simple interior spaces with wooden furniture to relate to countryside dwellings, while the spacious design of the main living rooms referenced the *old haciendas*. The views from the main living rooms and their access to the gardens generate an intimate relationship between the user and nature, mimicking the experience of countryside life. In turn, the wall of lava rock suggests the perimeter walls of Mexican ranches, while the clay jars and rock floor showcase everyday rural tools. Yet again, a wooden table facing the garden terrace creates the illusion of immersion in the Mexican countryside. All these factors support Curtis's theory of using rural elements to enhance regional qualities in contemporary architecture.

Point 4: Quality of Place

As explained in chapter 1, this point explores the limits between space and place, defining how the relationship between a building, surrounding context and users contributes to the creation of place. Frampton establishes architecture not as a free-standing object but, rather, as a component in a region's livelihood and everyday experience of place. Frampton's perspective examines the space-defining elements and enclosures of the two homes, the relationships between these spaces, and the integration of each home to the surrounding landscape. Also important to Frampton are the circulations and transitions from the exterior to interior spaces as expressed in Barragan's architecture, especially the interaction of the surrounding context with the buildings as that connectedness helps define the sense of place for the two houses.

Curtis's theory also seeks to explore the relationship between the building and place, yet he also believes that by utilizing traditional building methods and local craftsmanship when creating a building, a greater connection to place can be achieved. In the case of Barragan, his designs rely on local materials and traditional building methods. His architecture is not only reflective of the region's typology but is also relevant to Mexico's social and cultural ethos, present from the design stage throughout the construction phase and the finished product. This provides a built environment that is integrated to the surrounding context, born and nurtured in place, and relevant to the everyday life patterns of its people.

Point 4 and Barragan's Home and Studio

When analyzing Barragan's home and studio from Frampton's perspective, one notes a clear separation, both physically and thematically, between exterior and interior spaces. The house exterior presents a simple, bland facade that meshes with the humble image of the neighborhood, while the interior expresses a much more complex architectural composition. Barragan's main aim with the home and studio was to create intimate interior spaces that gave refuge and tranquility from the outside street life. His design used sharp geometric volumes and planar surfaces to enclose space. He employed diverse-sized walls to separate the interior rooms

and create diverse sequential experiences. Barragan also used the lush garden vegetation to enhance the detachment of interior space from the surrounding urban setting.

While the interior's separation from the outside surroundings may appear to be counteractive of place, it follows the general paradigm of a house in Mexico City and is in tune with the country's social economic reality. Mexico's social condition requires that interior spaces be protected and guarded from the sometimes aggressive exterior. Instead of providing direct visual and physical access to the home, Barragan blended the dwelling facade with the local urban landscape. He then related the house to its regional context by featuring a spatial layout within focused on a typically Mexican lifestyle, while at the same time providing personal spaces that were of contemporary function.

In the case of Curtis's approach, one can argue that Barragan enhanced a regional image by utilizing adobe walls, wooden beams, wooden floors, stone stairs, and other vernacular elements made of natural materials. These elements are not only from the region, but also require local labor. While most modern buildings of the time featured concrete walls, steel structures, and aluminum-and-glass windows, Barragan respected an age-old tradition of building with adobe bricks, wood, and stone. He incorporated traditional construction to the needs and functions of a modern home. The adobe walls also provided an effective environmental response to Mexico's hot, dry climate, as it allowed the interior spaces to remain cool during the day and warm during the night, since adobe stores and releases heat very slowly. In a way that Curtis would approve, Barragan does not allow the imposition of foreign values to dictate the construction methods of his architecture. Instead he recreates modernism with vernacular materials and methods, providing regional qualities to his design and a deeper connection to place.

Point 4 and Barragan's Eduardo Prieto Lopez House

When examining the Eduardo Prieto Lopez house from Frampton's perspective, the relationship between the home and its surroundings follow the same pattern as Barragan's home and studio. The Eduardo Prieto Lopez house is composed of enclosed private spaces with limited

or no direct interaction with the surrounding urban landscape. The house has a perimeter stone wall that delimits the house, and the entrance provides a transition space between an urban setting and the private and quaint interior spaces. This entrance then presents the dwelling's upper level with living space opening up to the garden terrace, a recreation of the relationship between nature and building found in traditional homes, especially the old *haciendas*. The upper levels are then connected through stairs to the lower-floor rooms, which then open up to the swimming pool surrounded by lava rock. While the private spaces retract from the urban surrounding and social activities of the street, they still create a link to place by fostering a deep relationship between the user, the landscape, and interior spaces.

From Curtis's perspective, Barragan can be seen to employ local materials and building techniques, as is demonstrated in the perimeter wall made of lava rock extracted from the site and built through traditional construction methods. Similarly, it can be said that the use of wood, stone and adobe bricks reflects Barragan's affinity to age-old traditional building techniques employed in a modern home. Barragan demonstrated his use of local labor through the house's interior details, such as large windows with frames of delicate ironwork, exposed wooden ceiling beams, pinewood floors, and handcrafted, wooden furnishings. Most succinctly, Barragan uses the knowledge of tradition to satisfy the demands of a modern home.

Point 5: Regional Type and Natural Landscape

This point relates to the use of a regional type and the adaptation to the natural landscape to design needs. Frampton and Curtis incorporate some similar ideas in their architectural typology that relates to the region. Frampton defines typology as the result of civilization and culture that create structures for human settlements. Curtis's definition is similar, but he searches for the reason behind that structural element or "type" and examines how that type has evolved to become relevant in contemporary architecture. Curtis's approach has already been considered in regard to points 1 and 3, where the general type of houses found in the rural landscape is important for defining the architectural language of Barragan's two houses.

Point 5 and Barragan's Home and Studio

In Frampton's perspective, one notes certain qualities of his home and studio that relate to local typology. The dwellings found in the Mexican countryside have certain structural characteristics that reflect a regional identity, including austere external volumes, sloped roofs, thick adobe walls, and a square facade with odd openings overlooking the street. Most of these characteristics are born from cultural heritage and local environmental response, such as adobe walls reflecting indigenous construction legacy and the few openings serving to manage Mexico's intense sunlight. Barragan incorporated many of these elements in his home and studio as exemplified through the main facade with a simple square shape with odd openings towards the street, use of local materials, and indigenous colors and textures. Barragan also used the exterior patios and gardens to bring light into the house, which is another defining characteristic of Mexico's architectural typology. In the case of unique topographical qualities, Barragan's home and studio was built on a regular terrain, with little to no major shifts in the site's slopes. However, Barragan created shifting levels in the house that added a sense of movement and relate to Mexico's diverse topographical landscape.

From Curtis's perspective, these characteristics must be analyzed to understand not only the form, but also the function—the originating principle. Traditional architecture featured adobe walls for its heat insulation qualities, the odd openings facing the street to manage light yet retain privacy, and heavy wooden doors and thick walls on the exterior to protect interior space. Traditional architecture also included flat surfaced facades to provide homogeneity in the streetscape, exterior gardens and patios to bring light in and access to green spaces (compensating for the lack of connection to the street), and use of vernacular materials because of their low cost and accessibility. Barragan utilized these vernacular principles in his home and studio, mimicking both form and function of traditional dwellings but adapting these principles to his own architectural language, creating a modern home with distinct regional qualities derived from indigenous customs.

Point 5 and Barragan's Eduardo Prieto Lopez House

The Eduardo Prieto Lopez house incorporates many of the same regional structural elements used in Barragan's home and studio. From Frampton's perspective, the house can be said to use simple rectangular volumes to replicate traditional dwellings, with interior patios and corridors derived from the layout of rural houses. Other characteristics that refer to a regional typology include: the use of wide wooden overhangs in exterior patios (between the upper living rooms and the gardens), bright colored walls in the exterior, pure white ones in interior spaces, and a balcony facing the swimming pool, reminiscent of wooden balconies on the front of colonial houses.

In the case of topographic qualities, the design of the Eduardo Prieto Lopez house closely follows the physical characteristics of the site. The house's integration with the natural landscape is much more palpable than in Barragan's home and studio due to the unique topography of the site. The different levels of the building follow the irregularities of the terrain, with living areas on the upper floor and the bedrooms and study in the lower floor. Barragan used the natural landscape to add regional character to various spaces of the house, through the use of local vegetation in the upper terrace gardens, and a swimming pool surrounded by the sites volcanic stone. The mountainous terrains, variety of local plants, and volcanic rock have been adapted to the building's layout and provide an interesting contrast to the dwelling's structural composition.

From Curtis's perspective, the house can be said to exemplify the function of several vernacular elements typical of the region as applied to the home's contemporary design. The house features a garden terrace next to the upper living rooms, which mimic traditional homes with central courtyards shaded by trees and the use of wide wooden overhangs to protect the patio from Mexico's climatic conditions. Barragan also incorporated chimneys in his design, which not only serve their original purpose of providing heat but also created volumes made with distinct material that integrate them with the landscape.

Point 6: Architecture as Cultural and Technological Reflection

For both Frampton and Curtis, architecture reflects the evolution of culture and technology displayed in the form of human settlements. Their theories overlap in recognizing the value of human ingenuity in creating a built environment that has lasting human, cultural and artistic value. For Frampton, architecture is not a mere source of picturesque scenes but also a structural accomplishment that reflects cultural heritage through artistic expression. Curtis acknowledges the importance of both modernism and tradition in establishing a cultural identity, serving to provide deep meanings to the built environment.

Point 6 and Barragan's Home and Studio

From Frampton's perspective, Barragan's home and studio presents a structural composition whose sculptural form, use of traditional elements, and profound meanings provide a modern connection to local culture and complement the natural landscape. Barragan's home, when seen from the exterior, does not present an image of an iconic landmark. However, the combined experiences of transitioning spaces, the connection between rooms, the lush gardens, color palette and geometric volumes throughout the house provide more meaning than mere aesthetically pleasing scenes. Each of these experiences relate to Mexican culture as an abstraction from pre-Colombian or colonial forms, response to regional environmental characteristics, social patterns, and Barragan's own artistic and intellectual precepts. In his home and studio, Barragan created a work of architecture whose value is not based on a skin deep regional image or scenic possibilities but involves regional values deeply rooted in his architectural vocabulary.

From Curtis's perspective, the home and studio feature strong traces of modernism in their functionality, minimalism, and a design that adapts to contemporary lifestyle. This is seen in the building's simple facade, use of straight lines, connection between spaces, and rooms designed to fit modern living. This use of modernism reflects the importance and influence of the International Style during the period in which the house was built and becomes part of an important architectural legacy. Barragan also recognizes the importance of regional tradition by using local materials, indigenous colors, regional art, and recreating rural experiences. The art,

history, social structure and vernacular elements expressed by Barragan's home and studio are part of Mexico's cultural heritage and defining qualities of regional identity.

Point 6 and Barragan's Eduardo Prieto Lopez House

From Frampton's perspective, the Eduardo Prieto Lopez house can be said to use the topographic qualities of site to showcase the verticality of the building's structure. The rectangular forms make reference to both tradition and modernism, and the intense colors have roots to Mexico's cultural heritage. A major design theme is transitioning spaces that provide sequential experiences from the entrance to the lower level. This is achieved through spacious rooms opening up to luscious gardens; Barragan creates intimate spaces with great vistas that reflect regional artistic and human values. On the lower level, the exterior spaces present a visual contrast between sharp geometric forms of Barragan's unique architectural dialect and the qualities of the surrounding landscape. The house creates contemplative spaces, with poetic references to Mexico's past, sculptural forms showcase human creativity, and layout allows functionality and movement that relate both to Mexican lifestyle and Barragan's modern ideals.

From Curtis's perspective, it can be said that Barragan recognizes both the value of traditional and modern architecture in creating a regionally sensitive building. He incorporates the familiarity of vernacular elements, recognizing the importance of their cultural heritage and human value. This is reflected in his use of wooden floors, stone walls, exposed ceiling beams, and pinewood floors. These elements are characteristics that define a regional image. In the case of Modernism, in the entrance of the house, Barragan provided an interplay of colored volumes that reflects modernist tendencies—the sculptural strength of cubic and planar volumes create a contemporary image that is representative of Mexico's new architectural identity. The square shaped glass windows, swimming pool and large driveway also reflects modern values and their importance in contemporary Mexican culture. Barragan also incorporated oil paintings by Mexican artist Chucho Reyes to enhance a connection to place. Both traditional components and modern values are utilized by Barragan to create architecture with local roots and regional identity.

Point 7: Nature and the Built Environment

Frampton and Curtis both emphasize that regionally sensitive architecture needs direct connection to the natural environment. For Frampton, a balance must be found between the use of natural resources and modern technology to provide both rootedness to place and a good quality of life for the users of a modern home. Frampton particularly emphasizes the use of natural lighting to enhance regional character and the incorporation of artificial lighting to respond to the needs of a modern home. This balance is explored in both houses to examine Barragan's incorporation of Mexico's ambience conditions into his architectural dialect. In contrast to Frampton, Curtis favors the incorporation of the natural landscape as a strategy for returning to sources, relying more on regional natural resources to provide for the needs of a modern home.

Mexico is a place of diverse geographic, climatic, and cultural contrasts, where each region has its own landscape, dialect and tradition. Yet the one thing that is shared by each region is the intense light from the sun and the deep shadows it spreads. Barragan's architecture recognizes this and explores ways in which to enhance the forms and outlines of his designs using natural light. Mexico also features an ecologically diverse environment, with a wide range of plants at Barragan's disposal for creating rich gardens that relate to the native landscape. The diverse flora is often incorporated into Barragan's work, as can be seen in the two Mexico City houses.

Point 7 and Barragan's Home and Studio

From Frampton's perspective, one can point to Barragan's use of a wider range of lighting methods, most of which were devised by the architect himself. He employed direct and indirect side lighting in the studio—light that is localized via an overhead opening in the passageway stairs, interior shutters of his own design in several rooms, filtered light created by net curtains in the living room, and a yellow glass in the entry hall and staircase leading to the terrace. Barragan's home and studio channels light through corner windows so that it bounces off walls and outlines the sharp corners and sculptural forms used throughout the house. Barragan also played with dark shadows by manipulating light direction. He did this through strategically placed windows that shield intense sunlight yet provide passageways for the sun to illuminate narrow hallways, changing the character of these spaces as the day progresses. This intense light

exposes the roughness and texture of the walls. In the front entry lobby, his manipulation of sunlight brings the materials to life to as they contrast with the dark lava-stone floor.

Perhaps the best example of Barragan's ingenuity in managing natural light can be seen in his design of casement windows, as exemplified in the mezzanine level that contains the library. He utilized wooden interior shutters to regulate the sun's rays throughout the day, borrowing from traditional architecture, but through an abstract and variable form. The window is composed of four white panels, and this pattern is repeated in bedrooms and guestroom. Barragan did, however, use artificial lighting when required, for example, he and Mexican artist Jesus Chucho Reyes designed lamp fixtures that are simply parchment and Plexiglas cylinders and parallelepipeds, set on the ground or on a piece of furniture. (Pauly 2002, p. 178- 179)

While Barragan does use artificial elements, his home and studio illustrates Curtis's theory of favoring natural over artificial. Barragan uses the garden and patio to access the light from the sun, while creating contemplative spaces and simulating “wildness” of the rural landscape. The lush vegetation provides shading to the gardens areas and prolongs shadows in the interior living spaces. Barragan also integrates the Mexican sky into the design of his house, as shown in the roof terrace featuring an interplay of colored volumes set against the backdrop of the intense blue sky. Barragan's use of natural lighting to illuminate both exterior volumes and interior spaces helps display the textures and forms of vernacular materials. The unique qualities of ambient light achieved by his manipulation of light give the house a distinct sense of place.

Point 7 and Barragan's Eduardo Prieto Lopez House

From Frampton's perspective, one can say that Barragan's Eduardo Prieto Lopez house incorporates more modern qualities than his home and studio. The large squared iron-framed glass windows reflect contemporary tendencies, as opposed to the wooden casement windows heavily used in his home and studio. However, Barragan still uses natural sunlight to showcase the sculptural forms and textures found in the Eduardo Prieto Lopez House. He relies on the manipulation of light to create a sense of movement and fluidity as it hits the simple geometric shapes in each room. Barragan uses a poetic interpretation of shadow meshed with light inside

the dwelling. As one transitions between areas, it feels like light is gradually transposed from one space to another according to the needs and functions of each room,

The house reflects a poetic interpretation of shadow engaged with light inside the dwelling, with the spatial layout devised as a series of luminous halos and shadowy zones that create intriguing sequences. In each of these sequences, light is treated as a basic material, and dark shadows allow light to give one a sense of discovery as he or she transitions from one place to another. This is demonstrated in the entrance courtyard as light contrasts with the shadowy wall of the corridor. It is also palpable in the narrow corridors, which serve not only as circulation for the user but also filters light and creates sharp shadows on the planar walls. As one transitions from the hallway into the main living spaces, the change in the intensity of light allows the living rooms to be perceived as larger spaces. As one moves from one area to another, light and shadow are used to uncover each space of the building,

From Curtis's perspective, it can be said that Barragan still favors the use of natural lighting over artificial, as he uses the terrace garden and open green spaces (next to the swimming pool area) to fill his rooms with light. The white planar volumes of the interior spaces are showcased by Mexico's intense sun, and the textures of vernacular materials are intensified by natural illumination. Barragan also incorporates generous panoramic vistas in the upper level, that not only serve to bring light into the rooms but also create a connection to the surrounding landscape. Barragan sought to provide a return to the sources by using natural lighting and contemplative exterior spaces. While the house is enclosed by stone walls, it still recreates a sense of open space from the rural landscape, and its use of natural regional resources, such as local plant life, the lava-rock formation, and Mexico's climatic conditions, provide a deep connection to the natural environment.

Point 8: Architecture of the senses

Frampton argues that good regional practice lies not just in creating visually striking structures that reflect cultural heritage but also in incorporating tactile and multi-sensory experiences that relate to regional characteristics. Curtis does not address the use of the senses to

enhance traditional architecture, yet he does acknowledge the importance of replicating rural experiences to provide regional reference. In the case of his two houses, Barragan explores the use of all the senses through different sequences that provide experiences unique to the region. Barragan used materials of distinct textures, local vegetation, filtering colored windows, and intense light and sharp shadows to provide visual and tactile diversity. He always referenced environmental and cultural values that identify with Mexico's heritage. Barragan created spaces that provide unique bodily responses and emotional connections to place through multi-sensory sequences that showcase the natural landscape and regional qualities.

Point 8 and Barragan's Home and Studio

In his theory of critical regionalism, Frampton emphasizes the exploitation of the senses to create a deeper connection to place, and he would approve of Barragan's home and studio providing a wide range of multi-sensory experiences, heavily felt as one transitions from one space to another. The entry provides a shift in character from a rough exterior to a complex interior. In the entry hallway, the change of ambient light is achieved through a filtered yellow glass, heightening the user's perception of materials and shapes. The change from the street-walk concrete to the entry's volcanic stone floor enclosed by planar walls creates a sense of transition, perceived by all the senses. As one moves from circulation areas to living areas, the hallways serve to prepare the senses for the upcoming scenic changes. Through materials, light and shadows, Barragan creates a sense of wonder and discovery in the user. The living rooms provide a different experience than the hallways. As the user moves from a hard stone floor to a softer wooden floor, he or she experiences the textures on the walls differently as the white surfaces allow more light to bounce off, and provide a more intensely lit room. The changing levels throughout the house also provide different sensations, the body experiences changing ambient conditions through a dynamic flow. Intense sunbeams and long shadows also appeal to the senses, as Barragan placed windows and openings that shoot rays of light that create warm and well lit areas, contrasting with the cool dark spaces where the light is blocked and shadows are allowed to reign.

The exterior gardens also provide unique sensory experiences. They serve to cool interior spaces by creating shadows that extend into the living rooms, while making distinct sounds as the wind flickers the leaves against the adobe walls. The gardens provide an emotional response in the user, through their contemplative areas of tranquility. The shift from enclosed spaces towards a lush garden appeals not only to bodily senses, but also creates an emotional link to the natural landscape. This link with the surrounding natural environment is in tune with Curtis's idea of returning to the sources. Barragan's home and studio provides a multi-sensory experience that relates to place and fosters an intimate relationship with regional environmental qualities.

Point 8 and Barragan's Eduardo Prieto Lopez House

The Eduardo Prieto Lopez House also provides a multi-sensory experience. From Frampton's perspective, Barragan can be said to utilize natural elements found in site and to incorporate them to enhance the visual and tactile experience of place. The exterior wall made of volcanic stone provides a sharp and rough surface that sets the tone of a protective perimeter. This wall encloses an entrance patio with rectangular geometric volumes rising from the stone floor. The wooden door on the exterior provides a different palpable texture from the thick walls, and helps shift the more aggressive image and feel of the exterior and prepare the user for the softer, more welcoming interior.

As one moves through the first floor interior, several elements appear that provide sensuous appeal, such as wooden floors, textured walls, space, stone stairs, wooden furniture, iron framed windows, and a terrace that allows vegetation to become part of the house. The terrace gardens provide an emotional response that connects to place, as the space replicates the feeling of being immersed in the natural landscape. Tactile and visual variety unfolds as one moves through each space, from the interior wooden floors of the main living rooms, through the volcanic rock floor with an overhang shading the area where the wooden furniture sits, to the natural grass of the luscious garden. The use of local materials reflects Curtis's emphasis on vernacular principles, and Barragan's shaping of experiences of exterior spaces is in tune with Curtis's return to the source.

Light and shadow are also key elements of the house, as a localized form of lighting through clean-cut openings divides spaces into intensely dark and fully illuminated surfaces. This provides different thermal experiences as one walks between cool and warm areas of the same space. The unevenness of the terrain also adds variety to movement and thus to bodily experience. On the lower floor, Barragan continues to appeal to the senses, as the refreshing feeling of a cool water swimming pool contrasts with the rough volcanic stone around it. In essence, Barragan used several natural characteristics of the landscape to provide a variety of tactile and visual experiences that connect to place.

Chapter 4 - Integrating Barragan, Frampton and Curtis

Having interpreted Barragan's two Mexico City houses from Frampton's and Curtis's perspectives, I now overview some main themes and motifs of Barragan's architectural language and make some connections with Frampton's and Curtis's theories. Barragan's integration of modernist and traditional qualities provides a frame of reference for creating regionally sensitive architecture advocated by the two architectural thinkers. As both Frampton and Curtis would probably argue, Barragan's mode of architecture can influence in a positive way the development of human settlements in the way it demonstrates reference to local cultural heritage and an integration of privileged environmental qualities.

In the case of Barragan's two houses, a central value of his work arose from his ideological stance, which in many ways outweighed his formal results. Barragan's work was based on allusions and evocations of regional elements found in Mexico's cultural heritage. He managed to capture the vitality of Mexican culture through small elegant spaces, a wide range of regional materials, lush vegetation, and manipulation of light. He used conceptual analogies for Mexico's unique identity and presented them in intimate ways through interior sequences and sculptural exterior forms.

Barragan also had a clear picture of Mexico's social and economic reality, but not just from the socialist and nationalist perspective promoted at the time. He had deep insight into the customs and financial capacities of Mexican society, especially in rural areas. His knowledge came from his upbringing in Guadalajara and his experiences in the Mexican pueblos of Jalisco and Michoacán. Yet instead of trying to romanticize the vernacular and recreate colonial or pre-Colombian architecture with modern luxuries, he took the image of poverty within his culture and enhanced its most significant attributes to create truly elegant and artistic living spaces in synch with Mexican climate, lifestyle, and regional qualities. In addition, Barragan was strongly influenced by the contemporary arts, which reflected Mexico's more modern societal values and structure. He combined this with theoretical approaches to modernism learned from Le Corbusier, Heinrich Kulka, Walter Gropius, and others. Yet although he drew heavily on the work of both Mexican and European intellectuals, his architecture was not elitist. Rather, his

architecture retained regional qualities that still related to the masses and remained relevant to a building's social context. His ability to create comforting, unique spaces while at the same time reflecting the conditions of Mexican society makes Barragan's architecture an example of powerful regional design.

More significant than the formal qualities of his buildings, was his evolution as an architect. His use of color, textures, and vernacular references was ever present in his work, and his unique language enabled him to generate buildings that countered prevalent architectural tendencies of the time. Barragan embraced locality and familiarity, using ideas, materials, techniques, and forms in a very personal way. He also identified important elements of foreign architecture and combined them with local traditions. He mastered the different elements from various regional and foreign architectural idioms and used them in his architecture.

In the case of Barragan's home and studio, its architecture is not only an iconic work of modern Mexican art but is also an intimate reflection of Barragan's thoughts and life style. Each space within the home and studio has a specific reference to either Mexican culture or the natural environment, and addresses his everyday life. Barragan effectively integrated geometric volumes, indigenous textures and materials, regional climatic conditions, and social patterns to create an architecture rooted to place yet relevant to contemporary life. In short, Barragan's home and studio reflects his intimate thoughts on people, nature, and place.

His Eduardo Lopez Prieto house, while not as representative of his own personal philosophy, still incorporates many of the elements he had previously established in his home and studio, such as lush vegetation, regional textures, play of shadows, and simple geometric forms relating to both tradition and modernism. The value of the Eduardo Lopez Prieto house lies in its distinct qualities responding to both culture and specific characteristics of site, incorporating local social customs in the design and displaying deep respect for the natural landscape. This is exemplified in the way architectural spaces follow the irregular form of the terrain and how he used the site's natural elements as construction materials. Both homes are key examples of Barragan's connection to place, his appreciation of the natural environment, and his knowledge of modern values combined to create regionally sensitive architecture.

Design Premises

Drawing on the preceding integration of Barragan's two Mexico City houses, I conclude by identifying several architectural properties in his work that no doubt both Frampton and Curtis would admire. Some of these properties incorporate strong references to Mexico's traditional architecture and others are drawn from contemporary tendencies, which are part of his regional architectural dialect. These properties include:

- **External volumes:** The exterior forms found in Barragan's architecture are simple and display artistic sculptural qualities. This precise geometry pays homage to modern architectural language. It can also be traced to vernacular architecture, as these forms are found in both pre-Columbian and colonial heritages. Barragan played with scale and size to create an artistic and poetic space that is relatable to the cultural essence of the Mexican heritage.
- **Interior patios and gardens:** Barragan incorporated interior spaces enclosing gardens or patios that created a connection between rooms and outdoor space. Local vegetation is always present in his buildings and serves to ground his architecture in the natural environment. These patios and gardens not only function to provide diverse lighting effects, but also serve as contemplative areas to create a sense of peace and tranquility and an escape and refuge from the urban surroundings.
- **Roofs:** While the vernacular architecture found in the Mexican countryside featured steep-sloping roofs with wooden beams, most of Barragan's modern houses have flat concrete roofs. However, Barragan incorporated wooden beams into the structure of ceilings, using modern building techniques.
- **Thick walls:** Barragan found that much of Mexico's cultural heritage came from the monumental structures of the past. Especially, he emphasized walls covered with earthbound colors, allowing a play of shadows, enclosing intimate spaces, and dividing private and public spaces. The thickness of his walls contributes to the wall's importance as a significant architectural element in Mexico's historic legacy and the use of local adobe effectively solves climatic issues of the region.

- **Simple street facades:** Barragan's architecture did not seek to impose extravagant forms upon the surrounding landscape. The street facades he created were simple and sober, with few openings that thus provided privacy and limited visual access to the street. His exterior forms served as protective elements blending seamlessly with the surrounding urban context, reminiscent of the simple facades found in Mexican villages.
- **Local materials:** Barragan relied on local materials drawn from Mexico's age-old building tradition, as a means to enhance regional identity. He created modern elements but with local and regional materials, effectively using the resources at his disposal. Adobe walls, lava rock floors, stone stairs, wooden beams, pinewood floorboards, and wooden windows related to Mexico's indigenous architectural legacy.
- **Modern and traditional space:** Barragan's work drew on modernism's functionality and rationalism and incorporated them into a spatial layout that followed the Mexican lifestyle. Geometric form extends through interior and exterior spaces, generating sober yet elegant spaces that have traces of both modernism and tradition.
- **Colors and texture:** Barragan incorporated in his work indigenous textures and colors found in the Mexican landscape. These intense colors derived from pre-Columbian and Spanish cultures as well as from traditional Mexican art. This not only gave a vibrant lively image to his sculptural forms but also referenced regional history and identity. The colors enhance the distinct textures found in vernacular elements, wall surfaces, plantings, and natural material.
- **Shadows and light:** Control over ambient conditions was essential in Barragan's architecture, and the manipulation of light and shadows gave extra depth to his houses. Barragan's work captured the extreme duality of light and darkness found in Mexico's streets. This contrast enhances the textures and colors of the walls. The time of the day and intensity of the sun radically changes the image of place, and Barragan translated these environmental shifts into his buildings. This in turn showcases the sculptural forms of Barragan's architecture and reflects modernism's minimalist, artistic tendencies.

Barragan utilized each of these qualities in his work: the contrast between light and shadows, the vernacular materials and colors, the simple geometric forms of pre-conquest architecture, and the structural layout, functionality, and sculptural qualities of modernism.

Barragan utilized these design qualities to reinterpret tradition in a way that is relevant to contemporary architecture and to Mexico's social structure, traditional spatial layouts, regional materials and environmental awareness. His design premises demonstrate the profound meanings behind his architectural spaces, including an understanding of local culture, an effective response to climatic conditions, integration with the surrounding natural environment, and a clear sense of regional identity.

Some Final Thoughts

Although Frampton's critical regionalism and Curtis's authentic regionalism were first introduced over twenty years ago, they are still relevant to Central American architecture, including Guatemala's. While there are some signs of significant progress in Guatemala's search for an architectural identity (Villegas 2002), Frampton and Curtis can provide greater insight in regard to issues that must be taken into account when seeking to create a place-based Guatemalan architecture. Their approaches provide potential for establishing regional identity through architectural expression. While their theories may not provide a precise formula for effective regional design, their main points can serve as a tentative outline for creating a built environment that responds to the demands of a growing technocratic, universal civilization, while at the same time retaining and showcasing Guatemala's rich cultural heritage, diverse ecology, and societal values. One can argue, as I have attempted here, that Barragan's architecture can be used as one concrete model for the kind of regionally sensitive design that both Frampton and Curtis advocate.

In the case of Frampton, his perspective on "integrating" modernism and tradition is centrally relevant to today's global world view. His theory argues for an architectural expression still in touch with a region's identity and cultural background as we have seen in Barragan's Mexico City houses. An important lesson to be taken from Frampton is that the value of tradition in the built environment is not only impregnated in its architectural history and culture, but also

in the acknowledgement of the specific characteristics of site and climate, to which critical regionalism seeks to generate an adequate response. These properties are regularly found in Barragan's architectural works. On the other hand, Curtis seeks to use vernacular principles to adequately address climatic and regional conditions, with traditional building forms reinterpreted and simplified using modernist concepts that facilitate a universal appeal. Curtis, like Frampton, seeks to integrate local cultural values, use of climatic variability, and traditional tendencies with modernist references to establish an architectural identity relevant to place. Again, these possibilities are well illustrated in Barragan's region and place-sensitive designs.

Both critical regionalism and authentic regionalism are reactions against a globalized culture, working towards an architectural alternative based on local qualities that can compete in the world market, while at the same time retaining an identity and sense of place. Frampton and Curtis emphasize the importance of regional climate, landscape, and culture, though in somewhat different ways. Their theories overlap in seeking an architecture of deeper meanings that has connection to local culture, historic relevance, and use of modern principles. Their theories do not promote an architecture based on nostalgia for the past, or a traditional vernacular glorified without function, but rather a redefined regional identity. They emphasize an architecture grounded in place, achieving continuity of tradition reinvigorated through modernity as I have attempted to demonstrate in this thesis; one example is Barragan's *oeuvre* of place-grounded and traditionally-sensitive architecture. As his two Mexico City houses illustrate, embracing and enhancing regional qualities, both cultural and environmental, can serve to create a connection to place that avoids widespread mechanical placelessness in the development of human settlements, adding diversity to the current built environment.

In short, architecture must, in a modern language, acknowledge native culture, specifically address environmental and regional qualities, and reinterpret cultural heritage. This will provide an architectural identity that responds effectively to regional and modern demands, fostering an intimate relationship to place and culture. Finally, strengthening the relationship between people and place through architecture may prove to be of great importance for improving our current living conditions, and strengthening our bond to regional roots. This design effort is fundamental if we are to create a genuinely sustainable place in which to live.

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