The Work of TEN Arquitectos

Enrique Norten
Lorch Professor of Architecture
MAP Three · TEN Arquitectos

Published on the occasion of the appointment of Enrique Norten as Lorch Professor of Architecture.

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The architect Emil Lorch began teaching at the University of Michigan in September, 1906. His courses were initially taught in the College of Engineering and two years later, largely through Lorch's efforts, the architecture program became a department. In 1931, also as a result of his endeavors, the department became the College of Architecture.

One of Lorch's significant contributions to the College was his initiation of international programs. In 1921, he sent student work from Michigan to the first Pan American Institute of Architects Competition. The authors of that work were awarded a Gold Medal and several other prizes. Now, with studios in Florence, Vienna and Prague, the program is still benefiting from these international initiatives. As the College continues to extend its influences beyond national boundaries, it is particularly appropriate that the distinguished Mexican architect Enrique Norten, appointed as the Emil Lorch Professor of Architecture, continues the legacy that Emil Lorch so energetically created.

Robert M. Beckley
Dean, College of Architecture + Urban Planning


Introduction

Enrique Norten's appointment as Emil Lorch Professor at the College of Architecture and Urban Planning seems entirely appropriate, for he is both a distinguished architect and an outstanding educator. Born in Mexico City and a graduate of the Universidad Iberoamericana, he also holds a Master of Architecture degree from Cornell University. One year after graduating from Cornell, he opened his own office and since then has been actively working in practice.

Enrique Norten, working with colleagues at TEN Arquitectos, has designed a number of outstanding buildings which have been published widely and have received many significant international architectural awards. These projects include the National Theater School of Mexico which was completed in 1994, a series of fine urban housing schemes, facilities for Mexican television and, most recently, the design for the country's new Natural History Museum. Making architecture, as we all know, takes a great deal of time, care, tenacity and patience. During the last ten years, TEN Arquitectos have taken time and care while exercising tenacity and patience to create a significant body of work. It is work which is highly original, yet which also builds on the impressive tradition of his country and the culture of the region. It acknowledges particular social conditions and needs while also recognizing the outstanding contributions of modern architects and engineers in Mexico like Luis Barragán and Felix Candela.
Enrique Norten has also built a distinguished career as an educator. He taught for ten years in Mexico at the Universidad Iberoamericana, as well as teaching as a Visiting Professor at a number of major American institutions including Columbia, Cornell, Rice and SCI-Arc. In 1996, he was Eliot Noyes Visiting Design Critic at the Graduate School of Design at Harvard University and the O'Neil Ford Chair in Architecture at the University of Texas at Austin.

Enrique Norten's arrival at Michigan marks a significant moment in the life of the College, the University and for architecture. Architecture is a public art; it shapes our lives, makes cities, and helps to form our culture. As the practice of architecture becomes increasingly internationalized and fragmented, it is critical that the University, the community and the professions together take an active role in developing a truly responsive civic architecture. Enrique Norten has been focusing on the issues of design in the city through the development of his own work. He brings to the College valuable insight, experience and, perhaps most importantly, a passion for architecture.

Brian Carter
Professor & Chair of Architecture
I am honored to be with you for the first time as a member of this community, as a faculty member of this College. For me, practice and education are interdependent. All that I learn in school comes back into my practice, and all that I learn from my practice comes back into my teaching. I do not go to school to teach, but to learn with the students. I see education as a laboratory which offers the opportunity to explore ideas that cannot be explored in the life of practice; yet practice offers limits and restrictions that are always good to remember in the laboratory. From my point of view, I cannot see one without the other.

The following series of projects, each very different from one to another, has been selected as a representation of my work. I understand these projects as fragments of a body of work – an incomplete, to be completed body of work – that will only be done at the end of our careers whenever that may be. All of the projects speak to each other, relate to each other, complement each other, and many of the issues addressed arise in more than one project. Therefore, I will try to identify significant themes to give you an idea of the processes of development of our office during the past ten years.

We are working in a new era in which information is the central protagonist that has replaced the time of heroic modernity. A universal culture based on capital flow, exchange of goods and the consumerism of a world free market has brought about a total technological homogenization that has confirmed and given meaning to the idea of the global village.
In addition, a complex information network now connects places and cultures in a continuous fusion of time and place, creating a certain universal uniformity of criteria and ideas. At the same time, the opposite tendency has become evident in the appearance of natural claims of specific and local cultures. Groups and individuals have become more conscious of their particular situations, their differences, their sense of being unique. In contrast to the architecture proposed by our immediate predecessors, the debate of our generation takes place at the intersection of this play of tensions and compressions caused by the contradictions between a contemporary desire for expansion and the need for contraction.

The new architecture of our generation has placed itself at this moment of uneasy, fragile equilibrium between the space of expansive flow and differentiated space. The lack of definition that results from this contradiction allows us to accept the impermanence of change and, at the same time, discover the particularities and metaphysical possibilities of the place. This condition suggests new types and qualities of spaces. A new architecture that seeks to align itself simultaneously with global continuity and the poetic expression of individuals and places is being conceived. Contemporary architecture is being decided at the point where the vectors of forces provoked by a dynamic, expansive context intersect with the architect's reason, intuition and sensibility and with the cultural and physical conditions of the site. The identity of this architecture is defined in the contradiction of space proposed.
by the universal megalopolis – continuous and undefined – and the unique, specific place. New architecture struggles between the conditions of its own universally recognized internal language and local language, between history and geography, techne and topos.

The solidity of the industrial age has dissolved, and the machine, a central player in modern aesthetics, has given way to a new technology whose inventions are immersed in a process of miniaturization and virtual disappearance to the point of being practically invisible and inaudible. In the same way, the human body is no longer defined by its own physicality. The body's limits are now those established by the possibilities of the global network of flow and movement.

The new architecture has lost its substance, just as man to whom it refers and serves. This new architecture is no longer defined by the physicality of its components; rather, it is an open and discontinuous architecture in which the qualities and hierarchies of space are established by a complex superposition of grids of energy and flow that finds expression in a universal language. At the same time, the unique specificity of the actual site and the particularity of the fragment become evident through their tectonic conditions. Three dimensional architecture of volumes and masses is being replaced by a new architecture of lines and planes that define space dynamically, based on ever changing relationships among elements and ephemeral forms of human occupation.
Different conditions of light and sound – transparency, translucency, opacity – and above all, different qualities of silence play a major role in contemporary architectonic proposals.

The new architecture of our generation is balanced between the clarity of creative will and the expression of constructive grammar, between the capacity for inventing spaces and the skill in selection and use of materials and constructive processes at the building site. The poetry of our discipline is complex, a reflection of the processes of construction of this new, immaterial and discontinuous condition of architecture underscored by order, clarity, precision, passion, discipline and understanding of the energy and nature of things. The tectonic aspect of our work revolves around the processes of thinking, of doing and of communicating through construction the development of ideas.

The most overwhelming manifestation of the new age in which we live is the urban continuum that we know as the universal city, a city without limits or geography. This new contemporary metropolis has supplanted its predecessor – the Renaissance city of geometric and rational order, of sculpted physical spaces where sophisticated and elegant urbanity developed. This modern city has definitively erased the limits of the historic city and destroyed its singular heart, substituting a multiplicity of centers, of functionally specialized places. Life in the present day city, like the corresponding new architecture, has as its setting a transitory condition formed by the superposition of various perimeters.
loosely defined by the network of traffic flow. The traditional city composed of the fixed, established duality of figure and ground has given way to a new city of backgrounds which are artificially created by the dynamics of unstable and perishable figures. In this total city, space is defined by complex vectorial relationships generated by fragments created by the movements of man, goods and information. The most diverse patterns of social life coexist from the most orthodox to the most subversive and challenging. The contemporary city is a city of multiple superimposed readings, of uneasy order: unstable, fortuitous, changing. Life in this city is ephemeral, fragile, transitory, fragmentary.

And so is its architecture. The contemporary city does not recognize forms. It is a city without substance, whose spaces are defined by the complex play of forces which result from the contradictions produced by the movements of people, products and information, and the actual physical condition of its multiple fragments and local traditions. New urbanity suggests an architecture that is informed and fed by the energy of this new city that responds to the urban conditions of the universal megalopolis, that not only recognizes but exalts them. At the same time, new programmatic conditions that are both ambiguous and discontinuous require that we reconsider proposals for setting the experiences of architecture in relation to the cultural and tectonic requirements of communities, of unique people in specific places.
The projects that we have designed have one thing in common: They all are located in my city, which is the City of Mexico. The work is a homage to the city where I was born, where I have lived most of my life and where I have done most of my work. We all have very strong relationships to our places. I have a love and hate relationship with my city, much more love than hate.

Mexico City embraced modernity with passion. It is a city with many modern buildings of quality. There are small parts of the city which belong to the traditional periods of architecture – the colonial buildings of the 17th and 18th centuries. But the historic core is only a small part of Mexico City, for the major growth has occurred during this century. It is a city of movement, of tremendous activity, and of conflicting forces. It is a city of interaction, of compression and tension, and that is where I understand the contextual relationships of each one of our buildings. Above all, our work participates in the contradictions of the city, both the traditional city and the new city which I have tried to describe.
Selected Projects
Located along a main commercial avenue in Mexico City, an existing four-story structure dating from the 1940s was acquired to accommodate the headquarters of a lighting company. The building occupies a small triangular site that is the result of the intersection of two distinct city grids.

The program included new showrooms and offices for an importer and distributor of lighting fixtures as well as the transformation of the building into a billboard advertising lighting.

New zoning codes enforced the preservation of the existing building. Consequently the resulting renovation seeks to create a contrast between old and new through forms and finishes. The structure – concrete reinforced load bearing brick walls and concrete slabs – has been stripped back. Steel beams and concrete columns from a previous intervention have been retained. While intended to be covered and finished with other materials, these poorly crafted elements have been left exposed and unfinished in order to express the true character of the existing building.
Materials new to the building – including various types of glass, metal laminate, stainless steel cables, varnished wood and polished marble – have been selected for each intervention. Attached and affixed both within and without, these elements express the dynamic conditions of the place in opposition to the static character of the structure. A dialogue of contradiction is thus created between the imperfection of the existing building and the fine, delicate qualities of the new architecture.
House 0
Bosques de las Lomas, Mexico D.F.
1991

This house is located on a residual plot of land in a residential development on the outskirts of Mexico City. The site is narrow in plan with its long sides facing a busy street at the front and the huge retaining wall of the neighbor's garden at the rear. The site therefore presented a large vertical surface to work from and a small horizontal surface to work upon – a unique condition for invention.

The house is designed in section starting with the vertical plane at the rear of the site. From that plane, a series of planes move in space to virtually define inhabited zones and circulation zones. The planes also establish the limits between private and public; intimate and communal. Each of the detached planes maintains a unique material, color, shape and geometry to define overlapping spaces that relate to the dynamics of the street. Service facilities and circulation spaces are inserted along the outermost layers of the main facade, forming a buffer to the living spaces which are lodged between two interior planes. Two courtyards, one at either end of the house, reinforce the longitudinal axial composition, opening the spaces within to the best views and exposure to the sun. Instead of looking out directly onto the busy public street, this strategy creates a sense of spatial and visual continuity with the surrounding eucalyptus forest.
Workers' Housing
Brasil 75, Centro, Mexico D.F.
1992

This project was developed as part of the Urban Infill Program for the Central Colonial District of Mexico City. The building is part of a dense urban fabric characterized by the presence of 16th – 19th century dwellings and institutional buildings. An 18th century church shares a boundary wall with the project, while an existing plaza lies immediately across the street.

This location in the colonial center brought responsibilities with regard to the interaction between existing buildings and the strictly enforced codes of the National Institute of History and Anthropology that control the design of new buildings which can be built in this area. Such codes are decided by people who do not believe that modern architecture can play a role in our cities. Building height limits, physical relationships to context, street facade materials and exterior proportions of voids and masses are all strictly defined. One of the challenges, therefore, was to design a building in the heart of the colonial center that would cope with the codes and be part of the historic texture but, at the same time, would be contemporary to us and to the people who would inhabit it.

The project provides low budget housing for 21 families who live and work in this part of the city. On the one hand, these people have deeply rooted traditions but, on the other hand, they have a strong desire to be part of our modern world and of the future world. Therefore, we believed that it was
important that their life place would both respond to many of the conditions of their traditional lifestyle and be part of their desire to look ahead.

Cognizant of its colonial urban context, the project is a reinterpretation of an architectural typology known as *la vecindad*. This condition, which originated in Spain, is typically defined as multi-family dwelling units that face inward to a common space. Witnessing the daily lives of its inhabitants, this shared outdoor space serves as an interior circulation street as well as a social space for the community. In addition, it provides relief from the pressures imposed by the urban context. Separated from the chaotic public street by an iron gate, the common space is a private street where children can play, where adults get together, where community parties take place. These are people who rely a lot on their neighbors; they make a lot of celebrations together and have many gatherings together. Because of the privileged weather of Mexico City, these activities are able to happen in the communal open air space at the heart of the scheme.

The living units are arranged in two parallel four-story buildings on either side of the long central patio. The actual dwellings are very small — only 55 square meters — because of the budget and because of the codes of the agency that commissioned the project. Consequently, the dwellings become places where only the intimate conditions of living take place, providing for sleeping, eating and bathing — the minimum requirements of this precarious kind of lifestyle.
In addition to the dwellings, there are 21 shops which are also derived from traditional patterns. As the father of the family goes out to work in the factories or shops, the rest of the family has a secondary economic activity that helps to provide support. Each apartment therefore has one of the shop units that face onto the communal space where a shoemaker or a carpenter or another modest commercial operation can be set up to help ensure the survival of the family.

Both dwellings and shops maintain a direct relationship to the patio. The residential units are reached from a single stairway with linking bridges to both buildings. The shops are raised a half level above the patio to create a vertical hierarchy between the interior street, the commercial spaces and the apartments.

The most challenging aspect of all was to demonstrate that, within the restricted budget of the client, a new kind of architectural language could be brought into the historic center with a new vocabulary that speaks of the contemporary condition of both ourselves and the dwellers of the place. We decided to look for ordinary materials that could be found in any corner shop, and to use them in ways which would give them great dignity. This strategy creates a new image for a building type otherwise destined to be an expression of typical low cost materials used in a conventional way.
This project has remained unbuilt, but it is important because it was the beginning of an investigation that has kept our attention. The site is a flat surface of land in a park surrounded by corporate offices. The developer of the corporate offices wanted a cultural center to offer to the public in exchange for development privileges. The building was to house activities ranging from a lecture to an art show, from a party to a small concert. All of those activities are totally different and would require different spaces if one were to design for each event.

But 'cultural center' means everything and nothing. It is not a building program. Through this project, we started to understand that programs in contemporary architecture can be ambiguous and even nonexistent. Our societies and communities need spaces that are flexible, that are ephemeral, that change, that can accept a wide range of different activities, that are sometimes even fortuitous. More and more, we find ourselves engaged in this kind of project, and this has caused us to think a lot about what kind of space can house a totally diverse condition of use.

The idea that form follows function becomes totally irrelevant in this kind of contemporary life. We started to conceive what we called a continuous space, a space where walls and ceilings and floors can be exchanged, a space not limited by corners. We understood that buildings had been traditionally defined by corners: by space and wall, by wall and ceiling, by wall and wall. We wanted to find spaces that would be so abstract that they could become...
backdrops to a variety of activities. That search brought us back to our original thinking, back to thinking about how most activities could take place in the open air in our city: in the streets, in the plazas. For this cultural center, that is where all of the celebrations would take place, where art would start, where performances would be given, all in a very natural way.

The site is absolutely flat, so with the building itself, a totally new topography would be created to mark the new conditions. A partially buried building was proposed – an artificial topographical accident – whose only protuberance would be a metallic ‘hill’ that would identify the building and modify the landscape of the park. Only a small part of the building would come out of the ground to act as a landmark in this arena of corporate objects. An open-air sunken street would order the project and make reference to an urbani ty absent in the area.
The National Theater School is part of our ongoing investigation of the ephemeral. It is located on a campus for the National Center for Drama which is situated at an important intersection in the city where two freeways meet with a Metro line adjacent. The roads and railway generate contradictory forces of movement. In contrast with this ever-present conflict of vying forces along the north and west boundaries of the site, existing recording studios form a static backdrop to the south. Characterized by transformation and movement, the site is subject to constant friction and tension induced by velocity; as well as to the urban pressures of the campus setting.

While very few people – only students, faculty or those attending performances – would come and walk through the building, over 19 million people driving by or passing through on the train would, at different moments of their lives, be exposed to or confronted by this building. The dilemma was how to deal with urban scale from a transient position to design an icon that would register in the mind of the observer in a fraction of time. Within a few seconds, people would have to be given the opportunity to understand the building, to have an impression and to let it become, little by little, one of their landmarks in the city, to become part of that collection of elements that give meaning to the different places of the city.
Representing an inclusive approach to the discipline of theater, the program called for the accommodation of diverse, yet interdependent needs. Some elements – in particular, three different performing spaces – were highly specific. In contrast, there were a number of spaces that had a name but were not clearly defined programmatically. These spaces had to do with training and with different kinds of learning related to the theater: rehearsal rooms, scenery studios, costume workshops, lighting workshops and many other activities superimposed in a complex manner. Finally, the program included lecture halls, administrative offices, a cafeteria, a gym and a library.

In response to site and program, the building is designed as a collection of stacked, individually articulated volumes unified by a common access and meeting space. The building is a collection of fragments which interact and, at the same time, contradict and complement each other. Each piece has its own personality, its own vocabulary, its own material, its own texture, its own temperature. For example, the brown box – the wooden box – is the library of the school. It is designed as an element balanced in fragile equilibrium, a metaphor for the place of knowledge and culture in our communities.
The fragments are all contained within a shell. The form of the shell is generated as an extrusion that responds to the functional conditions of the section of the main performance space. From the exterior, the shell protects these fragments from the busy, noisy surroundings and also provides the iconography of the building at the transient urban scale. In another sense, the shell forms a total enclosure, a unified backdrop for the various individual fragments. While logically arranged in terms of circulation, the articulated forms represent a model of controlled disorder. This contradiction between random appearance and designed order results in a paradoxical dynamism amongst the forms. The superposition of the lines and planes that conform the spaces within the shell creates a condition in which all spaces do not have a precise function. This is where the life of the building is enacted, where the encounters of this community really take place. The superposition of elements also creates a cubist condition where various readings take place simultaneously, depending on the use at that moment.
TELEVISA Mixed Use Building
Avenida Chapultepec No. 32, Mexico D.F.
1995

The site, a vacant trapezoidal urban lot formed by colliding, haphazard street geometries, terminates a procession of densely packed blocks occupied by small television companies that are part of TELEVISA, a large broadcasting corporation. They all function independently but have many activities in common. The client wanted to create a center where the various communal activities could be brought together.

Immediately adjacent to the site to the east, an eight-story network executive office building and a TV transmission tower create a physical edge. A solitary island of space anchored in an urban setting, the site is part of a fragile context, one of the many ethereal areas of Mexico City that have developed out of the superposition of the perimeters of the various centers. It is an area of strange juxtapositions with no real identity. Such left-over areas of our cities are where the architecture of our generation is being shaped.

In search of a new image for the company, the program called for the building's expression as an urban icon identifying the network. The program included a number of divergent functions: a parking garage; office space for media services, union relations and banking services; an employee cafeteria which could also be used for parties, concerts and broadcasting; executive dining facilities; conference rooms; and recreational facilities.
This mix of distinct and independent needs resulted in a building expressed as two superimposed forms. Some activities common to all of the employees of the corporation – things like parking, banking, health services and union services – take place in prescribed kinds of forms. Other activities are much more open-ended and undefined. The two programmatic conditions are expressed in section: The parking and the conventional offices are in the base of the building. All of the social activities – the undefined, changing and ephemeral conditions of the program – are above. Both forms maintain the contours of the block; they are interdependent, yet each exists as a distinct entity.

Addressing the scale of the city, the public parking facility conforms to the line of the street. A dark, imposing monolith, the street level facade is punctured at only two points to permit vehicular access. Above, a silvery, elliptical shell defines a continuous space which is sufficiently abstract to accept a wide range of social activities. The upper western facade maintains a closed relationship to the street; the shell curves in on itself, exposing a hard outer exoskeleton to the main vehicular artery. In contrast, the eastern facade is transparent, opening toward the adjacent network buildings. In addition to providing a quality of spatial limitlessness, the partial elliptical section provides a two-story interior volume with dining facilities for 600 at the main level and a bar, executive dining rooms and conference rooms above. Offices are housed in a service level between the parking and the social functions. Sharing the same external contours as
the plinth of parking, the intermediate office level is enclosed by recessed glass curtain walls that define a continuous outdoor terrace along the building's perimeter and create a transparent, formless transition between the superimposed forms.

Vertical and horizontal circulation cores connect the overlaid forms. A flight of steps that passes behind an exterior wall provides an entrance to employee services at the southern end of the site. Stairs enclosed in an inverted conical volume link the parking levels to the offices. Two ramps joined by a landing at the office level provide access to the dining facilities above. The ramps are cantilevered from vertical planes that simultaneously serve as street level billboards. Establishing an architectural vocabulary through the use of visual media, these planes represent the transformation of type in that the billboards assume the structural and spatial roles of the wall.

Ambiguity – of function, and between indoors and outdoors – is important. What happens where one space ends and another space begins is intentionally ambiguous because the activities are so ephemeral. The only constant is the city, the continuous element that serves as a backdrop to the rich life of the building.
Museum of Natural History
Chapultepec Park, Mexico, D.F.
1995

In a densely forested section of Mexico City's largest and most prominent park, a new museum is required to house a permanent collection, temporary installations, an auditorium, a museum shop, and restaurants. In addition, administrative offices, workshops, classrooms, a library and a laboratory are to be provided.

Replacing an existing museum on the site, the proposed building is a low-lying structure comprised of three elements: the permanent collection is housed in a vast colonnaded hall with an expansive flat roof pierced by sculptural skylights; a rectangular volume with a canopy-hung roof forms a generous entrance lobby and contains the auditorium; and flanking the submerged hall are two elongated glass and steel prisms that house the remaining museum functions.

Although it is located in the heart of the city, the building is perceived as an isolated object in a sea of trees. The scheme further explores translucent and transparent planes and lines that create the potential for a large variety of exhibition spaces. The west prism, which intersects with the entrance canopy and faces one of the park's ring roads, is distinguished by its canted geometry. The east prism is rectilinear; its outer face, oriented toward the forest, is screened with sequoia louvers.
This small house in Mexico City is located in one of the urban centers which emerged at the beginning of the century. The dense texture of this part of the city is formed by townhouses joined to one another with a shared separation wall; structurally they are independent, but physically they are united. The house is a reflection upon living in Mexico City, a place of tremendous intensity and density. Because many things are happening simultaneously, the need for absolute privacy and intimacy arises for the inhabitants of the city. The people in this house want to live in an open condition and, at the same time, be able to enjoy their own privacy. In this small sliver of space, it was very important to provide for these needs without contradiction.

This house experiments with an idea about site utilization which differs from most of the houses in the area. Traditionally, houses have been built on the front part of the site, leaving the back part as garden. In contrast, this site is divided into two long slender pieces perpendicular to the street so that the northern part of the site is occupied by the house and the southern part of the site remains open. Exactly the same amount of space is built as is left unbuilt. This move allows for a closed public facade to the street with only glimpses into the inner life of the house. The closure provides privacy and security. In contrast, the inner facade is totally open and transparent, facing onto a piece of space that belongs only to the family of the house and to the people who are close to them. The openness and transparency of the inner facade address the ambition for a modern condition of living.
The principal living, dining and patio spaces are located on the middle floor and connect to the bedrooms above and the library below via a stair core at the rear of the house. The ground floor also contains the entry, garage, laundry and service bedrooms. The roof of the house is utilized as a deck. Even in the private house, program has become a changing, fluid element which is reflected in the materiality of the architecture. The possibility of building spaces that can change as the conditions of life change and as the family changes is an important issue in this house. It is very open. Spaces are defined merely by planes or lines. A single volume which contains the kitchen becomes the center of the house, the warm place of the house. Around the volume of the kitchen, the whole house rotates in activity and motion.

The small size of the plot and the limited budget called for rational, straightforward organization. The house consists of layered slots of space which run longitudinally along its full length on every level and are transcribed onto the street facade. The first, a narrow layer of storage space which runs along the north wall is articulated as a smooth plane of wood. Parallel to this layer is the circulation of the house. The living spaces comprise the next wider zone which is enclosed by a wall of glass. The southern sun is blocked by the deep overhang of the roof and by the next layer, a screen of redwood louvers. Patios at ground and second floor levels comprise the exterior slot. Finally, an ivy covered party wall forms the south boundary of the site.
The superimposition of layered slots of space creates transverse spatial relationships which reference the exterior spaces to the interior organization of the house. The living space is aligned with the void of the ground level patio, while the kitchen and dining spaces are coordinated with the upper level patio. Just as interlocking volumes provide for various readings of the spaces, continuity of materials from exterior to interior creates further transparency between zones. The louvered screen both controls the light and heat of the sun and distinguishes among degrees of intimacy in the house. The screen protects the bedrooms on the upper floor so that, from the gardens, there are no views inside. But from inside, the screen becomes totally transparent. The garden, instead of being a horizontal green surface, is a patio made of gray lava stone. The south party wall is covered with ivy so that the whole house looks out into a large, vertical green surface.
Postscript
The Nursing and Biomedical Sciences Building is planned to be a magnet for campus activity, to provide an inspiring learning environment and to create an administrative arena.

The design solution is based on the inseparable integration of architecture, engineering and construction technology. Responses to the site, program and user needs are developed in tandem with practical issues of sustainable engineering systems and construction methodology. Together an ingeniously efficient, responsive and responsible new building form materializes.

The Nursing and Biomedical Sciences Building (NBSB) can be understood by envisioning Grant Fay Park with two narrow volumes or buildings at its western edge. The buildings, one transparent and one opaque, are pushing towards each other. As a result of this pressure, the two volumes displace and from their friction emerges an exploding geometric crystal. The result is a transparent academic building and an opaque administrative building with a faceted atrium between them. Together they present a clean and pristine image to the surrounding campus while creating humane, organic spaces within.
The project creates a heart for the Houston Health Science Center and thereby strengthen UT's position within the Texas Medical Center. The open building would literally draw people of the campus in through its varied openings, pump them through its chambers to be re-energized and propel them back out into the campus. This open, energizing place introduces a welcome counterpoint to the many campus buildings which appear impenetrable to the public.
Enrique Norten

Enrique Norten was born in Mexico City in 1954. A graduate of the Universidad Iberoamericana (1978), he received a Master of Architecture degree from Cornell University in 1980. After starting his professional career in Mexico City, he established the firm Taller de Enrique Norten Arquitectos (TEN Arquitectos) there in 1986.

Teaching

1997 University of Michigan, Lorch Professor of Architecture.
1996 Harvard University Graduate School of Design, Eliot Noyes Visiting Design Critic.
1993 Rice University, Visiting Professor.
1991 Columbia University, Visiting Professor.
1983-85 Universidad Iberoamericana, Mexico City, Graduate Program Coordinator.
1980-90 Universidad Iberoamericana, Mexico City, Professor.

Professional Activities selected

1996 Architecture Magazine Awards, jury member.
1993-96 AIA Design Awards jury member in the United States and Puerto Rico.
1991 Founding member and editorial board member, Arquitectura magazine.

Awards / Honors selected

1996 First prize and Honorary Mention, IV Mexican Biennale.
1995 Progressive Architecture Award: Natural History Museum.
1994 Progressive Architecture Award: TELEVISA Building.
1992 Record Houses Award. Architectural Record: House O.

Exhibitions selected

1996 VI International Exhibition of Architecture, Venice Biennale, Italy.
1994 Building(s) in the City – The Work of TEN Arquitectos, University of Texas at Austin, Graduate School of Design, Harvard University.
1994 Contacts – In the Limits of Architecture and Sculpture, Museo Tamayo, Mexico City.
Competitions selected

1996 Nursing and Biomedical Sciences Building, University of Texas. Invited competition.
1992 Ibero-Olmeca University, Villahermosa, Tabasco. Invited competition, finalist.
Heritage Gardens and Cultural Center, San Jose, California. Invited competition, finalist.
Moda in Casa, Mexico City. Invited competition, 1st place.
1990 Museo del Nino, Mexico City. Invited competition, 2nd place.
1987 The French Institute and Cultural Center, Mexico City. Invited competition, 1st place.

Publications selected

TEN Arquitectos
Taller de Enrique Norten Arquitectos

Enrique Norten
Bernardo Gomez Pimienta

Raúl Acevedo
Miquel Adriá
Axel Araño
Jaime Cabezas
Antonio Cangas
Blanca Castañeda
Jose Manuel Castillo
Alejandro de la Vega
Jesús Alfredo Domínguez
Gustavo Espitia
Jorge Flores
Héctor L. Gámiñz
Raúl Garduño
Rebecca Golden
Miguel Angel Gonzales
Daniel Granados
Margarita Goyzueta
Armando Hashimoto
Aarón Hernandez
Sergio Juárez
Miguel Angel Junco
Ana Martinez
Carlos Ordoñez
Francisco Pardo
Alejandra Peña
Jorge Luis Pérez
Javier Presas
Arturo Rojas
Carlos Ruiz de Chávez
Roberto Sheinberg
Juan Carlos Tello
Sigfrido Ulloa
Carlos Valdez
Oscar Vargas
Mariá Carmen Zeballos
Emil Lorch

Emil Lorch was born in Detroit in 1870. He attended Detroit Museum Art School from 1887-89 and Massachusetts Institute of Technology from 1890-92 before returning to teach at the Detroit School of Art from 1895-98. After a year of study in Paris, he went to Chicago as Assistant Director of the Chicago Art Institute and Secretary of the Chicago School of Architecture. In 1903, he earned a Master of Arts in Architecture at Harvard University and began teaching architecture at the Drexel Institute in Philadelphia.

In 1906, Lorch was invited to the University of Michigan to establish an architecture program in the Department of Engineering. He served as head of programs in architecture until 1936, when he resigned as Director of the College of Architecture. He continued teaching until his retirement in 1940. Throughout this period Lorch took the leadership in the organization of the College of Architecture, contributed largely to the development of its resources and its prestige, and was untiring in his efforts to advance the interests and usefulness of the architectural profession both in Michigan and nationally.

An admirer of Louis Sullivan, Lorch was a lifelong champion of the Chicago School. Michigan was one of the few schools to resist the Beaux-Arts tradition and because he was able to translate the principles advanced by Sullivan into a working policy for the school, Lorch attracted many leading architects as visiting lecturers, including Frank Lloyd Wright and George Elmslie. In 1923, he persuaded Eliel Saarinen to leave Finland and join the Michigan faculty as Visiting Professor of Architecture.

Lorch was a leader in national organizations. One of eight school heads who formed the Association of Collegiate Schools of Architecture in 1912, he held the office of vice president and later president during the first decade of the association. In the period 1915-17, Lorch was a prime force in the establishment of legislation regulating the practice of architecture. He was a founding member of the National Council of Architectural Registration Boards and was elected its first president in 1920.
Lorch was active in architectural practice, mainly in Ann Arbor. He was architect for the Belle Isle Bridge in Detroit, and he designed the Architecture Building on the central campus of the University of Michigan. He was the architect of several buildings for Detroit Edison and of numerous residential projects.

During the 1930s, Lorch headed a project of the Historic American Buildings Survey to record Michigan's significant structures. From his retirement in 1940 until his death in 1963, he devoted himself almost entirely to the preservation of historic buildings. He was active in the restoration projects of Mackinac Island and other early forts. He collected and catalogued information about hundreds of historic structures and this is now one of the most heavily used collections at the Bentley Historical Library.

Lorch received many testimonials of honor and respect during his career. In 1939 he was made a Fellow of the American Institute of Architects. At the 1956 celebration marking the 50th anniversary of architectural education at Michigan, Lorch was presented the honorary degree, Doctor of Architecture. The following year, the Michigan Society of Architects awarded him its Gold Medal for "his great contributions to architectural education and the architectural history of the State." In 1961, the Regents granted Dr. Lorch the titles, Dean Emeritus of the College of Architecture and Design and Professor Emeritus of Architecture.

The Lorch Professors:

Willard A. Oberdick
S. Glen Paulsen
Leonard Eaton
Robert C. Metcalf
Enrique Norten
Acknowledgments

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MAP One
ROTOBOOK

MAP Two
Allies and Morrison

MAP Three
TEN Arquitectos

Daniel Libeskind
*Traces of the Unborn*
The 1995 Raoul Wallenberg Lecture

Patkau Architects
*Investigations into the Particular*
The 1995 John Dinkeloo Memorial Lecture

Vincent Scully
*The Architecture of Community*
The 1996 Raoul Wallenberg Lecture

Richard Horden
*Light Architecture*
The 1996 John Dinkeloo Memorial Lecture