El Seminario de Historia Urbana del Departamento de Investigaciones Históricas del INAH reune a un número variable de investigadores, de especialidades diversas, y a un grupo de estudiantes que reciben formación de investigación en historia urbana. La dirección del Seminario está a cargo de Alejandra Moreno Toscano, investigadora de El Colegio de México. El Seminario sobre Problemas Metodológicos en Historia Urbana de Agosto de 1974 tuvo como propósito principal, confrontar diversas investigaciones en curso, subrayando sus dificultades metodológicas.

La característica fundamental del trabajo del Seminario de Historia Urbana es que se propuso desarrollar una investigación colectiva sobre la Historia de la Ciudad de México durante el siglo XIX y entender las herencias de ese pasado en su configuración actual. Las investigaciones, aparentemente desligadas, confluyen todas en la preocupación por construir esa historia.

Puede decirse que las investigaciones en proceso tocan los principales problemas de investigación en Historia Urbana. Se analizan, por ejemplo, las relaciones entre la ciudad y su “campo” circundante, entre la ciudad y “el pais.” La ciudad de México, quizás por sus características de dominio político, siempre fue centro de atracción de migrantes que pro-

*The following Notes are summaries of progress reports delivered at the Symposium at Chapultepec Castle, August 1974. Except for the introductory comments by Alejandra Moreno Toscano, the Mexican contributions were translated and prepared by the LARR staff from materials sent by the individual participants.
venían de diversas zonas del país: Conocer las características de los desplazamientos de la población durante el siglo XIX es pues, el tema de estudio de algunos de los investigadores. También, nuestra preocupación ha sido definir las relaciones entre la estructura social y la estructura urbana, procurando no caer en el formalismo de definir la estructura urbana a partir de posiciones de localización, ni tampoco dejar de lado el problema del "espacio" y reducir todo el estudio al análisis de la estructura social. Sostenemos, por el contrario, que lo que da su característica específica a la historia urbana es, precisamente, la relación entre una estructura socio-política determinada y su acción en la organización del espacio. Las dificultades de esta pretensión, nos han hecho dirigir los estudios hacia dos terrenos fundamentales. En primer lugar, el proceso de "construcción" y producción de ese espacio urbano (de ahí el interés por el estudio de los arquitectos, por el análisis de tipos de construcción específicos (vecindades) o de la actividad de los fraccionadores, especuladores de terrenos o compradores de espacio urbano. En segundo lugar, analizar por medio de estudios de caso, formas de organización del trabajo que, por lo que hemos observado hasta ahora, parecen tener una influencia muy importante en la distribución de las actividades urbanas. El tercer tema de las investigaciones en curso, es el estudio de quienes viven ese espacio urbano. Para ello, se realizan análisis del crecimiento y de la estructura de la población, así como ejemplos de movimientos intra-urbanos y de acceso a la vivienda urbana.

Las investigaciones resultado del trabajo del Seminario, aparecen publicadas como informes de investigación, como artículos o libros independientes (por ejemplo, Seminario de Historia Urbana, Investigaciones sobre la Historia de la Ciudad de México (I). [México, INAH, Cuadernos de Trabajo del Departamento de Investigaciones Históricas, 1974]). Sin embargo, lo importante de la experiencia del Seminario es que todas las investigaciones individuales forman parte de un conjunto más complejo que pretende iluminar la historia de una ciudad.

Los investigadores, además de sus trabajos individuales, contribuyen a la formación del primer banco de datos de informaciones históricas que existirá en México, analizando y transcribiendo la información de los padrones municipales de 1811, 1848, y 1882. Para la construcción de ese Banco de Datos se recibió la colaboración técnica del Centro de Investigación en Matemáticas Aplicadas y Sistemas de la Universidad Nacional Autónoma de México, lo que permitió el diseño de un sistema de recuperación de información por medio de computadora con las características que exige el análisis de informaciones históricas. Es pues el carácter interdisciplinario del Seminario lo que explica su capacidad para abarcar una historia con pretensiones de totalidad.
THE SYSTEM OF AUTOMATIC RETRIEVAL OF URBAN DATA

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The major objectives of this lecture to the Seminar on the Methodological Problems of Urban History were to share some recent advances in the application of computation to the social sciences and to express confidence that the diverse talents, viewpoints, and professional preparation of specialists from several disciplines would permit the formulation of new methods for the synthesis and analysis of available information to solve the problems which confront modern man. To establish a general methodology valid for future investigations in the field demands the creation of a system of information storage and retrieval which would allow investigators to manipulate vast quantities of data. Computers can offer several advantages to social scientists, among them:

1. Increased rapidity in the tabulation of information. A computer requires only seconds to answer questions which would otherwise require weeks of tedious consultation and study in libraries and archives.

2. Greater flexibility. A computer is not restricted in the types of data which may be analyzed.

3. Facilities for expansion and reproduction of materials. The initial effort required to construct data banks is not lost. Data is indefinitely conserved on magnetic tapes and may be amplified by introducing new information at any time.

The implementation of a computer system of this type can be divided into three fundamental stages:

1. Design and definition of the system. The need for interdisciplinary interaction is greatest here since the structure and limitations of the system will be determined by the available information.

2. Compilation, transcription, and careful checking of information which defines the data bank.

3. Actual use of the system by the investigators.
Before working with the computer, the research team critically analyzed the following factors:

1. What did they propose to study?
2. From what base did they begin their research?
3. What conclusions did they hope to reach?
4. What information did they need during the course of their research?

The team then began to gather the information required to solve the problems they had defined. The statistics, obtained from a study of the inhabitants of Mexico City in the years 1811, 1848, and 1882, were fed into a computer, thereby creating the data bank.

The program used is called Sistema de Información Urbana (SIU), a general system for the storage and automatic retrieval of information by means of a digital computer. The data, represented in an alphabetical form which uses words, phrases, or numbers, are carefully checked and fed into the computer. The data retrieval is effected by means of a computer language similar to Spanish which utilizes logical commands and parentheses in its alphabet. For example: “Deseamos recuperar todos los individuos que tengan las siguientes características: (9/ Plateros, Tacuba) y (46 . Alcalde, Alcalde de la Real Corte) y (40/ Cuautla, Cuernavaca)) deseamos también imprimir adicionalmente las siguientes características (14,15,18).” This question will retrieve information on those individuals who live on Plateros or Tacuba Street, whose occupation is Alcalde or Alcalde de la Real Corte, and whose place of origin in Cuautla or Cuernavaca.
ELEMENTS FOR THE ANALYSIS OF THE INTERNAL STRUCTURE OF MEXICO CITY

A Typology of Dwellings

Rosa María Sánchez de Tagle

INAH

This address to the Seminar discussed the social and cultural aspects of dwellings in urban life in Mexico City during the early nineteenth century. The studies were based on information obtained from the national census of 1811. After a brief review of the census papers, the following were offered as the major obstacles to interpreting the information contained:

1. The designation of dwellings as “houses” or “rooms” clearly corresponded to the criteria of the time period in which the census was conducted, and to the judgement of the census taker. What was a “room” to one may have been a “house” to another; what may have been considered a “room” in 1811, may be classified as a “house” today.

2. There were many gaps in the information recorded in the census which frequently referred only to the location of the building, without mention of its physical structure or purpose.

A terminology was established to describe the dwellings under study. The term vivienda was used for buildings occupied by people from higher income groups. To determine whether a building was a vivienda, information on the ethnic and economic background of the individuals who inhabited it was consulted. For example, a building belonging to a peninsular Spanish family with servants was registered as a vivienda, while the dwelling of an Indian factory worker was considered a room, or cuarto.

The following guidelines were proposed for studying urban dwellings in early nineteenth-century Mexico City:

1. Type of House: Defined by the grouping of rooms within the house. Certain houses were constructed to be more social than physical (e.g., an apartment complex) while others were more physical than social (e.g., the home of a wealthy merchant).

2. Condition of House.
3. Services Available in Dwelling.
4. Number of Unoccupied Rooms in Dwelling.

This data would enable detection of changes in the evolution of the concepts of vivienda and cuarto and changes in the use of the buildings themselves. For example, a vivienda in 1811 may have been classified as a cuarto in a later census. Or, a vivienda which belonged to an upper class family in 1811 may later have served as an apartment complex housing several lower class families.

The demographic statistics of this census reveal a relatively low population density per square meter in Mexico City, but the density per dwelling and per room was extremely high. It was also discovered that the city consisted of numerous independent nuclei, or zones, each isolated from the others. There were areas where the physical concentration of buildings was very high or very low. The buildings in these areas usually corresponded to independent structures occupied by individual families, or to commercial buildings not necessarily destined for living purposes. There were also areas in which the buildings were divided into many rooms, and which were inhabited by middle class families. The following conclusions were drawn from detailed study of the physical concentration of buildings: the smaller the number of individual houses, the greater the number of rooms; and the greater the number of rooms, the smaller the number of people. This, then, meant that the greatest concentration of people lived in areas where the houses were not subdivided into many rooms. The areas of high physical concentration of buildings corresponded to the lowest population density. It was also noted that there were areas in which buildings and people tended to be concentrated; these areas were dispersed unevenly throughout the city and were mutually independent. There was no radical concentration of people in the center of the city.

There are difficulties in correlating data on housing with data on social structure in the city. For example, if we take the general information contained in the census of 1811 and classify the population according to the type of house they lived in, the result is that 50.5 percent of the urban population of Mexico City belonged to the middle and upper classes, while only 23.3 percent belonged to the lower-middle and lower classes. The characteristic houses of each economic class were evenly distributed with no apparent "zonal segregation" in Mexico City in 1811. The houses of the wealthy and those of the poor were scattered throughout the urban area. Nevertheless, the social differentiation appears within the housing unit itself. There are significant social differences between those who inhabit a house and those who live in a room of the same building.
THE GEOGRAPHIC DISPLACEMENT OF POPULATION 1895–1910
Perspectives in the Study of Urban Systems

Carlos Aguirre Anaya
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The information for this lecture was obtained from the Mexican censuses of 1895, 1900, and 1910. This period in Mexican history was marked by the dictatorship of General Porfirio Díaz and by accelerated economic growth.

This study of the national census concentrated on one of its subdivisions known as the residencia, which reports the number of persons residing in each district who were born outside that district. With this information it was hoped to observe the migratory patterns established within Mexico from 1895 to 1910. Unfortunately, the information in the census presents serious difficulties in accurately measuring these migratory trends. While it does indicate the number of migrant residents in each district, it does not offer information on the precise date of their arrival in the district. Information pertaining to the age, occupation, and literacy of the migrants is also lacking. Nevertheless, a general panorama of the geographic displacement of population throughout Mexico during this period was obtained.

The figure of one thousand was set as the minimum number of migrants necessary to measure population shifts. A list was then compiled of all the districts in the nation which had more than one thousand migrant residents, and their state of origin was noted. The statistics revealed that wherever there was an exodus of population (emigration) there was not a corresponding attraction of population (immigration), and vice versa. Four major areas of population shift within the nation were revealed: The region surrounding Mexico City, the area of Veracruz, the northern sections of the country, and the western coast.

The states bordering Mexico City provided the greatest number of migrants to the expanding commercial and industrial complexes of the federal capital, which was undoubtedly the greatest center of attraction for migrants between 1895 and 1910. The population in this region gravi-
tated toward Mexico City almost exclusively. In the other three regions, migrants were attracted to several urban centers, not to any one in particular.

The states of Puebla and Oaxaca drove out their native populations toward the tropical coastlands of Veracruz. The demands for tropical commodities and the discovery of petroleum fields stimulated the economic and demographic growth of Veracruz. Orizaba, Córdoba, and the port of Veracruz received the greatest number of migrants.

The third region of population flow covered three states along the western coast of Mexico. The increase in cultivation of export products, such as coffee and tobacco, provoked the migration in this area. The state of Jalisco supplied her native sons to the coffee plantations of Colima and to the tobacco fields of Nayarit.

The growth of mining, agriculture, and commercial livestock raising in the northern states produced great migratory movements in Nuevo Leon, Coahuila, Chihuahua, Durango, Zacatecas, San Luis Potosí, Aguascalientes, and Jalisco. There was a spectacular exodus from San Luis Potosí and Zacatecas to various urban centers in the northern-most states, such as Nuevo Leon, Coahuila, and Chihuahua. Torreón and Monterrey, the two most notable centers of demographic growth in this region, were connected to the federal capital by railroads, which shortened the distance from the northern borderlands to the central region.
This research proposed to define how property was distributed in the national capital throughout the 1800s, to evaluate the importance of the concentration of property in the hands of a landed elite, and to describe the social groups which benefited from landownership. Also proposed was an analysis of the impact and changes produced by the decline of one landowning group and its replacement by another in the physical, economic, and social structure of the city.

The investigation was based on the study of documents and other primary sources which permitted the definition of the social groups which owned property, and measurement of the degree to which they monopolized it. Of particular interest was the determination of whether the nationalization of church lands in the mid-1800s was followed by an equitable redistribution of property and the creation of a middle class, or whether it simply resulted in the formation of a new landowning class. The following sources were consulted:

1. Padrón General of 1813. A most complete source, it includes the exact location of each building in the city, the proprietor’s name, and the rent value.

2. Avaluó de los terrenos de la ciudad publicado en la Memoria del Ayuntamiento de 1830 y de las casas de la misma practicado en 1836 al decretarse la contribución predial. Includes only 40 percent of the houses in Mexico City.

3. Noticia de las fincas pertenecientes a corporaciones civiles y eclesiásticas del Distrito de México. Also incomplete; it does not contain information relating to private homes.

4. Padrón de Canales from the Museum of Mexico City (dated 1860). Offers information only on those homes which received water services from the city.

5. Padrón General de Aguas of 1900, from the Municipal Archives of
Mexico City. Relatively complete; contains information on the majority of houses in the capital.

The greatest methodological problem encountered was the comparison of the nineteenth-century documents consulted: Each contained different types of information making it difficult to correlate the statistics from one source with those of another.

A detailed study of these sources revealed that from 1813 to 1856, the greatest concentration of property (approximately 47.1 percent of the total in Mexico City) belonged to the church. Property belonging to individuals accounted for 45.4 percent of the total holdings, and the remaining 5 percent belonged to the city government. No significant changes in the distribution of property were registered before 1856; the church had lost only 10 percent of its previous holdings by that date.

The results of the Padron General de Aguas of 1900 indicate a greater concentration of property was in the hands of individuals (for instance, there was a group of wealthy families each of which possessed between 40 and 100 houses). This unquestionably favors the argument that the nationalization of church property did not produce a more equitable redistribution of lands in Mexico City. Therefore, a study was made of the economic difficulties which prompted the government to sell lands it had expropriated from the church in the 1850s, and how this benefited the newly established landed elite. It was discovered that when the acquisition of property by individuals increased, the amount of property owned by the government decreased. During those years in which the most prominent landowning families in Mexico City purchased the greatest number of homes, such as 1873 and 1874, the government did not acquire more property, but rather offered mortgages and sold much of its property at public auctions. There is evidence that many of the transactions effected in 1873 involved properties which had once belonged to the church, were later nationalized by the government, and then passed into the hands of the newly-landed elite. Financial necessities simply did not permit the gradual sale of the public domain at reasonable prices, but rather pressured the government to sell all property as quickly as possible, at reduced prices, and to whomever could pay the price. Therefore, the sale of nationalized church property only contributed to the formation of a new landed elite.

The breakdown of the concentration of church property produced physical changes in the city, as it enabled the government to construct new avenues and streets through sections of the city which were previously closed to the public. It caused significant social changes by creating a new class of landowners who demanded high rents and prompt payment;
the church was unable to protect its former tenants from the economic demands of the new landlords. Finally, the release of church lands stimulated economic changes. The real estate market, which had been stationary before the nationalization of the ecclesiastical estates, was suddenly set in motion, thereby fomenting the accumulation of capital which was later invested in projects for the urban development of the city. These physical, social, and economic changes will be investigated further in future research.
CONSTRUCTION AND CONTRACTORS
A Methodological Approach to the Study of Architectural Styles in Mexico City, 1780–1805

Sonia Lombardo de Ruiz
INAH

The information for this study was obtained from volumes 773 and 774 of Obras Públicas en General, in the Archivo del Antiguo Ayuntamiento de México. These documents contain a complete register of the architectural activities undertaken as public works or private homes from 1780 to 1805. It was hoped that a thorough study of the Obras Públicas en General would provide interesting data for the urban history of Mexico City and, more specifically, for the history of art and architecture in the federal capital.

The Obras Públicas en General offer the following information regarding applications for building permits filed at the City Hall in Mexico City: (1) Name of the architect, (2) name of the proprietor of the building, and (3) type of architectural work to be undertaken. The types of work were classified as follows:

1. Reparations—work undertaken to maintain or preserve a building already standing in the city (e.g., painting, replacing shingles, etc.).
2. Structural modifications—changes in the original appearance of the building which may imply stylistic changes (e.g., the conversion of window to a balcony).
3. Re-edification—the destruction of an old building and the construction of a new building on the same lot. This denotes a qualitative change in architecture, though it does not alter the “urbanness” of the area.
4. Construction—the construction of a new building, thereby modifying the urban environment.

When the architectural activities undertaken between 1780 and 1805 were ordered chronologically, three distinct periods in the architectural development of Mexico City became apparent:

1. 1785–1791: Works in the city increased gradually until 1789 then declined sharply in 1791.
2. 1792–1797: Marked by the greatest increase in activities.
3. 1798–1805: Gradual decrease in activities undertaken throughout the city.

Three maps of Mexico City were prepared (one for each of the time periods) and the city block in which each architectural activity took place was located. Symbols for the names of the architect and the proprietor were included. The architects who practiced in Mexico City during this time were classified into two main groups: One was dedicated primarily to working in the baroque style, while the other worked basically in neoclassic styles. The conclusions were summarized as follows:
1. The greatest number of architectural works were registered in 1792.
2. The years of least architectural work were 1786, 1801, and 1805.
3. Structural modification was the most common architectural activity in Mexico City from 1780 to 1805. It was followed in importance (or frequency) by reparation and construction; re-edification was the least common.
4. The structural modifications and reparations executed between 1780 and 1805 were performed primarily in the central and older regions of the city. The constructions were located along the outside borders of the city, crossing into the slums (the so-called "barrios de indios").
5. The poorest constructions were raised near Tlatelolco and San Pablo, areas traditionally occupied by Indians.
6. The number of civil works were always greater than religious works.
7. Church property was concentrated in the central and older sections of the city. The architectural activities on church property were limited to structural modifications and reparations.
8. Civil property was more widely dispersed throughout the city. Nearly all constructions in Mexico City from 1780 to 1805 were civil—not religious.
9. The works performed by the baroque-style architects predated those of the neoclassic architects.
10. The most outstanding architect (for volume of work) in the federal capital was D. Ignacio Castera.
11. The majority of architects worked on civil property. Only García Torres preferred to work on religious property.
12. There was no specific zoning of activities; most architects worked in all sectors of the city at one time or another.
During the course of this research, a number of nineteenth-century buildings which are still standing in Mexico City were photographed and the following information noted: The number of stories, the number of additions to the original structure, and the use assigned to each addition at the time of the visit. At each building an individual was sought who might provide the following information: (1) The use which the interior parts of the building received; (2) the number of housing units in the building; and (3) the changes introduced in the building to accommodate new business, small stores, or private offices. Those elements of the building which might reveal the use and overall condition of the structure were photographed, and the following criteria were established for describing the general use which might be assigned to a given building:

I. A business
II. A business on the ground level with a housing unit on the upper story
III. A single house
IV. A building with several housing units, all of which were occupied at the time of the visit
V. A building with several housing units, some of which were unoccupied due to hazardous conditions, or which were partially destroyed
VI. Buildings in transition—housing units being transformed into offices, shops, schools, or private businesses.

To refer to the overall condition of the building, the following categories were proposed: X—Excellent conditions; XX—Fair conditions; XXX—Defects in the construction, such as cracking, peeling, or warping of the woodwork; XXXX—Dangerous conditions. The 5,550 interior and exterior photographs were organized into a portfolio which may be used in future studies related to the architectural styles, the present conditions, and the permanence of urban dwellings in Mexico City.
A detailed study was also made of a particular type of construction known as the *vecindades*, or apartment complexes. They were organized according to date of construction and grouped into one of three time periods: Eighteenth, nineteenth, or twentieth century. Of the 1,346 buildings visited and photographed, 328 were vecindades (24.3 percent of the total). The following table shows the century in which the vecindades were constructed:

<table>
<thead>
<tr>
<th>Century</th>
<th>Number of Vecindades</th>
<th>Percentage of Total Number of Vecindades</th>
<th>Percentage of All Buildings Visited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eighteenth</td>
<td>125</td>
<td>38.1%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Nineteenth</td>
<td>198</td>
<td>60.3%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Twentieth</td>
<td>5</td>
<td>1.5%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

It was demonstrated that Mexico City expanded toward the north-northeastern section of the city during the nineteenth century. Migrants who moved to the capital throughout the 1800s settled in the numerous vecindades being constructed in that area, for it was the gateway to the city and the job market. Today’s residents in the vecindades of Mexico City are native to the capital. These buildings no longer receive migrants moving to the city in search for employment, but serve as permanent homes for those living in the area. Since most of the vecindades built in the nineteenth century are still used as apartment complexes housing numerous families, the permanence of housing units in Mexico City may have been proved.