THE CITY AS A COLLECTIVE WORK OF ART: PROJECTS FROM THE ÉCOLE DES BEAUX ARTS FOR “EXCHANGE” CITIES

Section: Cultural heritage and planning models

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Our paper sets out to compare the plan by Léon Jaussely for Barcelona (1904-1907), the plan by Tony Garnier for the Cité Industrielle applied to Lyon (1904-1933), and the plans by Ernest Hébrard for Thessaloniki (1918) and by René Danger for Izmir (1924)¹. These four projects lead us to the heart of the debate then arising in France on urbanism: while the first two were dated prior to the Town Planning Act finally approved in 1919 (known as the Cornudet law), the others came into being roughly around that time. Léon Jaussely (1875-1932), Tony Garnier (1869-1948), Ernest Hébrard (1875-1933) and René Danger (1872-1954) represent a generation: similar in age, they had the same training - begun at the École des Beaux Arts and completed at the Académie de France in Rome² - and were members of the Musée Social and the Société Française des Urbanistes³.

Barcelona and Lyon in the west, Thessaloniki and Izmir in the east, characterize the Mediterranean as one of the main theatres of operation of this generation. Historically distinguished by their busy trading relations over long distance land and sea routes, Barcelona, Lyon, Thessaloniki and Izmir were all destined to undergo far-reaching, in some cases dramatic, changes in many aspects of their social, manufacturing, institutional and living conditions.

Reference to the four plans is repeatedly made in contemporary writings. Robert de Souza (1864-1946) considered Jaussely’s plan for Barcelona to be one of the proposed urban transformations from which we can draw the most useful lessons⁴. In his judgement of the plan for the reconstruction of Thessaloniki, the first great planning operation of the 20th century⁵, Pierre Lavedan (1885-1982) considered it as a harder task even than the founding of a city; this because it was a question of recasting, as in a melting pot, totally dissimilar elements and creating among them some form of unity⁶.
René Danger quotes as examples his plan for rebuilding Izmir and those for Thessaloniki and Barcelona at the end of this Cours d’urbanisme. Gaston Bardet (1907-1989) heralds the plans by Garnier, Jaussely and Hébrard as being the most representative products of the French school of formal urbanism, the only one concerned with “composition on the grand scale” but, still according to him, neglectful of the question of social organization on which the life of a settlement depends.

More recent writings require us to reconsider these plans. In an essay about the first French planners, Jean-Louis Cohen rejects the somewhat hurried judgements passed on the École des Beaux Arts, and suggests that special consideration be given to each case where its architects were involved and carried out their projects. In her study on French urbanism in the colonies, Gwendolyn Wright emphasised the drive towards modernization shown by the group then being formed at Villa Medici between 1900 and 1909. Tony Garnier in the Cité Industrielle (1901-1904), Léon Jaussely in the plan for Barcelona (1904-1907), Ernest Hébrard in the World Center of Communications (1910-1912) focused on composition on the urban level. These were no mere formal exercises, they were attempts to explore the natural, infrastructural and environmental conditions that could favour the particular function assigned to a city.

Garnier, Jaussely, Hébrard and Danger seemed to share the idea of a “civilizing” role for a city, where architecture could help shape a comprehensive order in the built environment. Accordingly, it could encourage a fresh attitude towards all aspects of social and cultural intercourse, more appropriate to a development of the economy oriented by international capitalism. First and foremost, the modern city they envisaged required easy access, together with a functional spatial organization (areas for manufacturing, for residential districts of different types, for centres of collective social life and activity).

This kind of strategy has proved its worth thanks to the experimental attitude of the architects who fostered it. They envisaged an opportunity to re-interpret the roles Barcelona, Lyon, Thessaloniki and Izmir could fulfil, and accordingly, they worked to redesign their physical, functional and formal layouts. In fact, they devised an “act of foundation” providing the city of the future with some link to existing features of its long-term history. The nature of the problem is brought up, for example, by Lavedan,
Danger and Bardet, when they respectively discuss in their writings of the “urban function”, of the “raison d’être” and of the “individual character” of a city\textsuperscript{11}.

Garnier, Jaussely, Hébrard and Danger suggest strategic investments in technical and functional installations. For each city they proposed extensions to the port, made more accessible by land (improvements to rail connections) and by sea (wharfs, docks, warehouses, industry) giving prevalence to the technical over the historical component (stores, legations, bazaars). The Civic Centre was redesigned to include buildings for new institutions (town hall, law courts, post office etc). Their proposals comprised a new trade fair and/or university to revitalize the city’s economic and cultural exchanges. To fit the new settlement into the old city they drew on a thorough knowledge of the city’s historical background.
Today we have special interest in these plans for these because of their almost forgotten conceptual approach.

**Léon Jaussely’s plan for Barcelona, and Tony Garnier’s for Lyon**

Though never carried out, Jaussely’s plan exerted considerable influence on later decisions for the future of Barcelona, particularly for his ability to view the city as a complex organism.

It was during a competition for the “Plan de enlaces de la zona de Ensanche de Barcelona con los pueblos agregados” (1903) that Jaussely faced the difficult task of altering the design laid down in Cerdá’s plan of 1859. Though critical of the uniform “chessboard” style of blocks, he approved the structural lines of this extraordinary precursor: the north-east / south-west diagonal from the Vallès to the port area; the artery parallel to the sea connecting the eastern and western coasts. To drain the flow of short, medium and long-distance traffic, Jaussely superimposed three ring roads onto the system of diagonals that, crossing each other, gave rise to two parabolas one towards the Mediterranean, the other towards the hilly interior. The innermost ring was to link the new industrial area behind Montjuic with those of Sant Andreu and Sant Marti, defining a route that brought the railway stations and services within reach of production and placed a limit on residential expansion. The middle ring road connected up districts brought within the city boundaries in 1897\textsuperscript{12} with the large Hospital de la Santa Creu i de Sant Pau\textsuperscript{13}. The outer ring road ran along the slopes of the hills and served the first garden cities and a series of hospital buildings, some existing, others part of the project\textsuperscript{14}. 

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Jaussely redesigned Cerdà’s plan, introducing a different series of priorities in the organization of urban space and assigning specialist roles to certain parts of the city. His zoning scheme established three main functions: housing, business and trade, industry (to this latter he attributed decisive importance). Differing in their structure, the zones were linked by a system of centralized services (schools, churches, markets, etc. located to preserve the character of the earlier settlement).

Where the diagonals crossed Jaussely emphasised the central feature of the Plaza de les Glories Catalanes giving it new administrative and cultural functions. He also recognised the important role of the road along the sea from the ring road alongside the railway, and by the apparently contradictory presence of both industrial buildings and recreational establishments. The civic and monumental character of public spaces clearly emerges in the perspective drawings accompanying the final edition of the project.

Jaussely’s idea for Barcelona, industrial capital of the Principate, found its direct antecedent in Cerdà’s plan. By aggregating and coordinating the already existing local municipalities, redistributing urban functions and designing a new city centre, Jaussely envisaged a Greater Barcelona to cover the whole plain “removing for ever from the layout that ridiculous evocation of America extending ad infinitum like a geometrical repetition”.

This plan for an “urban recomposition” of Barcelona most certainly recalls former projects of importance: the Cité Industrielle designed for a population of 35,000 by Tony Garnier, the first scholarship holder of the Académie de France to reject attempts to redesign ancient monuments and devote all his attention to devising a plan for a new city. Between the first version of his plan (1901-1904) and its ultimate edition (1917) Garnier had opportunities, in the context of Lyon, for experimenting with his idea of a city, in collaboration with the local administration led by the mayor Edouard Herriot. Garnier’s design for the “Grands Travaux de la ville de Lyon” (1919) is closely related to the Plan for extending and embellishing the city undertaken by the local administration and begun in 1912. A feature of the plan is a series of ring roads, three great concentric boulevards linked, in the north, to the Fair ground along the banks of the Rhone and, in the south, to the port at the confluence between the Saône and the
Rhone. The series of rings forms the basic feature of urban expansion, keeping it under control but at the same time favouring communication between the city centre and the outlying industrial municipalities. The large installations of the industrial area lie along the rings: markets and slaughter house, hospital, États-Unis housing project. Situated in the Croix-Rousse area, famous for its textile products, was the School of Weaving; close to the historical centre it was planned to set up the Bourse du Travail\textsuperscript{19}, a new centre serving a built-up area of nearly a million people.

The elements of urban composition in the plan for the Cité Industrielle are used again by Garnier in all his Lyon works: the network of roads\textsuperscript{20}, the pavilion-type layout, the sequence of terraces and courtyards and the large glass windows, the use of new materials, the sober aspect recalling the classical French tradition.

Gernier’s “Grands Travaux”, made possible by close collaboration with the mayor Edouard Herriot, constitute the declaration of a political project which, in the face of growing manufacturing activity throughout the whole region, invested in housing for the workers, in improvement of health conditions, in the construction of public utility buildings, supporting large publicly sponsored projects and the corporative organization of work.

Though so different, both these plans adopt an open network of roadways constituting the structure of a type of zoning suited to creation of an orderly industrial expansion, juxtaposing the compact city centre to the new suburban settlements, individual in their layouts and architecture, and in which collective public services acquired a mobilising role. In his “Memoriam” of 1907 Jaussely wrote:  \textit{In a great maritime city which, like Barcelona, is fast developing its industrial and commercial structures, urbanization does not merely mean designing roads, squares and parks, but also implies the exploitation of active forces and energy to improve and increase production, the source of its wealth. The city must so be organized as to achieve the highest level of prosperity and to this end must be devised the plan (...)} To urbanization therefore must be assigned the importance it deserves since, as Jean Lahor says: many moral questions are purely questions of aesthetics.
**Ernest Hébrard’s plan for Thessaloniki, René Danger’s plan for Smyrna**

The commitment shown by this generation of architects towards the destinies of cities seems confirmed by the ability they showed in approaching the problem of reconstruction in all its complexity.

In his article on the plan for Thessaloniki, Pierre Lavedan emphasised how architecture can be necessary to face the most difficult of crises: *Over the last half century, the problem of rebuilding cities has been neglected, seen as a purely utilitarian or scientific question. Only engineers and surveyors have taken any interest in it. They have amused themselves by cutting up the urban mass into geometrical figures, and the monotonous symmetries of chessboard plans were seen as the triumph of logic. This mistake has now been recognised. Art has decided to take on a problem until now abandoned to science (...). The war, causing so much cruel devastation has posed, on a scale hitherto unknown, the problem of the city, as a work of architecture.*

The case of Thessaloniki, destroyed by fire in 1917, only five years after its annexation by Greece, may be associated to that of Izmir taken by Atatürk at the end of Greco-Turkish war (1919-1922) and also destroyed by fire. One after another the Jerusalem of the Balkans and the Giaur Izmir became a memory of the past. Physical destruction of the Jewish, Greek, Moslem quarters in Thessaloniki and of the Armenian, Greek and European quarters in Izmir, was followed by a compulsory process of ethnic relocation. The two million Christians and Moslems refugees who crossed the Aegean Sea crowded Thessaloniki and its territory and left Izmir's economy in a dramatic decline.

Reconstruction of these cities in the Greece of Eleftherios Venizelos and in Atatürk’s Turkey is always presented as a question of national importance. To realize that inventing Thessaloniki and Izmir anew was not a purely utilitarian question one need to think about what it meant to stabilize and organize a population in constant evolution, no longer supported by community structures. While reconstruction work was covering practically the whole of Thessaloniki, a serious political debate was going on in Greece over changes in the language; supremacy of the classical culture was being challenged partly to promote formation of a new class of technical experts. Engineers, architects, agronomists were all needed to carry out agrarian and refugee settlement policies in which Thessaloniki was destined to be the epicenter. Vis-à-vis this geopolitical scenario, reconstruction began in Izmir at a time when republican ideology
was taking shape. Urban planning was being seen as a strategic tool for changing over from a traditional to a modern society. With so many former points of reference overthrown (alphabet, units of measurement, calendar), the discovery of new spatial frameworks, able to promote new kind of social relations and involve the population in an extended process of cultural reconstruction, became a matter of new importance.

In conditions of great instability such as these, Hébrard and Danger were invited to create a modern city, stressing the rupture with the recent past. Both their plans were drawn up to erase the old quarters and replace them with an orderly urban fabric extending outward to the suburban settlements. They made a clear distinction between blocks to be parcelled and public buildings, no longer encouraging the mix of functions typical of previous commercial and community structures. Location given to the new railway station, town hall, post offices, markets, schools, law courts and university, established the cardinal points of urban composition, giving new roles to a number of existing monumental buildings.

“Utilitarian reasons” provided a structure for architectural design. As in Jaussely’s zoning scheme for Barcelona, industrial, residential and civic activities were to develop separately. The industrial district was wedged in between the new port and the new railway station which marked with its freight yards the boundary of the working class area; low-density residential districts followed the topographical lines in connection with existing nuclei; a ring road contained urban expansion allowing a view onto the natural amphitheatre around the port. The modern centre, something of an agora, balanced the upper city crowned by the citadel. The university, occupying a dominating position in a large park, established a new pole of attraction. In both plans its presence can be understood as a statement of cultural reconstruction, in that it eradicated a previous collective identity (the Jewish and Moslem cemeteries at Thessaloniki, the Frank and the Greek quarters at Izmir).

This idealized projection towards the future, denying historical continuity, is based on an attempt to adhere as closely as possible to the natural order of the city. In the case of Thessaloniki, Hébrard sought to express it with the aid of archaeology. He revived the age-old relations between the sea front and the Via Egnatia route in his design of the Civic Axis; his diagonal streets make visible the proportional relation between the
Hellenistic road network and the overall size of the walled city, while his Civic Square redefines the dimension of the Forum.

At Izmir Danger followed his idea that topography (to which infrastructure should adapt in order to foster men’s perpetual evolution) may reveal the raison d’être of a city\textsuperscript{30}. He gave overriding importance to the topographical survey as a basis for designing the port, road and railways. The old railway lines marked the boundary with the industrial port, the new centre and the old city, outlining the area to be rebuilt. He developed the inner urban network in relation to the historical long-distance access routes into the city. The topographical layout, reactivated by new infrastructures and re-interpreted architecturally, proved once more decisive in the city’s new configuration.

For a full appreciation of the modernity of these plans, importance must be given to the events that accompanied their execution (which parts were realized, and when). For example it is important to emphasise that, while the port and rail works were put into execution after the second world war (or even remained at the design stage, as happened with the new railway junction at Smyrna), in both cases it was the proposal for a university that gave life to a series of important projects for the encouragement and renewal of trade and cultural activity.

As Hébrard imagined it, the University park in Thessaloniki was to appear as a green wedge between the Byzantine walls and the eastern suburbs reversing the relationship between built-up areas and open spaces in the historical city. His university buildings, sports facilities and theatres were all separate structures following a geometrical layout, marking the perimeter of a wide tree-planted area in the centre. His idea of a park with focal points providing a variety of inner and outer public spaces has been re-interpreted again and again. The first buildings of the Aristotle University and its subsequent additions, the pavilions of the International Fair and eventually the main museums not only form an “inventory of types”, they also show the lines of development of modern Greek architecture\textsuperscript{31}.

At Izmir, Danger designed the university park along a line joining the Square of the Caravans near the station to the Town Hall square on the seaside road. His project was altered by the city council in its size, functions and architectural features along the lines of the Gorki Park in Moscow\textsuperscript{32}. The idea was to combine a large recreation area and a
“People’s University”, creating *a constellation of public spaces through which republican ambitions of progress and modernization could be inscribed onto the urbanscape*\textsuperscript{33}. Such new programme included a permanent seat for the Fair, “the international bazaar of the future”\textsuperscript{34} which was to give a boost to the economy.

The great park, in stark contrast to the city consisting of blocks and aligned roads, is oval in shape and unifies a number of temporary and permanent buildings for basic services, sport, shows and exhibitions. Their arrangement inside the park follows two principal layouts: some of them standing along right-angled connecting axes (the main Fair pavilions and the museums), while others dot the green circuit around the perimeter (gardens and recreational facilities). By looking at the Turkish architectural journal «Architekt» we understand how this place became a real workshop - to which Bruno Taut amongst others contributed - experimenting in modern architecture while helping imagining the nation.

**Conclusion**

The amount of work being undertaken in many European cities (Barcelona, Berlin, Paris, and others) is an expression of the far-reaching changes in progress, showing how the city of today is seeking a future role, not only within its own area but also considering the effects it can produce in a much wider context. In dealing with the task of transforming an “exchange” city to into a productive city, the architects concerned with the plans under review have shown themselves able to identify new principles of urban and architectural construction, basing their studies on the resources available to be re-invested in a project for the “future city”, starting from the “individual character” and from the *raison d’être* of a city, attributing in each case an “urban function” (production, port, fair, university, main community facilities, etc.) a mobilising role in building suburban areas and in re-planning the city centre. The close relationship between planning and architecture, and the concern to maintain local roots, has led to much interesting innovation by avoiding any unconditional imposition of certain models. In realizing projects of recent date – often the winners of international competitions – efforts have been directed most of all to the completion and transformation of areas within the city (such as those formerly occupied by industrial plant), it often seems to happen that the relationship between a plan and the character of a city is not the main consideration, but rather that a new “internationalist language” is being sought. The nature of planning, calling on its particular culture to face the urban
dimension of architecture, might well induce a revival of interest in the work done by French architects and planners in the early decades of the 20th century.

1 Drawn up together with his brother Raymond and with advice from Henri Prost.
2 Garnier, Jaussely and Hébrard.
3 Jaussely, Hébrard and Danger.
11 Lavedan introduces the idea of urban function when alluding to a city’s prevailing role: military, political (capital cities), religious (sanctuaries), cultural (university cities), economic (cf. Qu’est-ce que l’Urbanisme?, Chap. III, La fonction urbaine); Gaston Bardet stated that the planner’s task is to express the intrinsic character of the city, linked to its site, geographical features and to its past history (cf. “Vingt ans d’urbanisme appliqué” L’Architecture d’Aujourd’hui (1939)); René Danger discusses la raison d’être of the city.
12 Sants,Les Corts, Gracia, Sant Andrei de Palomar, Sant Marti de Provençals, Sant Gervasi.
13 Then under construction to a design by Lluis Domenech i Montaner.
14 The road network was redesigned together with the railway system.
15 Cerdà’s plan formed part of a progressive policy that had been growing up in Catalonia since the start of the century, promoting economic protectionism and federal independence. A plan for the manufacturing and equilibrant city that in subsequent decades came to be executed in an increasingly contradictory manner. The most severe criticism came from regionalist opinion which, following the 1898 crisis over the loss of Cuba, the last Spanish colony, aimed at the modernization of Catalonia. The leading critic was Josep Puig i Cadafalch, elected councillor for the city of Barcelona in 1901.
16 Thus spoke Puig i Cadafalch in an article written in 1905 in favour of a Universal Exhibition.
17 A founder-member of the Société Française des Architectes-Urbanistes (1911).
18 Begun in 1905 with the plans for a cattle market and slaughter house at La Mouche on which work was started in 1909.
19 The only project never executed.
20 Influenced by the configuration of the city itself: from the system of fixed routes – islands, riverside roads, bridges, etc. to the “hôtel” typology with its imposingly arched galleries one above another, to the roofed passageways, known as the Croix-Rousse “traboules”.
22 Thessaloniki was called the Jerusalem of the Balkans for having taken in the largest Sephardite-Jewish community in Europe. Giaur Izmir means Izmir the infidel, governed by Christians and Europeans in great independence from the Ottoman central government.
23 Under the terms of the Treaty of Lausanne, compulsory exchanges were required between Turkish nationals of the Greek Orthodox religion living in Turkey and Greek nationals of Muslim religion living in Greece.
25 Only the city centre had been destroyed by fire but the suburban areas had been invested by refugee settlements.
A debate was going on between those who proposed using the popular “demotic” language (which contained many Turkish and Italian words) and those who supported the more “purified” official language.

That had given vigour to the Great Idea, the dream of a Greater Greece “over three continents and five seas”, extended to cover the whole of Turkish territory for generations inhabited by Greek ethnic groups.

At Thessaloniki as at Izmir the Turkish quarters had always been in the upper cities.

When discovering the architectural links between the Arch of Galerio and the Rotonda, Hébrard supposedly understood the extension of the imperial from the sea front to the via Egnatia.


The main projects comprise: the proposals by N. Mitzäkis for the first block of the university (1936-38), the competition for the International Fair ground (1937), buildings by N. Mitzäkis and P.Karantinös for the Faculty of Agriculture and Forestry (1939-55) and by P. Karantinös for the Faculty of Physics, Mathematics and the astronomical observatory (1953-58), the competition for the Polytechnic School (1957), the competition for the Faculty of Law, Theology, for the Library and administration (1960); lastly, construction of the Archaeological (1960) and Byzantine (1977) museums.

