Mythical Terrain and the Building of Mexico’s UNAM

René Davids
Professor of Architecture and Urban Design
University of California, Berkeley

October 2008
Paper No. 23
<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mythical Terrain and the Building of Mexico’s UNAM</td>
<td>1</td>
</tr>
<tr>
<td>The Mexicanness of the CU</td>
<td>11</td>
</tr>
<tr>
<td>Conclusion</td>
<td>12</td>
</tr>
<tr>
<td>Endnotes</td>
<td>14</td>
</tr>
</tbody>
</table>
MYTHICAL TERRAIN AND THE BUILDING OF MEXICO’S UNAM

Recent trends in global capitalism have transformed the university into a corporation interested in the production of “excellence” rather than a representation of the national state.¹ In the late 1940s, however, Latin American states were heavily invested in the building of new universities that would help to promote their image as socially progressive and technologically forward-looking societies. Mexico had lived through a dramatic revolution at the beginning of the twentieth century, and the post-revolutionary regimes were particularly committed to providing universal education. The symbolism attached to the university was so strong that the new campus for the Universidad Nacional Autónoma de Mexico (UNAM), the oldest public university in the country, was inaugurated on November 20, 1952, the day that commemorates the beginning of the Mexican Revolution. The new university constituted a visible emblem of the revolution’s ambition to achieve a fair distribution of the country’s assets and free universal education for all.²

Internal migration to urban centers, a growing middle class, and a surge in the number of women seeking professional training led to the expansion of the universities during the 1950s. The UNAM, with its scattered buildings in downtown Mexico City, could no longer cope with the increasing number of students, leading officials to search for a replacement site. Inspired by the American campus model, their goal was to gather all the dispersed facilities in one place, which meant looking for a site on the capital’s periphery. This had the added appeal of moving politically radical students away from the centers of power. The Revolution of 1910 had succeeded, and authorities sought to celebrate and mythologize its legacy while pushing any possibility of continued debate and dissent to the margins.³ The site eventually chosen was in El Pedregal, an outlying district situated south of San Angel that enjoyed the dual benefits of clean air and immunity from the seasonal flooding which plagued Mexico City.

Believed to have been formed about 2,500 years ago by the eruption of the volcano Xitle, El Pedregal was a thirty square mile area covered in basalt. Sparsely inhabited before 1945, El Pedregal was a volcanic landscape in a country where volcanoes have long held profound
cosmological and cultural significance. It was also the home of several rare animal species, lichens and grasses, flowering plants such as the Palo Loco, agaves, and various species of pines and oaks that took advantage of the scarce water and the dust that accumulated in the cracks and crevices of the lava. Native Mexicans had sought refuge from their Spanish colonizers in the area, and in the early part of the twentieth century revolutionaries hid there from the forces they finally overthrew. Untouched by European imperialism, El Pedregal was often referred to as a new Eden and equated with the ancient heart of Mexico. Infused with ideas of death and regeneration as well as resistance to persecution, El Pedregal seemed ideally suited to house the new campus that carried the mandate to fulfill the democratic educational goals of the revolution.

Within these ambitious and lofty goals the architects charged with designing the university’s master plan, Enrique del Moral, Mario Pani, and Mauricio Campos, explained their objectives as easing “the relationship between departments and creating physical and pedagogical unity for the convenience of students, professors, and researchers.” Many complex ambitions and symbolic decisions belied that humble explanation, however. For example, the UNAM’s distribution of building commissions to 140 architects was an expression of the Mexican Revolution’s aim to redistribute the country’s resources that stood in sharp contrast to the construction of the contemporary Universidad Central de Venezuela which was charged to just one architect: Carlos Raúl Villanueva.

The layout of the different schools on the UNAM campus was indebted to the superblock concept. Initially introduced at the end of the nineteenth century in Britain by the Garden City Movement and adopted by the Modern Movement in the early twentieth century, superblocks were larger than traditional urban blocks and featured pedestrian-only public grounds in the center. Le Corbusier, who disseminated the idea through his writings, designed his superblocks with strict, rational, orthogonal street layouts. The street system at the UNAM, however, was configured organically around the lava formations. The Scholastic area, the best known and most interesting of the Ciudad Universitaria (CU) zones, was situated along an east–west axis bound
at its western end by the north–south running Avenida de Los Insurgentes and at its eastern edge by the School of Medicine. A large public space flanked on the south by the humanities buildings and on the north by the sciences wing glued the different departments and structures together. (FIG. 1) The placement of the buildings around this space was organized symbolically. The School of Medicine, designed by Roberto Alvarez Espinoza, Ramón Torres, and Pedro Ramírez, for example, linked the north and south wings to denote the discipline’s reliance on both the sciences and the humanities. In a similar vein, the placement of the School of Science at the center of the university was intended to suggest that scientific knowledge was the key to Mexico’s future.

Ultimately it was the adherence of the building designs to some of the principles of the Modern Movement around a large plaza (campus) rather than the content laden symbolic relationships that held the university together compositionally. By using a style that had been imported from Europe, the campus forms provided an advanced and technologically progressive image and gave a sense of departure from the Spanish colonial past. Iconic features of the Modern Movement such as horizontal windows, flat roofs, covered walks, and pilotis were
incorporated into most buildings, while a Mexican flavor was imparted through controversial deviations from the Modern orthodoxy, such as the inclusion of figurative murals with stirring nationalist narratives. (FIG. 2) Adding to the nationalist overtones of the design were the lava stone steps, extracted from the site itself, which recalled pre-Hispanic Mexican monuments and the use of tecali (Mexican onyx or travertine) from Puebla. (FIG. 3)

The murals—depicting populist messages and historical narratives—were among the most controversial elements of the university’s design. The Rectory Tower designed by Mario Pani, Enrique del Moral, and Salvador Ortega Flores, for example, featured a mural by David Alfaro Siqueiros that presented the extended arms of a large figure representing Mexico’s thrust towards the future while the small individuals in the background stood for the people’s battle against capitalism.

The university’s main library, situated close to Avenida de Los Insurgentes at the head of the CU’s main public space, featured an even more prominent mural. Designed by Juan O’Gorman, it complemented the message of the Rectory Tower by featuring on each of its four facades a narrative of different stages of Mexican history, stories that reverberated with the political and social mission of the public university and the government that sponsored it. (FIG. 4) In this regard, the CU’s architecture became associated with the nationalistic trend that, particularly after the Revolution of 1910, was prevalent in the Mexican arts. Architects who wished to
adhere to the principles of the Modern Movement resisted this trend, but ultimately joined the project when Miguel Alemán, who presided over a technocratic administration that emphasized industrialization over agrarian reform as the solution to Mexico’s problems and encouraged the construction of public works, rose to the presidency.⁷

The attempt to “Mexicanize” the architecture through the murals was not universally accepted; many rejected it as an “architecture of the state, of propaganda and of national exaltation.”⁸ Others hailed the use of murals as an example of the integration of the arts. In any case, the murals were a far cry from the subtle way in which the architect Luis Barragán managed to seamlessly integrate the Mexican vernacular Hispanic colonial tradition with the plain and simple forms of Modernism as seen in his own house, built in 1947 in Tacubaya, Mexico.

For despite O’Gorman’s contention that the criticism leveled against the murals had to be attributed to snobs fearing to express their vulgar sentiments,⁹ the painterly works failed to integrate smoothly into the architecture. Given the absence of signature buildings on campus, the murals gave the rather humble modernist buildings an iconic, monumental presence that became recognizable around the world.

Figure 4: The Rectory (left) and Main Library (right).

Photo courtesy of UNAM
The Olympic Stadium (FIG. 5) was the most dramatic example of this seemingly paradoxical combination of the modest and the monumental. Located just across the Avenida de los Insurgentes from the Rectoría and connected by a large underpass to the lower Plaza de la Rectoría, the Olympic Stadium was at the head of the west–east axis. Designed by August Pérez Palacios and his collaborators, Raúl Salinas Moro and Jorge Bravo Jiménez, the stadium emerged as a reincarnated volcano, a building that recalled the numerous pre-Columbian pyramids, an imposing artificial topography: part landscape, part built monument. Thrown up from the center of the “crater” the lava was deposited in high embankments. Rows of seats were designed inside, while the outer ring was faced with lava rock also extracted from the site. The level of the fields and tracks was four to six meters below the surrounding sidewalk. By simultaneously making reference to Pre-Columbian myths associated with volcanoes and creating a modern, technologically sophisticated building for the masses, the stadium expressed the national ambition of providing a progressive future through education rooted in tradition. The success of the Olympic Stadium can also be read as the rebuilding of José Villagrán García’s National Stadium of 1924, which was the stage for massive performances and a vehicle for political rallies. Built in imitation of the great Greek precedents, the National Stadium was demolished because of structural failures after only twenty years of existence. The new Olympic Stadium succeeded where the National Stadium had failed, expressing both a timeless and a modern Mexican identity. However, the design’s accomplishment was in part predicated on the small number and uniqueness of sports arenas in the urban context, thereby limiting its influence on other buildings.

While the stadium recalled the Pre-Columbian pyramids and the volcanoes of the Mexican landscape, the CU was in some ways reminiscent of Le Corbusier’s 1936 plan for the University
of Brazil. Although he had generated inspired but unrealistic propositions for some of the continent’s cities, when confronted with a real commission Le Corbusier developed a project that, while never realized, became highly influential. The first designs for the UNAM seemed uncannily similar to the Swiss architect’s design. Not only did the plans for both universities share similar layouts, they were also sited in valleys set against a backdrop of not-too-distant mountains.12

In both schemes, the Department of Medicine was at the head of the axial composition, and a prominent vertical library building was set in the center. Both projects also featured pedestrian-friendly public spaces and a major circulation network that crossed the campus, linking the university to the city.

Orthogonally placed in relation to its long northern side, the first design for the UNAM, completed in March 1947, (FIG. 6) featured three identical, parallel slab-blocks running north–south to the northern edge. Their placement appeared to open windows into the surrounding landscape. A central plaza was defined mainly by covered walkways. Two slab blocks were positioned to the south of the plaza with only minor buildings running parallel to the walkways. The buildings changed orientation as the project developed; the final 1952 version featured a large, leveled public space that was strongly bound by buildings. The progressive iterations of the plan show its gradual transformation from a design that featured figures in space to a composition where the space becomes the figure.13

For the most part, critics have overlooked this important evolution and its link back to the Hispanic tradition of space-making which privileged enclosure over movement. In this respect, the design was actually at odds with the UNAM’s professed ambition to create a
central public space in the Pre-Columbian tradition. Space-making for the indigenous peoples of the Americas always connected the user to the surrounding landscape even when, as in the case of Teotihuacán, the buildings were aligned along a monumental street (La calzada de los muertos). (FIG. 7) The main public “campus” at the UNAM, by contrast, was an enclosed space, which linked the university to the Hispanic rather than the indigenous tradition. The UNAM’s buildings, while modern in style, were similarly not in sync with Le Corbusier’s idea of placing magnificent pure volumes bathed in light on an open and continuous field. Compared to other famous Modernist compositions of the period, such as the capitol complex at Chandigarh, the UNAM’s central space (el campus) seemed conventional. Not so the architecture of both complexes that wished equally strongly to signify, through Modernist architecture, a new beginning for their people. The Modern style was associated with ridding societies of traditional constraints by bearing little resemblance to the traditional architecture of their respective countries.

Le Corbusier was commissioned to design Chandigarh in 1951 as a result of the partition of India following independence from British imperial rule. The Punjab region had been split in two and Lahore, the old capital, fell on the Pakistani side. As a result, a new seat of government was needed on the Indian side of the border. Chandigarh was not conceived as the mere capital of an Indian state but, as noted Le Corbusier scholar William Curtis has called it, “a visible and persuasive instrument of national economic and social development, consonant with Nehru’s idea that the country must industrialize or perish.”

The vast new urban spaces in both India and Mexico had precedents in the pre-Columbian and Mughal traditions. According to Curtis, Le Corbusier’s earliest Indian sketches depict the eighteenth-century Mughal garden at Pinjore, close to Chandigarh. The garden design used
clever effects to compress terraces of water with the rugged outlines of the landscape. The
garden’s ideas had a noticeable influence on Le Corbusier. Perhaps even more striking was the
relationship between the sunken garden, pools, stairs, bridges, and ramps that Le Corbusier
conceived as an approach to the Governor’s Palace and the Diwan-i-Khas at Fatehpur Sikri, a
site the architect had also seen and admired.

By carving into the earth, traditionally understood as the “soul” of traditional societies,
the modern spaces suggested a method by which both Mexico and India could connect to
with their pasts. As at Fatehpur Sikri, in Chandigarh the excavations in front of the Assembly
and High Court (1951–55) are filled with water to reflect the buildings’ presence. The most
striking excavation is the submerged garden in front of the never-finished Governor’s Palace,
a place that, by being sunken, doesn’t interrupt the vastness of the capital plaza. The garden’s
walkways suggest the division in four quadrants that are typical in Mughal gardens. Rather than
accommodating activities, these were precincts for contemplation, sensual delight, and sedentary
retreat from the intense heat.16

By sinking the quadrants but not the paths Le Corbusier allowed them to become elevated
walkways. From this vantage point one
could attain a privileged view of the
totemic pole, artificial mountain, and
monumental stairs that punctuate the
garden. Acting, therefore, more as an
inverted podium for sculptural objects than
a submerged public retreat, the Governor’s
Palace garden, like the rest of the capital’s
public spaces, privileged sculptural
contemplation over inhabitation. Not surprisingly, all of Le Corbusier’s sketches of the garden
are seen from a birds-eye perspective. (FIG. 8)
The excavation at the UNAM seemed fundamentally different to that of Chandigarh as it was intended to level people to gather, casually meet, and/or play. Designed as a large rectangle, the public space at the UNAM was more indebted to the Hispanic Colonial than the Pre-Hispanic tradition. The European influence in Mexico had produced a hybrid practice that incorporated some of the pre-Hispanic traditions, such as the large scale of the public spaces, to the Spanish conception of space. Maria Azevedo Saomao argues, for example, that the monumental scale of Pre-Hispanic public spaces directly influenced the size of the plazas in the new world, a difference that becomes clear when comparing public spaces designed after the conquest in both the old continent and the new. For example, Mexico City’s Zócalo, built on Aztec ruins, is substantially larger than the roughly contemporary plaza of Valladolid, Spain. Another feature that was often incorporated into Mexican plazas after the conquest was the steps found in Pre-Hispanic public spaces as ways to lead from one space to another. Clear examples can be found in Michoacán, such as the Plaza de Charapán or Terecuato. (FIG. 9)

Pre-Hispanic plazas were configured by monumental, free-standing buildings situated in dynamic spatial relationships to each other while maintaining a strong relationship to the larger landscape. The neo-Hispanic plaza, by contrast, featured modest buildings, with the exception of the church, and was arranged so as to achieve a sense of static enclosure. While architects and scholars have argued that the Mexican character of the UNAM was provided by its direct connection to the Pre-Hispanic past, the hybridized plaza that emerged after the conquest may be the more appropriate and clearer precedent to cite. In fact, el campus, the main public space at the UNAM is a large-scale stepped and enclosed space not unlike the spaces created by the
Spaniards when they came in contact with indigenous traditions. Determined to prove the purity of the UNAM’s Mexicanness, researchers have diminished or even ignored Colonial influences in favor of the pre-Hispanic, inflicting a form of ethnic cleansing on the architectural history of Mexico.

THE MEXICANNESS OF THE CU

With regard to the CU, scholars have typically focused on the Modern Movement and the representation of “Mexicanness” in the architecture through its connections to the pre-Hispanic past. An important aspect of the UNAM, however, is the configuration of the space, not as a symbol but simply for its spatial qualities.

According to Alberto Kallach, “The gardens of El Pedregal, a suburban development designed by architect Luis Barragán, were a direct source of inspiration for the open spaces of the Ciudad Universitaria.” Barragán believed that public gardens could be built where individuals still felt themselves to be in their own individual gardens. For Barragán, the Generalife in Granada—a public garden with partially enclosed and separate areas—constituted a suitable precedent. While the individual intimacy Barragán sought to achieve is arguably missing at the CU, the large communal space divided into sub-spaces with strong boundaries is undeniable present.

Not surprisingly perhaps the UNAM has similarities with Barragán’s proposal for la Plaza de la Constitución, better known as El Zócalo. One of the largest public plazas in the world and the heart of Mexico City, it occupies the site of the old ceremonial center of Mexico: Tenochtitlán, the capital of the Aztec Empire and the locus of political events, public festivities, celebrations, informal gatherings, commerce, and performances. Regarded as an

Figure 10: Ciudad Universitaria campus.
undistinguished proposal by architectural historian Marc Treib, the project’s main characteristic was its dramatic simplicity and unified stone texture that eliminated the existing green square to restore a space that more closely resembled the eighteenth-century Zócalo. (FIG. 10)

In contrast to the upward moving spires of the cathedral, Barragán proposed a grotto-like subterranean passage headed by a striking water fountain suggestive of the opposition between divine power and the darker forces of the world. A perspective sketch by Barragán shows an eerie space in which the people are made to look insignificant by the sheer power and scale of their surroundings. As at the UNAM, most of the traffic was relegated to the periphery, and a new, smaller square was placed on the east side of the cathedral. The plaza’s surrounding colonnades provided containment, recalling the pilotis that front the university’s campus which read more like a colonnaded cloister than a proper example of the implementation of the orthodox Modern Movement idea of lifting a building as a means to free the ground. Barragán conceived of the Zócalo as a shallow concave that would create the illusion of a perfectly level surface.

CONCLUSION

The UNAM’s modesty and sense of enclosure connected it more strongly to the tradition of the American campus and the Mexican colonial plazas and monastic complexes than to Teotihuacán

Figure 11: Campus at UNAM.
or Monte Alban. For Mario Pani and Enrique del Moral\textsuperscript{24} the enclosed space was both a symbol and a system evoked: convergence and community but also retreat and containment. (FIG. 11) In its boundaries soccer playing students release their youthful energies, lovers embrace, and others study or merely watch the world go by. The UNAM’s biggest contribution was the renewal of a Mexican tradition of space-making.\textsuperscript{25} Critics obsessed with pre-Hispanic continuity have underplayed the UNAM’s renewal of a hybrid space-making tradition in the New World.

2. Carlos Novoa, president of the Universidad Nacional Autonoma de Mexico quoted by Keith Eggener in *Luis Barragán’s Gardens of El Pedregal*; New York: Princeton Architectural Press, (2001) 106. “During the 1950’s the university sitting in the Pedregal region was presented as a matter of great significance, one that went well beyond issues of economy or expediency. “The university City is rising in a place marked by destiny,” said University Rector Luis Garrido in 1952. “It was the seat of an ancient civilization and now it will be the seat of the culture of the future.”


7. Jorge Alberto Manrique in “El Futuro Radiante: La Ciudad Universitaria” in *La Cultura Contemporanea Mexicana del siglo XX*. Mexico: Consejo Nacional para la Cultura y las Artes. (1994) 213 considers the UNAM plazas to recall pre-Hispanic spaces of Teotihuacán’s Calzada de los muertos pedestrian precinct. Or see Ernesto Alva Martinez in his essay “La Búsqueda de una Identidad” in *La Arquitectura Mexicana del Siglo XX* edited by Fernando Gonzales Gortázar the treatment of the open spaces of the University City as well as the murals present in several buildings such as Juan O’Gorman’s library map of the country in the Olympic swimming pool by Felix T. Nuncio and the Alberto T. Arais frontones represents a national search for pre-Hispanic roots through an abstract language.

In an article that appeared in *Arquitectura* in 1952 (*Arquitectura* 37, March 1952) the author considers the El Pedregal subdivision as an example of new residential Mexican architecture that imposes a Mexicaness on its modernity through the lava that reflects the soul of the country upon which it was built. (“El Fraccionamiento Jardines del Pedregal inaugura, franca y característica, la nueva arquitectura residencial, que sin perder, sin renunciar en lo absoluto, a nada de las comodidades que la modernidad exige, establece dominante y seguro de si el estilo arquitectónico más mexicano, levantando en esa extensión de lava hierática, que por sus mismas condiciones, refleja el alma de Mexico, la nueva ciudad cuajada de reminiscencias y portentosa en su futuro.”)

See also José Antonio Alderete Haas’s essay “The Search for Roots in Mexican Modernism” in *Latin American Architecture 1929-1960, Contemporary Reflections*. New York: Monacelli Press (2004). According to scholars such as José Alderete Haas, Mexican architects used three strategies to Mexicanize the architecture of the international movement that included the use of local materials, the incorporation of formal references from the Pre-Columbian past, and the employment of symbolic murals in buildings.


19. See for example “Politics and Architectural Language. Post-Revolutionary Regimes in Mexico and Their Influence on Mexican Public Architecture, 1920-1952.” In Modernity and the Architecture of Mexico, ed. Edward R. Burian Austin: University of Texas at Austin Press 1997. p. 83; “At last, the two aspirations of the 1930s of expressing modernity and Mexicanness were reconciled through the use of murals and urban design. This project was designed with the intention of reflecting the values of national identity as derived from the pre-Hispanic past, and applied them in buildings that made use of both modern materials and composition principles.” Or Celia Ester Arredondo Zambrano’s essay: “Modernity in Mexico: The Case of the Ciudad Universitaria.” in the same book.

20. See Alberto Kallach’s, essay “Architecture and Place” in Modernity and the Architecture of Mexico ed. by Edward R, Burian p 109. “The gardens of El Pedregal were a direct source of inspiration for the gardens of CU. Luis Barragán was invited to participate in the projects of forestation and garden design for the urban design directed by Pedro Ramírez Vázquez and Augusto Pérez Palacios, who was also responsible for the stadium project. While the extent of Barragán’s participation in the landscape design of CU is unclear, the gardens of El Pedregal set the tone and the formal vocabulary for the landscape strategy at the CU.


22. See Marc Treib “A Setting for Solitude: The Landscape of Luis Barragán.” Marc Treib “misses in Barragán’s large public spaces the depth of involvement and mastery of space and materials characteristic of his residential work and small plazas” p. 133.


24. La Construcción de la Ciudad Universitaria del Pedregal.

25. Pani states in Mario Pani. Historia Oral de la Ciudad de Mexico by Graciela de Garay. Mexico: Instituto de Investigaciones Dr. José María Luis Mora, (2000) 49 in reference to the old downtown university that there were no common spaces; the places to get together were the streets, the taverns, or the pool halls. (Tenían una integración solo de vecindad, pero sin lugares comunes en dónde estar: los lugares eran las calles, las cantinas o los billares.)
TITLES IN THE CLAS WORKING PAPER SERIES


No. 15: Anna Zalik, Re-Regulating the Mexican Gulf, 2006.


No. 23: René Davids, Mythical Terrain and the Building of Mexico’s UNAM, 2008.

TITLES IN THE CLAS POLICY PAPER SERIES


No. 5: Micah Lang, et al., Meeting the Need for Safe Drinking Water in Rural Mexico through Point-of-Use Treatment

No. 6: David R. Ayón, Long Road to the Voto Postal: Mexican Policy and People of Mexican Origin in the U.S.


ORDERING INFORMATION
To order papers from the CLAS Working Papers or Policy Papers series, send a check or money order for US $5.00 made out to the UC Regents along with the title and/or serial number to:

Working Papers Series
Center for Latin American Studies
2334 Bowditch Street
Berkeley, CA 94720

WWW.CLAS.BERKELEY.EDU