

THE MODERN APPROPRIATION OF URBAN SPACE THROUGH MEDITERRANEAN MEDINAS

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Abstract

Complex dialectic between Modern Movement and the Mediterranean finds in Moroccan experiences in the fifties an important shift, addressing relations between city and human perception. Both technical and cultural needs moved architects of Service de l'Urbanisme, led by Michel Ecochard since 1946, to call into question the paradigm of vertical city used to be proposed in Europe. Typical issues of Modern research on collective housing - standardization, economy, density - are thus influenced by traditional medinas, having been conceptually rethought, turning over Le Corbusier's vertical aggregations on the horizontal surface of landscape.

New horizontal density, experimented for the first time in Morocco in the early fifties, was driven by several factors: regional influence of the city as well as constructive and practical issues, that let Modern architecture rediscover the value of urban space. Ecochard design investigates the structure of the voids of the traditional city, interprets the different typologies, their hierarchical relationships and scale modulation along with their socio-cultural meanings.

Through Moroccan medinas, Modern Movement in post-war period discover again the sense of urban space and of the deep-rooted structure of the city. Issues that would have considerable success in the subsequent realizations in Morocco as well as in CIAM debate and in European experimentations, starting from Adalberto Libera up to Alvaro Siza.

City as urban fabric reconstructs human scale, finding a new social centrality for public space. Into concatenation of voids, light and shadow, spaces properly calibrated for collective life testifies the semantic richness of spontaneous settlements and corroborates the Mediterranean vocation of Modern architecture.

Keywords: Mediterranean city, colonial modern, Michel Ecochard, Habitat pour le plus grand nombre, Morocco

Background. Mediterranean urban space and Modern architecture.

The regionalist influence of Mediterranean city and of North African medinas represents a corroborating element of whole Modern architecture Mediterranean

vocation. As observable in medinas and *casbah*¹, most of Mediterranean urban characters persist in coastal settlements along North Africa and southern Europe shores. The urban space generated over centuries by adaptations to land and climate, manifest itself with common characters, even beyond the considerable cultural, political and religious differences.

This spatiality takes form of an immanent character, manifesting himself in the deep connection between architecture, landscape and city, and in the recurrence of a series of spatial figures. Even in the differences among urban fabrics genesis, the recurring aspect is the systematic continuity of open space within architecture and landscape: this is defined by built elements mediating different open space statutes and structuring those in a succession of thresholds: landscape space, urban space and open domestic space.

The indistinguishability between the sculpted rock, the stone base and Mnesicle's architecture in the Athens propylaea is the metonymy of such typical condition of building: necessarily linked to the landscape, wherein spatial narration is structured. The adherence to orography and to climate has guided the self-organized process driving the juxtaposition of architectural elements. These are arranged on the randomness of nature in order to conform an internal habitat, according to physical and cultural needs.

The modulation of the *continuum* of the open space becomes a phenomenological character, detached from the abstract order of the grid, but adherent to the organic nature of territory and of men (Tzompanakis, 2012). This modulation of the void is controlled by architecture: at once walls, curtains, volumes, patios and orographic terracing shapes open spaces at human scale. Fabrics and voids are punctuated by events, that provide direction, rhythm and hierarchy to space. Mediterranean phenomenology is thus a narrative space, to be read through perceptive sequences guided by architecture.

¹ The two terms identify different portions of cities in North African context. In urban areas, the term *Casbah* refers to a fortified citadel, including military buildings and a small part of residential fabric; the *medina* is the commercial city, where population lives and most of public activities *take* place: the *souk*, the Koranic schools, the mosques. In rural areas, where a real urban fabric is lacking, the actual fortification is identified with *Qsar*, while *Casbah* describes the inner urban micro-cosmos enclosed within the walls.

The juxtaposition of simple volumes creates a dense ensemble, crossed by collective life spaces corresponding to typical figures: the *piazza* and the *souk*², the *passage sous saba* and the *sottoportego*³, the alley and the domestic patio. Elements consistency and identity between city, architecture and ground level produce the bas-relief effect: city and urban space are as a unique sculpted matter, a set of elements so linked to be perceptible as a whole.

Tension between the whole and its parts in Mediterranean built landscapes marks Modern architecture from its early days. The stroke of C.-E. Jeanneret, who draws the profile of the acropolis by including buildings such as orographic incrustations (Roma, 2016) and, only afterwards, discerns the parts, is a metaphor of the symbiotic relationship between architecture and landscape. Feature of architectural adherence to orography and open space, manifesting itself likewise in the clustered villages of Cyclades and southern Italy, as well as in the Casbahs of the southern coast, from Tunis to Algiers and Tangier.

Landscapes bearing a structural and spatial character is findable in Le Corbusier's first production, as in the aggregative Dom-Ino system (1914). This configure an addition system becoming a whole, whose parts are hard to be discerned, relating architectural voids to open space. Similarly, in the atopic *Cité Jardin* (1925) and, even more, in the aggregative solution proposed for the *Cité Universitaire* in Paris (1925), a '*caravanserai university campus*' (Boesiger and Stonorov, 1967, p. 73): here, the aggregation of base cells and inner voids constitute a porous whole.

Mediterranean themes are treated more at architectural scale rather than at urban one. The extroflexion of structural and distributive elements as well as terraces and patios look for a close dialogue between the building and the open space even in Pessac realisation (1924).

Nonetheless, more difficultly these characters establish a systemic value at urban scale; failing the typical density of traditional city and the articulation of an open space system, fabrics lack the coherent narrative structure between the

² Arab term for the main commercial street and squares within ancient urban fabrics

³ The French term, used in North Africa, and the Venetian one refer to the galleries providing public space continuity through and under buildings

architectures. Exemplary once again Pessac, where the figurative characterization of architectures follows Mediterranean dynamics between architecture and open space, while the dialectic between building and open space is diluted in the scale of the settlement, dissolving the tension of the link between architectures.

An urban breath of concatenation can be similarly found where the city is condensed in the synthetic macro-sign. In the geometric structure that holds together the Immeuble-villa (1922), as well as in the landscape design of Plan Obus in Algiers (1930).

The urban matrix of such macrostructures seems indisputable, whereas the "inner" nature is a whole of parts, a complex and polyvalent multiplicity of architectural ingredients: curtains are walls and patios, roofs are floors and garden. The "exterior" however is transfigured. Closed in the walls of geometry, the city offers itself to landscape by opposition. There is no more intimacy between architecture and landscape, as intermediation disappears. Such space that is still landscape and not yet architecture, built, bordered, structured from architecture but still adhering to the ground, no longer exists.

The condensed lecorbusierian cities, while looking at great scale, lose the relation with the human-scaled urban space. Accordingly, Modern research of Athens charter period renounces to the architecture of urban fabrics. And without this, it loses the intermediate space between the wildness of landscape and the domestic patio: the civic space of squares, alleys and passages, measured with ground, characterized by microclimatic comfort and architectural quality, lights and shadows, dilatations and contractions, such as to host citizenship life.

Colonial Modern and Michel Ecochard innovation.

The experience of Modern architecture in Morocco is a key step the appropriation of Mediterranean urban spatiality. For several reasons, related to its genesis and its success, which I will explain assuming hypothetically the action of Michel

Ecochard as a revealing event, a link between the tendencies of early modernism and the successive experimentations on the Mediterranean urban form.

First, Michel Ecochard, French architect leading the *Service de l'Urbanisme* of French Protectorate in Morocco from 1946 to 1952, declares it openly. In the exhibition of their projects at IX CIAM in 1953, the Group of Modern Moroccan Architects (GAMMA) presents historical fabrics as inspiration sources for their projects.

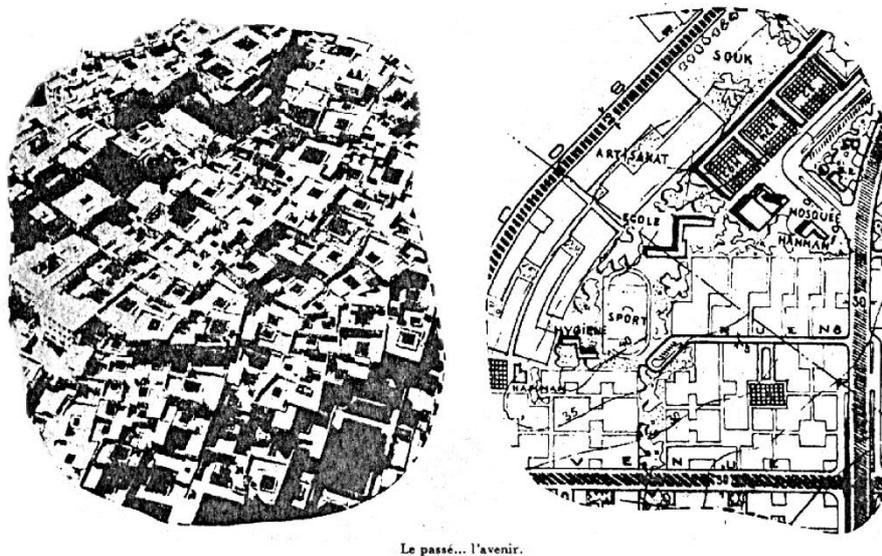


Figure 1. 'The past... the future' (Ecochard, 1950, p. 12).
The model of the medina and the project for Cité Yacoub el Mansour, Rabat, 1948

A first interesting aspect of Moroccan Modern architecture therefore concerns the pursuit of an explicit link with the Mediterranean city. The *otherness* of the pre-modern context, progressively excluded from the Modern thought, that in antinomy had defined its own urban manifesto, is programmatically assumed to be a central element (Avermaete, Karakayali *et al.*, 2010). The series of projects undertaken since 1948 in Rabat, then in Casablanca and in other Moroccan cities investigate the typological and morphological characters of the fabric: dimensions and features of historic patio houses, their territorial organization structure and principles; moreover, urban space sense and its morphological and

semantic aspects: as a veritable tool of mediation between the collective sphere and the individual dimension, the open space of the medina follows a precise statute that's expression of the socio-cultural meaning of space sequences and thresholds.

The projects of *Cité horizontale* take such structural logic as their guiding path. The patio cells are installed on 8-meters-wide square grid, that infrastructures the territory and constitutes the metric element. However, cells juxtaposition is not in series but in clusters: vehicular roads define the perimeter of neighbourhood units, dense, pedestrian fabrics, structured around a centre with proximity services. Inside the fabrics, open space is hierarchized in a progression that follows the organizational structure of the medina. Crossing alleys are reduced in section towards residential sectors. These in turn expand into squares for proximity relations and life, on which open impasses leading to the domestic space of the patio. Hence, open space is structured in several orders: circulation and collective services, neighbourhood spaces, proximity areas and domestic patios. This progression matches, morphologically and organizationally, use and perception codes of traditional settlements, offering a frame measured on human scale and calibrated on local habits.



Figure 2. Michel Ecochard, Horizontal fabrics in Cité Yacoub el Mansour, Rabat, 1948 (source: Photothèque, Ecole Nationale d'Architecture, Rabat)

A further interesting aspect is that theory has been followed by realization. On the date of the IX CIAM, many of the horizontal fabrics of Ecochard were already in use. Ecochard rationalizes the medina, assumes its structural principles within a standardized, prefabricated, economic system. Without derogating from the Athens Charter methodology (Ecochard, 1955), he simply proposes a different spatial model for Modern city.

Several choices are dictated by pragmatism. Beginning from the pursuit of an extensive urban model, rooted to the ground, providing strong relations with open space and earth: this stems from the goal to facilitate urban settlement for a population mostly coming from rural areas and still keeping rural habits. In such pragmatic spirit, ready solutions are needed, able to respond quickly and economically to an exceptional demographic pressure. Here is the functionalist method of Ecochard's team, and the shift of their design innovation.

Parcel dimensions, 8 meters by 8, and rooms proportions arise from efficiency criteria: the maximum 3 meters width of indoor spaces allows to use same prefabricated reinforced concrete panels for walls and roofs. Likewise, cluster organisation – rather than series – allows to optimize land use, keeping higher density together with more free public space to allow neighbourhood relations.

Modern *logos* intertwines without prejudice spontaneous *metis*⁴ (Avermaete, Karakayali *et al.*, 2010), drawing on the spontaneous city logics.

The result is an innovative morphology: modern in shape, in construction, in the orthogonal grid that infrastructures the *tabula rasa* of virgin Moroccan territories; Mediterranean and complex in space structure, which re-proposes the concatenation of urban spaces and clearly establishes their status. Externally dense and compact, Ecochard neighbourhood units allow themselves to be crossed by increasingly minute pathways, proposing squares expansions and alleys compression.

Volume is reduced to the minimum. A series of enclosures organize open space establishing the mediation between "outside" landscape space, the intermediate

⁴ *Metis* in ancient Greece was the spontaneous knowledge, opposite to *logos*

urban space and the intimate patio space "inside". White walls just arranged on the ground provide the absolute identity between architecture and city, domestic and collective space.

The innovation of a Modern fabric had several echoes in cultural debates and local heritage, which constitute the third element of interest of the Moroccan experience (Cohen, 1992). As mentioned, the Ecochard methodology has been presented at IX CIAM at Aix en Provence in 1953, through the visual grid "*Habitat pour le plus grand nombre*" by the Group of Modern Moroccan Architects (GAMMA).

The discussion at IX CIAM triggers a cultural debate in Europe on nature of Modern city, and on urges for a best care of human-scale in urban design, in its metrical, relational and social meanings. Team Ten protagonists were some of the promoters, including the George Candilis and Shadrach Woods who had been part of Moroccan *Service de l'Urbanisme*, as well as other figures that gave breath to the horizontal density formative tendency during the second post-war European period.

On the short distance, in time and space, the pioneering experience of Ecochard has been reiterated in Morocco and in other colonial contexts, enriched in architectural typologies but constant to the research on urban fabric and morphology. Design solutions and themes that surely Ecochard had already seen, in Mediterranean and in modern architecture, whose experimentation in Morocco has the merit of systematizing in a programmatic and transmissible form.

Variations. From Casablanca to Évora

Subsequent experiences in North Africa

Ecochard framework, made of patio cells and territory grids, is a design tool easy to understand and to reapply. Similar models have been reiterated in colonial contexts – *inter alia* Cansado in Mauritania or Accra in Ghana –

providing introverted habitat in horizontal fabrics, whose affinity is easy to be found in Ecochard realizations (Vv. Aa., 1955: 60).

After Moroccan independence, the same compositional structure was the basis of numerous variations, made by local architects and by local population spontaneous adaptations. Variations on Ecochard's fabrics mainly concern buildings heights: practical reasons of land density and the research of a less monotony suggest higher tissues towards a better plain-void rhythm. This happens in spontaneous evolution, which distresses designed balance elevating the plots towards a new stability, still based on Ecochard frames persistence (Maricchiolo, 2015).

In a similar way, the design production guided by the *Service de l'Urbanisme* after Ecochard leaving from Morocco, moved toward higher fabrics.

An interesting case in Rabat is the construction of the *Cité Youssoufia*. Begun in 1961, it differs from the Ecochard *Cité horizontale* for a more complex conception of urban space, although it keeps similar the housing typology and urban grid. The program includes three different types of housing, which correspond to different open space morphologies within a unitary design. In the centre, there are some small collective buildings, towers or lines, marking a large collective space provided with a central market. Around it rises a multi-family houses fabric, set on the 8x8 meters grid, arranged in arrays folded up on their own to constitute neighbourhood micro-areas. External, it stands a less dense houses sector.

The inner space of *Youssoufia* comes from Ecochard low plots and higher public centres, whilst much structured. The connotation of central public space and of avenues is entrusted to higher buildings layout, shaping an articulated square. The minute space is marked by the grid, in which is infilled the rhythmic alternation of volumes and voids of two levels units. This creates a chiaroscuro and perspective variation that gives depth to the urban image, while the jagged skyline deals with the spontaneous character of Mediterranean architecture. A captivating skyline in pure Modern forms that, together with plan slippage, construct dynamic perspectives towards the central space.



Figure 3. Rabat, Cité Yousoufia. In foreground the urban fabric, beside the central square with collective housing and the market (source: Photothèque, Ecole Nationale d'Architecture, Rabat)

A further urban complexity, in accordance with the same theme of base grids and cells disposition, has been proposed in the unrealized proposal for Sidi Othman in Casablanca by John Hentsch and André Studer (1954). The project introduces cells superposition, towards a more sophisticated urban morphology. It prefigures a Modern *casbah*, in which the patio units overlap to create a three-dimensional fabric that amplifies the richness of open spaces experience.

The formative tendency of horizontal density

The dissemination of the results of Moroccan experimentations is curated by Michel Ecochard himself, who through publications and conferences put his work in European cultural debate. The experience of *Service de l'Urbanisme* in Morocco thus represents the first field test of Modern theories on urban design:

in early fifties, while Marseilles Le Corbusier housing unit is being built, it is in fact the first large scale application case for Athens Charter principles and for prefabrication and modern technology use in city planning and building. Among the visual grids presented at IX CIAM, "*habitat pour le plus grand nombre*" presents the only realized experience.

Urban morphology of horizontal density gives raise to Adalberto Libera interest. Present in 1951 in Rabat at the U.I.A Congress⁵, which Ecochard is general rapporteur (Capannini, 2005), Libera had meanwhile been involved in the Tuscolano district construction in Rome. The postcard sent from Casablanca to Ina Casa president Foschini, '*voilà l'Ina-Casbah*' (Mornati and Cerrini, 2004, p. 126), testifies the heteronomy of Tuscolano III genesis. A low, dense fabric characterized by the morphogenetic role of void, which already in the name, *Unità abitativa orizzontale*, alludes to the famous *Unité d'habitation* under construction in Marseilles, remarking its overturning on the ground surface. Libera fabric does not stand on an isotropic and undefined landscape, but it draws its plots and relations (Saggio, 2016): as in Mediterranean fabrics, architectural elements shape a system of open, enclosed and covered spaces.

Libera unit is, by scale, more a building than an urban fabric. An *unicum* best refined in architectural solutions, plastic and constructive details, that resumes the regulatory traces of Ecochard horizontal city. An empty centre punctuated by a tall building, is surrounded by an open space hierarchy, establishing a system of thresholds emphasized by shelters. Dwellings typologies remind the lecorbusierian *Cité Universitaire*, while, without the "collapse" of internal paths, the system keeps user's walkability and city effect.

The attention to the perceptive and social dimension of dwellings, to the notion of *habitat* that in the colonial experience goes beyond the definition of a *machine for living* (Eleb, 1999), shifts the focus towards the relationship between residence and open space. Ecochard interdisciplinary approach in Morocco, whose action is corroborated by sociologist André Adam studies, widens the field

⁵ The second congress of the *Union Internationale des Architectes*, held in Rabat in 1951 on the theme: *Comment l'architecture répond à ses nouvelles tâches* (How Architecture is Dealing with its New Tasks)

of interest to the relational needs of inhabitants. It moves design towards the realization of a framework of life - the *habitat*, in fact - beyond the physical and psychological limit of the house, calling into question collective sphere. Although the design action of Ecochard was primarily aimed to solve housing problem, the analyses carried out on traditional city and on common space organization focus on relational weaving of the city.

Architectural debate enters the idea that urban space is the result and the frame of social and cultural practices. Such thought has been emphasized by Allison and Peter Smithson, that enhance Moroccan works, underlining the impact that Moroccan CIAM panels would have had on future protagonists of Team Ten thought (Smithson, A. and Smithson, P., 1955).

What the Ecochard project finally unveils is the plastic and spatial wealth that this open space can assume, through the spatialization of ground design. This is no longer an isotropic tray but is structured in a system of thresholds, with different uses and meanings for the user.

This sensitivity formed around the events of the IX CIAM tends to shift the conception of the city towards internal focus, assuming user's point of view, who crosses and perceives spaces with their own characterization and meaning. Non-linear spaces, planimetrically related to complex hierarchies, offsets, section and scale variations, continually configured by architectural presence.

This trend becomes a critical methodology that meets further issues, including Lynch and Jacobs studies in the United States, which reinforce the conscience on the link between morphology and vitality of public space (Saggio, 2012). Among the players of this critical review, and the individual versions provided by Team Ten members, it seems significant to remember the active participation in Morocco of Georges Candilis and Shadrach Woods⁶, whose legacy of North African experience reverberates, for example, in the projects for the Free University of Berlin (1963) and for the Centre of Frankfurt (1963).

⁶ The two architects, having founded the ATBAT-Afrique group with Vladimir Bodiansky, Bernard Kennedy and Henri Piot, worked with Ecochard's *Service de l'Urbanisme* to vertical residential units design and realization in Casablanca, the *Immeuble Nid d'Abeille* and the *immeuble Sémiramis*. Furthermore, they edited a part of the visual grid "*Habitat pour le plus grand nombre*" presentata at IX CIAM.

Far from Mediterranean shores, research on fabrics evolves on more methodological and operational ways⁷. The figurative research moves away from the strong and evident reference to the language, the landscape structure and the concatenation of spatial figures typical of Mediterranean city, from the white alleys skimming secret gardens, narrow within the walls that cross the territory. As well as from lecorbusierian endemic reference, often marked by a conceptual allusion to the imaginary of piled up villages along Mediterranean coasts.

The continuity of Mediterranean imprinting

It may seem a paradox that outside the Pillars of Hercules references to Mediterranean image are stronger. Portugal is a Mediterranean country less than it is Morocco, but in the research of Alvaro Siza emerge those spatial and figurative values that are part of the Western and Mediterranean background, played within a functionalist system.

Quinta da Malagueira settlement in Evora (1977-1998) interprets the whole phenomenological Mediterranean spatiality with the compositional mechanism, rigorous and functionalist, which Ecochard had also used. Several arrays resting on natural orography, internally compact and juxtaposed to each other, include a series of base cells that, as in Le Corbusier, and in Ecochard too, measures the system. The land design ensures rule and consistency, while the typological variety, due to the position of the patio and to the heights, attribute a random diversity that ignites the morphology of the space.

Along the narrow pedestrian streets stand variations on patio house, which keep boundary wall height as a fundamental tool for configuring open space. The high patios walls ensure intimacy as well as they avoid the loss of the road morphology. Curtains hold the masses together, defining both domestic and public open space. Aqueducts remark fabrics unity, signalling the systemic intention of the project, and putting the accent on the open space sense and qualification.

⁷ E. g.: experimentations on mat-buildings and low-rise-high-density urban fabrics in the United States and Europe. See: Saggio, A. (2012), pp. 223-235.

Siza is the last voice of the chorus of the Modern. He embodies its principles of urban construction, interpreting functionalism as an operating tool in both project construction and aesthetical or poetical expression. In the will and in the need to recognize the *pure volumes under the light of the sun*, and to preserve the purity of architecture, whose decoration lies in the modulation of light and shadows, as far as Modern aesthetic is made of space, proportions and poor materials.



Figure 4. Left: Cité Youssoufia in Rabat (source: photothèque, Ecole Nationale d'Architecture, Rabat). Right: A. Siza, Quinta da Malaqueira, Evora (source: author). Probably there are no direct relations between the two projects, however visual link testifies how similar methods and tools produce similar results

Conclusion

The overview of some Modern interpretations of the Mediterranean city, with particular attention to southern experiences, track down the emergence of related urban and spatial themes, linking similar phenomena. Among the experimentations on horizontal density, it seems not negligible the contribution made by the colonial experience, particularly by the first experience in Morocco. This is corroborated by the links between the protagonists of the *Service de l'Urbanisme* and the European panorama during the fifties, including the debate

around the IX CIAM, which initiates the critical revision of some theoretical models thanks to architects who practiced Moroccan field. Spatial suggestions of Mediterranean medinas reverberate thus beyond the borders of colonial Modern, permeating the architectural dialectic of the Mediterranean through its northern and southern shores.

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