### Robert Saliba

### 1840-1940: Genesis of Modern Architecture in Beirut

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The rise of Beirut as a major commercial port goes back to the eighteenth century coastal revival initiated by steamship navigation that triggered a shift in the economic activity from inland caravan cities like Damascus to coastal cities. The establishment of Beirut as the capital of vilayet Sidon in 1832 under the Egyptian occupation, attracted consular representation and foreign traders. However, it is between 1840 and 1864 that Beirut underwent the most important changes that constituted the turning-point in its modern history. On the one hand, the establishment of the French-controlled Ottoman Bank in 1850, the low import duties, the building of the wharf, and the construction of the Beirut-Damascus crossmountain road opened Beirut to the Syrian/Arabian interior and made it the principal entrepôt of the region. On the other hand, the massive migration of Maronites from the mixed Druze districts in Mount Lebanon and the Greek Orthodox influx from Damascus and Aleppo, following the 1845 and 1860 sectarian upheavals, resulted in the increase of Beirut's population between 1840 and 1880 from 10,000 to 80,000 in less than three decades.

### The First Phase of Modernization

Accordingly, Beirut outgrew its walls and expanded over its immediate surroundings leading to the creation of the first garden suburbs in the periphery of the old city. By 1876 city size increased 13 times (fig. 1,2). The immediate periphery got urbanized and a second suburban belt emerged with exclusive residential quarters. This urban

expansion was mainly the result of the migration of the urban bourgeoisie outside the walled city and the settling of rural migrants on the outskirts. The new residential townscape consisted of three housing types: upper-class mansions (Fig. 3, foreground), flat-roofed farmhouses with surrounding gardens, referred to as tarz al chami or Damascene type (Fig. 3, middle ground), and cubic stone structures with red tile roofs showing the strong emergence of a new building type: the bourgeois central hall house with its triple arch and corbelled marble balcony (Fig.3, background). In his "Geographie de la Syrie Centrale", Richard Thoumin calls this house la maison moderne Libanaise or the modern Lebanese house (fig. 4), also la maison citadine or the town house (Thoumin 1936, 294-295). In a map based on his 1920s survey, he shows the spread of this new type from Beirut to the mountain and other coastal settlements (fig. 5). Thoumin comments:

"Le mouvement a donc pris naissance à Beyrouth, puis il s'est étendu a l'arrière-pays. Il s'explique par une double influence: le climat et l'Occidentalisation. Si l'on prenait soin, a l'automne, de damer et de rouler la terrasse, celle-ci ne tardait pas a se transformer en écumoire...Le citadin voulut une demeure plus confortable où il fut a l'abri des cascades tombant du plafond, même s'il oubliait de rouler la couverture.

Des Libanais étaient allés en France, y avaient vu les toits de tuiles et leurs avantages. Il y a quelque cinquante ans, renoncer à la terrasse signifiait à la fois une certaine fortune et le desir de copier l'Occident. Dans ces conditions, le point

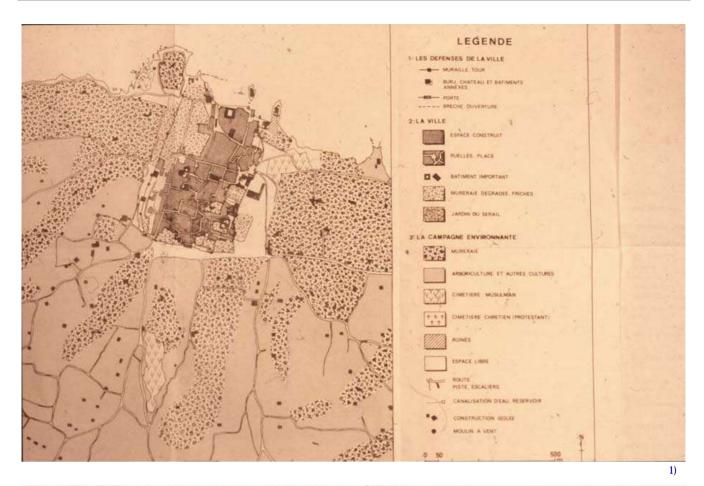
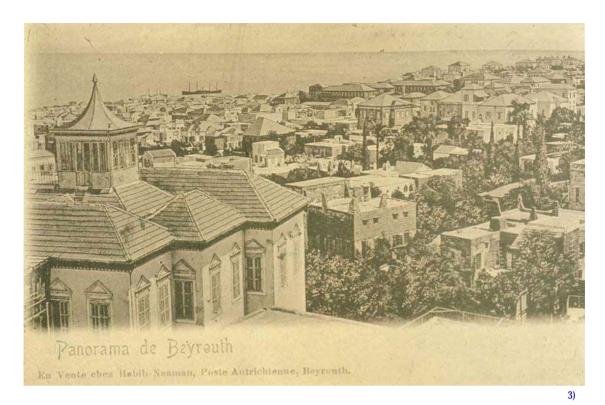
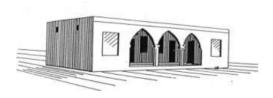


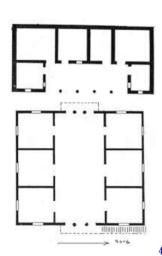


Fig.1 Beirut 1841. Source:Davie, Michael

Fig.2 Beirut 1876. Source: Löytved







Tripoli

Edhen

CKOrteba

Baalbek

Sahle

Chaurs Maslaka

Ans Safar S

Kabbella

Kala moun akuteris

Djeb Bjenin

Bachaya

Darrias

Lagenda

de départ de cette mode ne pouvait être que Beyrouth."

Hors de Beyrouth, avoir une maison à toit rouge fut un signe de supériorité. Vers 1905, des émigrés qui s'en étaient allé faire fortune aux Etats-Unis commencèrent à revenir au Liban. Dès leur arrivée leur premier soin fut de construire selon la mode nouvelle...

"Therefore, this movement started from Beirut, than extended to the hinterland. It may be explained by a double influence: climate and Occidentalisation. If the terrace [the flat earth roof] was not packed and rolled during autumn, it was transformed soon into a skimmer... The town dweller wanted a more comfortable residence where he was protected from

 $Fig. 3\ Beirut\ residential\ suburbs\ 1885.\ Source:\ Dumas\ in$   $Debbas,\ 1986,\ P.150$ 

Fig.4 Traditional and modem Lebanese house according to Thoumin. Source: Thoumin 1936, p. 293, 294 Above, plan and elevation of the traditional liwan house in the mountain region; below, plan of the modem central hall house in Beirut.

Fig.5 Spread of the red tile roof house (based on a 1920s survey). Source: Thoumin 1936

the cascades falling from the roof, even if he forgot to roll his terrace.

Some Lebanese traveled to France, and saw the tiles and their advantages. Fifty years ago, giving away the terrace roof expressed both wealth and a desire to copy the Occident...

Outside Beirut, having a house with red tile roof was a sign of superiority. Around 1905, migrants who went to the United States to get rich, started coming back. Upon their arrival, their first concern was to build according to the new fashion." Can the central hall house qualify as la maison moderne Libanaise, knowing that Lebanon did not exist yet as a political entity during the second half of the nineteenth century when this type emerged? On the other hand, was the central hall house an original Beiruti creation or an imported model readapted to local conditions? Finally, did it possess the enduring and intrinsic qualities of a vernacular model that emerges from a collective vision, and a long-term experience of local tradesmen with local materials?

The central hall house that we celebrate today as our national icon, the source of our architectural identity, and our traditional building type par excellence, is a hybrid suburban structure resulting from the integration of wrought iron I-beams and roof tiles from France, mechanically sawn timber from Romania, cast iron balustrades and hardware from England, and marble tiles from Italy. Other than the bearing walls built from local sandstone, the majority of materials used are machineage construction materials imported from Europe with the expansion of colonial trade during the second half the 19th century. The triple arch, the most distinguishing feature of the new type, is considered to be a Venetian import. No conclusive evidence is yet advanced on the origin of the central hall itself as an organizational spatial and planning device (Davie and Nordiguian, 1987). Finally, the extroverted nature of the new suburban



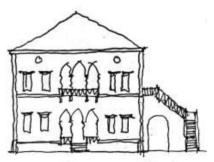








6 a)



High and mainstream vernacular: family apartment house (bayt or hara)

6 b)



Basic vernacular: house and farmhouse (bayt or dar)

or dar) 6 c)

Fig.6 (1,2,3,4-a,b,c) Central hall house: suburba-facade typology. Source: Saliba 1998, p. 44, 45



type as a free standing structure exhibiting itself to the street with its ornamented façade is interpreted as reflecting the desire of an emerging merchant class, conducting trade with Europe, and emulating western lifestyles and adopting imported materials and detailing as a symbol of status (Sehnaoui 1981). Irrespective of the above, the central hall / triple-arch / red-tile roof house proved to be a creative synthesis of Western imported materials and local know how. Although its origin, originality, and continuity with past traditions are yet unresolved research issues, its diffusion and its adoption by different social groups, prove that it possessed the inner attributes of a traditional vernacular model, i.e.:

Its common representation and understanding by owner and builder making it a spontaneous reference model
Its additive qualities and internal cohesiveness, since, as explained below, it was able to incorporate changes that "would have destroyed visually and

conceptually a high style design", to quote Rapoport in his qualification of preindustrial vernacular models (Rapoport 1969).

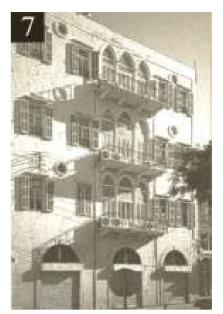
Different types of central bay elevations developed according to the wealth, social standing, and lifestyle of owners. The supra-vernacular elevation or kasr (fig. 6a) pertained to the aristocratic mansion; the high and mainstream vernacular elevation or hara (fig. 6b) to the family residence of the emerging bourgeoisie; and the lower vernacular elevation or bayt (fig. 6c) to the garden suburban house and to the farmhouse. Such structures still exist in the middle of high-rise apartment buildings in Achrafieh and Ras Beirut. Although the three types of elevations shared the central bay as a common feature, they differed in the level of façade articulation, the amount and type of ornamentation, and the use of imported materials of construction:

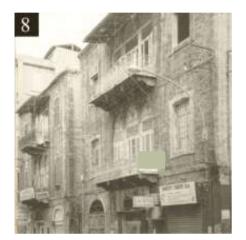
• The aristocratic mansions usually exhibited a dignified and ostentatious

Fig. 7 Beirut 1921. Source: Service Geographique de l'Armée, 1921









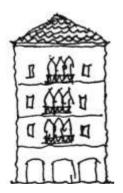


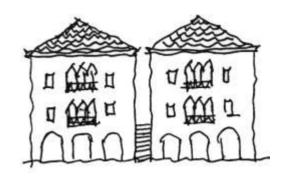












 $Fig. 8~(5,6,7,8-a,b,c-d,e)~Central~hall~house:~urban~facade\\typology.~Source:~Saliba~1996,~p.~48,~49$ 

c-d)

e)





9 a) 10 a)



9 b)

raised entrance with an elaborate staircase, a recessed or protruding central bay, and highly ornate surface detailing (fig. 6.1). Designers were mostly Italians, and styles were an eclectic mix of Gothic, Renaissance, and Islamic.

- · High bourgeois and mainstream residences used ornamentation selectively; they consisted of one to three floors, housing a single apartment per floor with separate entrance staircase for each level (fig 6.2). They relied on the know how of master builders and copied aristocratic mansions.
- · Finally, the flat roof suburban house and the farmhouse were characterized by a simple elevation incorporating sometimes a diagrammatic central bay with small and unadorned window openings (fig. 6.3,4). They lacked aesthetic pretensions and were executed by craftsmen who followed the conventional ways of building. With the continuing urban growth and the

continuous urbanization of the periphery (fig. 7), suburban residential types in the city either declined or underwent a process of change to adapt to the new functional constraints and siting conditions. They transformed into two main types: Luxury and upper cost apartment houses, or stacked villas (fig. 8.a).

Middle-cost apartment houses with a ground floor of shops and rental apartments above, clearly expressing the birth of a new residential type: the speculative apartment building (fig. 8.b). Such buildings extended vertically as highrise walk-ups (fig. 8.c), or horizontally as twin structures either separate or integrated under one roof (fig. 8.e,f,g). Such buildings were concentrated along important arteries, like rue Gouraud, rue Basta, and rue Bliss, and in the highly dense pericenter districts.

In summary, the first phase of early modernization produced a new vernacular



10 b)

Fig.9 (a,b) Non residential red tile roof buildings. Source: Saliba 1996, p. 48, 49

Fig.10 (a,b) Ottoman style monumental architecture. Source: Debbas (p. 73, 97)

b) le Grand Serail with clock tower.

a) Petit Serail





11 a) 11 b)

model, the central-hall house, that possessed the intrinsic qualities of a traditional type, while showing enough flexibility to adapt to the different social classes and various locations and parcel configurations. It shaped itself to urbanization constraints without loosing its inner cohesiveness, and incorporated stylistic impositions without loosing its distinguished visual character. The question remains: How far the central hall building was able to sustain the pressures induced by the second phase of early modernization, i.e., the intrusion of concrete in building construction and the emergence of architects and engineers as a new breed of design professionals competing with the traditional master builder?

Before answering this question, it is pertinent to give a brief overview of public buildings of the same period, in order to check possible connections and overlaps between domestic and non-domestic architecture on one hand, and vernacular and high style architecture on the other hand.

# Non residential architecture and urbanism

The central hall / red tile roof building was not only used in domestic architecture; it served as a reference model for new building types such as hotels or mixeduse buildings in the expanding Beirut's central district (fig. 9a,b). It also

accommodated the first office buildings along the waterfront and in the port district. Monumental architecture of the late Ottoman period was confined to a small number of key buildings pertaining to two broad stylistic categories:

The Official Ottoman style illustrated by the infantry barracks (le Grand Serail), the 1900 clock tower, and the Petit Serail (fig. 10a,b)

Late 19th century European eclecticism as illustrated by the Imperial Ottoman Bank, the Orosdi Bek Department store and the Eglise des Capucins. (fig. 11a,b,c)

It is clear that monumental architecture was in advance of domestic architecture in introducing the latest stylistic trends and building materials and techniques using western and western-educated professional designers. Missionary schools like the Ecole des Frères du Sacré-Coeur (1894) were already built in concrete at the end of the 19th century, while Orosdi Bek department store (1900) introduced the first elevator in Beirut. It will take around two to three decades for such trends to trickle down to mainstream domestic architecture

Modern urbanism was introduced in Beirut as early as 1878, when the Municipality ratified a project for the modernization of the infrastructure and the upgrading of public amenities following the rules of hygiene and embellishment set by Istanbul. By the first decade of the century, the city acquired its electric factory, its train station

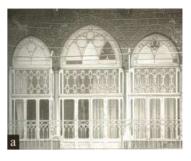


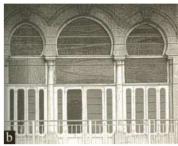
11 c)

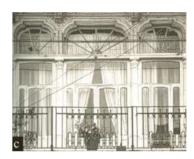
Fig.11(a,b,c) Western eclectic monumental architecture. Source: Debbas (p. 32, 34, 98)

- (a) Imperial Ottoman Bank
- (b) Orosdi Bek department store
- (c) Eglise des Capucins

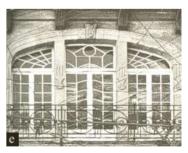




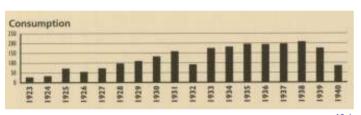


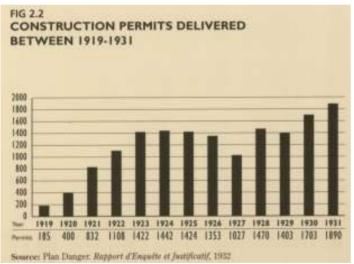












13b)

Fig.12. The razing of medieval Beirut, Source: Service Geographic de l'Armee1921 Destroyed Areas to be replaced by geometric street layout of Foch/ Allenby and the Etoile area

Fig.14 (a,b,c,d,e,f) From the triple arch to the rectangular bay. Source: Saliba p.55

The impact of concrete on traditional forms of opening.

Fig.13. Introduction of concrete in building construction a) consumption of cement between 1923 and 1940. b) construction permits delivered between 1919 - 1931. Source: Plan Danger 1932







15 b)

and its tramway lines. Accordingly, the old town was perceived as a barrier to movement between the port and its hinterland, and two openings were cut through the old fabric in 1915 (today's Rue Foch and Allenby), starting the second phase of early modernization carried through the French Mandate (fig. 12).

## The Second Phase of Early Modernization

The most dramatic change in the building industry occurred during the first quarter of the century, when cement was gradually incorporated in domestic construction. Between 1923 and 1930, consumption of imported cement increased about five times in the Levant States of Lebanon and Syria (Fig. 13a), paralleled by a sharp rise in construction permits (fig. 13b). The fast growth in cement imports stimulated the creation of the first cement plant in the region, the Société des Ciments Libanais that was established in 1929 through a joint French / Lebanese private venture. This change was accompanied by a theoretical knowledge of reinforced concrete, formally introduced and taught at the university- both at the American University of Beirut, and the Université St.

Joseph. Civil Engineering emerged for the first time as an independent profession and as a new field of specialization in a sphere of practice previously confined to established building crafts. However, the malleability of concrete and its predilection for imitation, was soon appropriated by the builders themselves as a "new vernacular" tradition, fostering the hybridization of architectural form and the proliferation of eclectic ornamentation. Concrete proved to be an economical substitute for stone dressing and carving. Builders started emulating stonework through casting, using pattern books and trade catalogs published in Europe and the U.S., and spread as far as Australia. By looking at the variety of intermediate shapes that the central bay took in less than a decade, starting as a triple arcade and ending as simple rectangular opening (Fig. 14), a clear idea may be formed about the range of styles that pervaded central hall buildings between mid 1920s and mid 1930s.

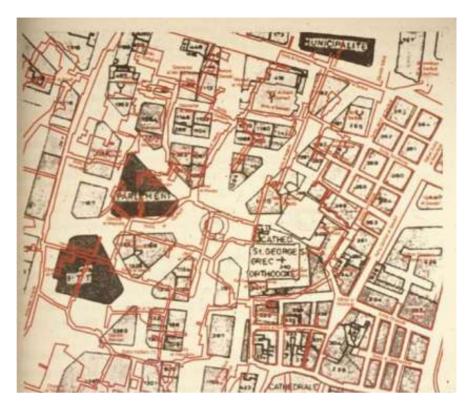
Beside stylistic variations, the central bay generated two additional façade types: the veranda type and the bow window type. The first was created through the addition of a concrete veranda, which soon became the predominant elevation feature

Fig.15 (a,b,c) From apartment house to apartment building. Source: Saliba p. 40, 41

in its own right; and the second was a European import (fig. 15).

In brief, the second phase of early modernization resulted in a dualistic structure, eclectic outside and traditional inside, keeping the same symmetrical and centralized plan while incorporating a wide range of styles in elevation, from neo-Classical to neo-Islamic, to Art Nouveau and Art Deco.

Meanwhile, the old fabric of Beirut's central district was being razed, to accommodate the Foch-Allenby and the Place de l'Etoile scheme consisting of star-shaped and wide gallery-lined avenues (fig. 16). A stage-set approach was adopted based on façade competitions as models for future buildings in both areas. The traditional central hall plan was replaced by an efficient office layout, while street elevations were differentiated by diverse stylistic treatment (fig. 17). The two symbols of local power, the Parliament and the Municipality expressed the dual nature of an ambiguous search for national identity. The Parliament building (fig.18), designed by Mardiros Altounian, a Beaux-Arts architect, was an imposing symmetrical structure with an Orientalrevivalist style articulating historical regional references with neo-Mamluk overtones. The Municipality building (fig. 19) designed by Yussef Bey Aftimos, an American-educated engineer, is a clear expression of the Neo-Islamic style developed in Cairo by turn-of the century Western and Western-educated architects. In 1930, two buildings were erected simultaneously: the Neo-Islamic Grand Theatre by Aftimos, and the modern-Perret style Hotel St.Georges by Antoine Tabet (fig. 20) showing the overlapping of two tendencies: the decline of eclecticism and the penetration of early modernism. This transition period will end during the second half of the 1930s signaling the establishment of modernism as the predominant style in domestic and public architecture for the rest of the century.







17)

Fig.16. The making of Place de l'Etoile. Source:

Fig.17. Foch-Allenby eclectic office buildings. Source: Solidere

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