
The study of urban form in France

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Abstract. *This paper reviews urban morphological research in France, mainly since the early 1970s within schools of architecture. Changes in the nature of the studies undertaken are discussed in relation to a number of contextual developments and earlier types of study: first, two historiographical traditions, namely the history of town planning and the topographical histories of individual cities; secondly, studies carried out in the first half of the century; and thirdly, research since the 1960s in disciplines other than architecture.*

Key Words: urban morphology, architecture, town planning, France

The morphological history of cities, as it has been developed in the last 30 years, is nourished by two historiographical traditions: the history of urbanism and topographical history. In France, these two traditions gave rise in the first half of this century to two masterpieces: *L'histoire de l'urbanisme* by Pierre Lavedan and *Une vie de cité; Paris de sa naissance à nos jours* by Marcel Poète. A major difference between these two works is their positions within the traditions to which they belong: the first laid the foundation of a new tradition, while the second was the apogee of a two-century old tradition.

History of town planning

L'histoire de l'urbanisme was published in three volumes between 1926 and 1982.¹ It is based on a distinction, essential for the author, between developed towns and created towns,² a distinction between spontaneous

urban evolution and town planning. According to Lavedan, only the latter type of town is of any interest to the history of urbanism,³ which is thus concerned with the creation of new towns, the planned extension of existing ones, and the planned transformation of old urban fabrics. Lavedan's work is based on considerable scholarship. His three volumes identify hundreds of different urban designs, for which he provides basic information. It is obvious why so many of the authors interested in the general history of town planning mention Lavedan: his work is a mine of information.

The aim of the general history of urbanism, like that of the general history of art, is to create a kind of genealogy of ideas, in this case of planning ideas. In order to do so, facts considered as relevant, gathered in a number of countries, mainly in the western hemisphere, are linked in a way that gives practically no attention to the evolution of

each particular town. In this kind of history, Paris, for instance, is mentioned in the chapters dealing with seventeenth- and eighteenth-century squares (on account of its five *places royales*) and with urban transformations of the second half of the nineteenth century (the famous *Haussmannization*). All the rest is forgotten.

Topographical history

In contrast, topographical or morphological history focuses traditionally on the physical aspects of particular cities. It has, for the most part, been the field of local historians, each studying his own town or city with no reference to other cities. Many cities have been studied in this manner. In Paris, this tradition goes back at least to 1550, with the publication of a book by Gilles Corrozet.⁴ This summarizes the legends of the foundation of Paris, explains the creation of many public buildings, and gives the etymology of street names. This approach was pursued during the following two centuries by several authors,⁵ and culminated in the work of Jaillot.⁶

Towards the middle of the nineteenth century, the topographical history of Paris was enriched by the new field of archaeology, interest in which was stimulated in Paris by the large public works carried out under Haussmann in the 1850s and 1860s. At the same time, the maps and plans of Paris were recognized as a valuable source for the history of the city and studied as such.⁷ It was also at that time that Adolphe Berty searched in the archives and measured existing buildings in order to draw an exact map of medieval Paris.⁸

Usually, the general works of topographical history were spatially organized, according to either an imaginary visit to Paris,⁹ or the numerical order of administrative quarters or the alphabetical order of the names of streets. At the beginning of the nineteenth century, however, a new approach appeared: two books followed a chronological order.¹⁰ Marcel Poëte gave a particular twist to this way of

telling the history of Paris because, for him, the Paris of the past and of his day were not successive beings: 'they were one and the same being under constant evolution'. Poëte wanted to understand and describe the soul of the city and see how it related to the physiognomy of the city. His monumental work was published between 1924 and 1931.¹¹ It consists of three volumes of text and one *album*. The first volume stretches from the birth of Paris to the middle of the fifteenth century;¹² the second from the middle of the fifteenth century to the end of the sixteenth century. The third volume deals more specifically with the religious aspects of the city during the sixteenth and seventeenth centuries. Anyone deterred by the 1500 pages of these three thick volumes could turn directly to the magnificent *Album* (published in 1925) in which Poëte tells, in his brilliant presentation of 600 illustrations, the evolution of Paris from its birth to the 1920s.

Early developments

The paths of Lavedan and Poëte crossed in two different ways. First, the two men worked together in what would become the Institut de l'Urbanisme de Paris. Poëte contributed to the shaping of an entire generation of students who wrote urban case studies under his supervision as part of their curriculum,¹³ while Lavedan became the director of this institute in 1942. Secondly, Poëte published the course that he gave at the Institute on 'Evolution of cities' under the title *Introduction à l'urbanisme* (the first part is an excellent introduction to urban analysis),¹⁴ and in 1975 Lavedan published *L'histoire de l'urbanisme de Paris*,¹⁵ which is still the best introduction to the morphological history of Paris.

Despite the quality of their work, neither Poëte nor Lavedan created a school of thought. Their ideas found an audience: individuals were certainly influenced by their books and teaching,¹⁶ but no group of disciples ever came into existence. Apart from personal factors, it is probably in the main the ambiguous status of the Institut

d'Urbanisme, and of urbanism as a subject, that accounts for this shortcoming.

It was not just a matter of chance that the only 'school' created in this field evolved around Raoul Blanchard, who published in 1911 his *Grenoble, étude de géographie urbaine*. Later, his work on other cities (for example, Annecy, Lille and Nancy) and the work of his students (for example, on Vizille, Valence, Albertville and Clermont-Ferrand) amounted to what Gilles Montigny considers to be a homogeneous body of scholarship based on the same approach.¹⁷ For example, all of the case studies are divided into three parts: first, the site and its influence on the city; secondly, the development of the city; and thirdly, the main functions of the city. The influence of Blanchard crossed the border, to Spain for instance.¹⁸

In the architectural realm, the interest in urban form was expressed in different ways at the beginning of the century. In the Ecole des Beaux Arts, the subjects studied by the winners of the *Prix de Rome* gradually evolved from isolated monuments to groupings of several monuments, and then to entire towns. This shift of emphasis also took place in the legislation and practice of preservation, which spread from the monument itself to its surroundings and later to entire areas.¹⁹ At the same time another development occurred: architects began to be interested in ordinary buildings in rural areas. An important outcome of this new interest was the publication in 1941 of a book by Georges Doyon, the third edition of which, nearly 40 years later, would be highly successful.²⁰ Work on rural dwellings led to one venture in particular: during the Second World War, about 50 architects took part in a typological survey covering the whole of France. They produced 1759 case studies of rural dwellings, which were assembled in 1969, augmented, and published in some 20 volumes.²¹

The beginning of a new era

After the Second World War, morphological studies were related to the effort of

reconstruction and regional planning. Geographers and sociologists did groundwork for governmental policy making, but their exact role has not yet been fully described.²² In the architectural world, a new awareness was emerging during the 1960s. The modernists were confronted with their own ideas: for example, the city was seen as the ultimate object of architecture, and the importance of housing was stressed. At the same time, the conception of architecture as propagated at the Ecole des Beaux-Arts, a very conservative establishment, was ferociously criticized. After the closure of this institution in 1968, many young teachers thought that the universities would be the best place for architectural studies. They wanted to leave the world of art and join the world of scholarship. To their dismay, the government decided that architecture should leave the Ecole des Beaux-Arts but should not be part of the universities. At this time, 23 independent schools of architecture were created, nine of them in Paris. The young teachers succeeded, however, in introducing research into the new schools. In the ministry in charge of architecture (its name has changed several times in the last 30 years, being first the Ministry of Culture, then the Ministry of Public Works, later the Ministry of Housing, and most recently again the Ministry of Culture) a small division was created, currently called the Bureau de la Recherche Architecturale, whose task it is to encourage research in the schools of architecture.

In terms of urban research, two groups were quickly ahead of the field: one in what is called today the Ecole d'Architecture de Paris-Belleville, and the other in what is currently known as the Ecole d'Architecture de Versailles.

Parisian schools of architecture

In the Ecole d'Architecture de Paris-Belleville, Bernard Huet initiated studies on Le Creusot, Nancy, Paris, Saint-Denis, Toulouse, Orleans and a few cities in Sicily.²³ Among these, the study of Le Creusot is the

best known, and it was the only one to be properly published.²⁴ It considers the development of an industrial town in order to understand the particular way of producing a city in the nineteenth century. In general, Huet was interested in the emergence of the modern city. In Toulouse, his team studied the 'retooling' of the town by the introduction of new building types during the nineteenth century; in Orleans they focused their study on three generations of *percées* (break-through streets), and in Paris it was the HBM (public housing) belt of the 1920s and 1930s that was the subject of the research. All of these studies followed what, in France, is called the *typo-morphological* approach. This has major Italian antecedents, namely in the Aymonino-Rossi branch of Muratorian scholarship with its focus on the dialectical relationship between the physical evolution of a town and its building types, mainly housing.²⁵ There was, however, a major contrast to Italian studies: through contact with thinkers such as Henri Lefebvre and, in particular, Henri Raymond, much importance was attached to various sociological aspects of urban and architectural forms.²⁶

In the Ecole d'Architecture de Versailles, research was organized around Jean Castex and Philippe Panerai, who were joined by the anthropologist Jean-Charles Depaule. Their first study focused on five large urban extensions or transformations: the Haussmannization of Paris, the designs of Unwin for Letchworth and Hampstead, Berlage's plan for Amsterdam, May's *siedlungen* in Frankfurt, and Le Corbusier's *unités d'habitation*.²⁷ This study ranges from individual buildings to the entire city, and shows how the urban block progressively opens up until it disappears altogether. It is a very strong anti-modernist manifesto which parallels what Colin Rowe was doing at the same time: criticizing what he called the dialectical jump from background to figure.²⁸ The plea of Castex and Panerai in favour of the closed block was later taken up in their study of Versailles, which is probably one of the best *typo-morphological* studies in

France. This work divides the history of Versailles into several periods, each of which is examined through the development of urban form and housing types. The specific design of Versailles is underlined, namely that it is a town developed not as a whole but rather as a collection of urban fragments. The study shows also how during its evolution this 'garden city of Enlightenment' became progressively a 'normal city': the large plots occupied initially by detached aristocratic mansions were filled in by apartment blocks.

At the end of the 1970s and the beginning of the 1980s, another team appeared at what is now called the Ecole d'Architecture Paris-la-Défense. It was composed of three architects: Alain Borie, Pierre Micheloni and Pierre Pinon. At the beginning, these three were interested in problems of architectural composition, mainly in the distortion of perfect geometrical figures. But their examples included urban forms.²⁹ They then proceeded to a much more urban approach, focusing on the development of towns on meanders.³⁰ It is impressive both in the number of towns studied and in the systematic way that the work is carried out. This team was influenced not so much by Italian research as by methods developed by Gerard Hanning in the Institut d'Aménagement et d'Urbanisme de la Région Ile de France. They disaggregated the urban fabric into different components - topography, road system, lots and built form - and studied the topological, geometrical and dimensional relationships between these levels. Unlike the studies mentioned previously, this is a 'pure' morphological study.

In 1981, all these Parisian researchers decided to work together and joined Antoine Grumbach (from the Ecole d'Architecture Paris-la-Villette), who developed in his projects and teaching the notion of the city as a sedimentary phenomenon,³¹ and Bruno Fortier (from the Institut Français d'Architecture),³² who had already written two books on eighteenth-century town planning.³³ Their common project was to

create an atlas of the urban forms of Paris. This meant reconstituting the plan of Vasserot, who had prepared measured drawings of Paris during the years 1810-30 but had never assembled his different plans at the same scale. The idea was to show this depiction of 'Paris before Haussmann' at the universal exhibition which was intended to be held in Paris in 1989. However, like the exhibition, it failed to materialize.

Bruno Fortier continued the project by himself while changing its scope. He studied thoroughly some twenty small fragments of Paris (including a *passage*, a *percée*, an aristocratic *hôtel* and a bridge), starting with the urban evolution of the site before considering the major architectural features. His draughtsmen drew in minute detail the ground plan of each area to the scale of 1:500, the scale that the Italians usually use in their urban research. But Fortier, who was never fond of the typo-morphological approach, was not interested in the relationship between 'morphology' and 'typology'. Rather, he wanted to understand how a town constitutes a formal substratum - seemingly a kind of *epistémé à la Foucault* - for architectural projects. The work seemed, therefore, to start from a very strong position: the town as a metalanguage of architecture. Unfortunately, Fortier is a very laconic writer, and never really developed this idea. This is why, at first glance, one can think that his book is merely concerned with the geometrical beauties of a plan or architectural detail. When this work was shown in 1989 at the Institut Français d'Architecture, it was an important moment in urban research by architects. Unfortunately the exhibition - by its form and content - gave the impression that Fortier shifted slowly from urban texture towards architectural objects. His book, which was published in conjunction with the exhibition, remains one of the most challenging pieces of thought on the relationship between urban form and architecture.³⁴

Provincial schools of architecture

During the 1980s, groups of urban researchers emerged in several architectural schools. Some of them were involved in establishing atlases of urban forms of their cities. This is mainly the case with I.N.A.M.A. (*Investigation sur l'histoire et l'actualité des mutations architecturales*) at the Ecole d'Architecture de Marseille, headed by Jean-Lucien Bonillo who studied several dwelling types (including the three-windowed Marseille house and the Haussmannien apartment building) before turning to the port and its relationship to the town as a whole.³⁵ In the Ecole d'Architecture de Grenoble, the team around Bernard Bonhomme and Xavier Malverti first gathered together a collection of plans of Grenoble, and then proceeded to study different urban fragments of the town.³⁶ At the Ecole d'Architecture de Lille, Alain Demangeon studied in a very thorough way the grand boulevard Lille-Roubaix-Tourcoing, which is a wide avenue resembling in some ways the Soria's linear city in Madrid. In the Ecole d'Architecture de Saint-Etienne, a systematic study was made of the morphological evolution of the city from the nineteenth century to the present day.³⁷ At the Ecole d'Architecture de Nancy, the 'atlas' served as a teaching tool for André Vaxelaire and Vincent Bradel who, with their students, studied different neighbourhoods of the historical city. In the Ecole d'Architecture de Nantes, the students of Michaël Darin, Michel Denès, Thierry Roze, Jacques Scavennec and Jean-Jacques Treuttel measured buildings and drew a ground plan (at the scale of 1:500) of a strip of land, 200m wide, crossing the town from east to west. The idea was to create an urban 'section', 10km long, showing the relationship between the city centre, the old *faubourgs*, the new suburbs and the countryside. The teams met regularly over 5 or 6 years, forming a research network supported by a grant from the Bureau de la Recherche Architecturale.

At the same time, in the Ecole d'Architecture de Nantes, Michaël Darin studied a number of different urban forms in several cities: *places, percées, boulevards* and ordinary streets in Montpellier, Nantes, Paris, Rouen and Toulouse. Through the different case studies the idea was to examine how the city is produced by 'a combination of conflicting actions by those up the social ladder (such as prefects, mayors, architects and engineers) and those on its lower rungs (modest house owners, for instance).'³⁸

Publication ventures

Outside the schools of architecture, Maurice Culot, who was very active in Brussels before moving to Paris, created a publishing venture in the Institut Français d'Architecture which produced a series of urban case studies, including those of Arcachon, Vittel, Toulouse and Marseille.³⁹ In the same institution, Lise Grenier edited a book on spas,⁴⁰ a subject not far from the resort towns studied by Dominique Rouillard, who teaches the history of architecture at the Ecole d'Architecture Paris -Tolbiac.⁴¹

Another institution that publishes work on urban form, principally architecture and town planning, is the Pavillon de l'Arsenal, an exhibition centre in the municipality of Paris. Some of its exhibitions result from research work. They are accompanied by remarkable catalogues, such as those of *Paris - Haussmann* and *Faubourgs de Paris*.⁴²

Suburban studies

The ideological context of architectural research on urban form in France was predisposed towards an emphasis on the historical parts of towns. However, researchers were also mindful of the need to study other kinds of urban fabric. Already, suburbs had appeared here and there in the different atlases that have been mentioned. But there are few researchers who have devoted their work specifically to this kind of phenomenon. One of them is Marcelle

Demorgon, a geographer in the Ecole d'Architecture de Versailles, who studied a number of highways in the Parisian region.⁴³ For her, these massive roads are the structural elements of peripheral areas. Now retired, her work is continued in the same school by Richard Sabatier.⁴⁴ In the Ecole d'Architecture Paris-Belleville, Nicole Eleb-Harlé, instead of focusing on one urban element, studied the general morphological evolution of several boroughs in the Paris region, including Pantin and Bondy.⁴⁵ Another study of a suburb is the book by Pierre Henon and Alain Thiébault on the history of Levallois-Perret, a borough just outside Paris, on its western side.⁴⁶ Working at a more detailed level, Benoît Carrié, Michaël Darin, Michel Denès and Thierry Roze tried, through a study of a very ordinary and heterogeneous part of Issy-les-Moulineaux (a borough adjacent to the south western part of Paris), to understand how this ancient village on the outskirts of Paris took its present-day shape. They analysed in a very precise way the evolution of streets, lots and buildings.⁴⁷

Studies abroad

French urban research is not limited to France alone. Some researchers preferred, and still prefer, working on other urban cultures. Philippe Gresset, for instance, studies Great Britain, mainly its Picturesque tradition.⁴⁸ Many others, however, are attracted by countries outside Europe, particularly in the Middle East (where Cairo, Damascus and Istanbul are among the cities that have been studied)⁴⁹ and North Africa (where cities in Algeria and Tunisia, for example, have been studied).⁵⁰ The doctoral thesis of Jacques Gaucher (a lecturer in the Ecole d'Architecture de Nantes) on three Tamil towns in southern India is particularly impressive, being based on many measured drawings ranging from those of individual houses (and their interiors) to the town as whole.⁵¹ Many of those attracted to such urban cultures have been looking for other ways to make cities: ways in which the

informal processes outweigh the formal ones. It was, for most of them, a way to criticize the evolution of French cities and modern urbanism.

Modern urban fabric

Most recently, a change has affected the *milieu* in which research is being undertaken. With the passing of time, modern urbanism has itself become part of history. Two pioneering works marking this change followed different approaches. Anatole Kopp saw, in the reconstruction that took place in the decades following the Second World War, a missed opportunity for the modern movement;⁵² while Bruno Vayssi re suggested, in a provocative way, that the urban fabric produced at that time is often of very good quality, even if he did not approve of those who produced it.⁵³

However, a new attitude is now emerging: much less polemical studies have started to be published. The thesis of Daniel Voldman (a non-architectural historian, but whose work deals with some morphological aspects) was published last year. It explains the mechanisms of urban production during the period of reconstruction after the Second World War.⁵⁴ R mi Baudoui (now head of the Bureau de la Recherche Architecturale) studied the life of Raoul Dautry, the Minister of Reconstruction, who was a very influential person on urban matters.⁵⁵ A symposium on the Reconstruction was held in the city of Lorient in 1994, and from it came two volumes containing many interesting local case studies.⁵⁶

As far as the 1960s and 1970s are concerned, in the Ecole d'Architecture de Saint-Etienne, J.N. Blanc, M. Bonilla and F. Tomas have recently studied the ideological context of the architecture and urbanism in the period, surveyed the main projects, and examined a few large housing projects in Saint-Etienne.⁵⁷ J.H. Fabre, B. Fayolle-Lussac, P. Girard and P. Weidknet, in the Ecole d'Architecture de Toulouse and Ecole d'Architecture de Bordeaux, also studied different housing estates of the same period.⁵⁸

Their work, as well as that done in Saint-Etienne, shifts emphasis from central government policy to the local context.

The quality of the urban fabrics under review is of the utmost importance. First, preservation is an issue in some of these housing estates, where architectural quality is more or less recognized. Secondly, the quality of more modest projects is also an issue. This is why Darin studied many pieces of modern green urban fabrics in an attempt to define what makes up their supposed quality.⁵⁹ This research was done with a grant from Plan Construction et Architecture, a governmental research agency that initiated a programme on the architecture of modern public space that led to a dozen studies of different aspects.⁶⁰

Changing patterns

In the 1970s, architectural research on urban form in France had a very strong ideological message. It was very much anti-modernist and it was used to define, or at least justify, new approaches to urban design. For some of the architects involved, research was only a short period in their professional life. Panerai and Huet, for instance, stopped doing research in order to concentrate on practice. Others, however, opted for an academic life and became 'pure' researchers (as pure as their teaching commitments would allow). Gradually, their work became less ideological, although this kind of research always tends to be a commentary on practice.

This development is a part of a general trend in the architectural schools: they are becoming more academic. Doctoral programmes are now being undertaken jointly with universities. More and more students are taking up these studies and producing impressive numbers of D.E.A. theses (documents of some 80 pages describing, after one year of studies, projects for doctoral theses).⁶¹ Some doctoral theses have already been submitted, be it by teachers, or by students hoping that this will open the way to academic careers.⁶²