# MUTATION OF THE SEASIDE ARCHITECTURE IN ALGERIA AND ITS IMPACT ON COASTAL LANDSPACE. A CASE STUDY: AIN EL TURC, ALGERIA

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## 1. Introduction

The Algerian coastline holds resources and undeniable opportunities regarding tourism. During colonial times a remarkable architecture, mainly represented by resort villas, was developed in some seaside villages [1].

From the beginning of the 20th century, Ain El Turc, one of the coastline municipalities of Oran, has cultivated a long tradition of holiday resorts and since 1945 has established itself as one of the first seaside resorts on a local as well as a national scale, thanks to its seaside heritage [2].

After independence, especially during the 1990s, the municipality of Ain El Turc experienced unprecedented development and today appears as a sprawling urban space. This urbanization arose from the requirement of the natural site and from the will of a succession of persons in charge, to create large housing estates throughout the seaside attraction: as a result, the city became much more residential than seasonal.

### *1.1. Architectural features of seaside constructions*

Although the seaside houses show diversified styles, there are similarities all related to the sea [3]. To enjoy the spectacle of the maritime landscape, the number of openings have multiplied, with many windows, terraces, verandas, covered galleries, bow windows, etc. being installed [4]. The materials used are juxtaposed next to each other: stone rubble, glass, brick, wood, mosaic which all contribute to the polychromy of the house in various ways [5].

The plan and layout are often different from one house to another, but they all meet specific needs relating to the sea. The seaside house is built on a basement partly below ground which includes the laundry, the kitchen and other household services [6-7].

The ground floor is reserved for receiving guests: a small lounge, a smoking room, a large living room, and a dining room. The 1st and 2nd floors usually house the bedrooms of the householders and their guests, while the servants' rooms are situated in the attic [8-9].

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The following table shows the principles of seaside architectures through the various architectural, technical and architectural devices that make up the house by the sea as well as their elements and the role of each in this composition (Table 1).

Table 1 shows that the whole is constituted by a combination of elements that establish certain relationships with the sea and: protect the building; fit in with the environment, provide transit spaces, enjoy the view of the sea and landscape [3-11-9] This analysis grid defines these relationships, and will allow us, through the case of Ain El Turc, to show whether the houses in the Algerian coastal cities observe the principles of seaside architecture defined in Table 1.

*Table1. Analysis grid: features of seaside houses (Source: authors)*

| Features | Elements | Protection | Integration | Transition | Contemplation | Observation |
|---|---|---|---|---|---|---|
| Spatial composition & architectural shape | 1. Siting | ● | ● | ● | ● | ● |
| | 2. Orientation | ● | | | ● | ● |
| | 3. Shape | ● | ● | ● | ● | ● |
| | 4. Height | | ● | ● | ● | ● |
| | 5. Addition | ● | ● | ● | ● | ● |
| | 6. Building materials | ● | ● | | | ● |
| Architectural elements | 1. Roof | ● | | | | ● |
| | 2. Colour | | ● | | | ● |
| | 3. Veranda | ● | | ● | ● | |
| | 4. Canopy | ● | | | | ● |
| | 5. Stoop | ● | | ● | | |
| | 6. Loggia | | | | ● | |
| | 7. Dormers | | | | ● | ● |
| | 8. Bow window | | | | ● | ● |
| | 9. Pergola | ● | ● | | | ● |
| | 10. Porch | ● | | | | ● |
| | 11. Gallery | ● | | ● | | ● |
| | 12. Balcony | | | ● | ● | ● |
| | 13. Roofedge | ● | | | | ● |
| | 14. Path aound the house | ● | | ● | | |
| | 15. Threshold | ● | | ● | | |
| | 16. Oriel | | | | ● | |
| Landscaping & relationship with the environment | 1. Fence | ● | ● | ● | | ● |
| | 2. Terrace | | ● | | ● | |
| | 3. Belvedere | | | | ● | |
| | 4. Gazebo | ● | ● | | ● | |
| | 5. Garden | ● | ● | ● | | ● |

● Presence of architectural elements

## 2. Seaside architecture in Algeria: the case of the seaside resort of Ain El Turc (Oran)

### *2.1. Presentation and situation*

The municipality of Ain El Turc is located at 15 km from the city of Oran; it covers a total area of 26 km². It is bounded on the north by the Mediterranean Sea, on the south by the municipality of Misserghin, on the east by Mers El Kebir and on the West by the municipality of Bousfer.

### *2.2. Historical development*

The process of urbanization in the city of Ain el Turc has evolved with various rhythms. Linked to the historical and political context, it combines two periods in time: colonial and post-independence.

#### *2.2.1. Colonial period*

The seaside resort of Ain El Turc was created in 1850 near the agricultural village. This area was originally predominated by arboriculture and viticulture farms.

Individual buildings for seasonal use were built in this area constituting a seaside village which developed to the detriment of the original agricultural village.

In 1900, new lands were divided along the beach and were used as seaside resorts (dwellings, proximity, equipment, etc.) for the people from Oran and the whole region, who sought rest and relaxation during the summertime.

Thus, seaside resorts were created such as Trouville in 1890, Saint Germain in 1905, Saint Rock in 1910 and Bouisseville in 1912, etc [2]. Until 1962, all the buildings constructed in this area were mainly beach villas, with the exception of a few residential areas of apartment blocks, such as the estate of Claire Fontaine completed in 1958. The development of the village started from the main square which is now called “la place El-Shems”. A year later, buildings were erected in the village in accordance with the alignment and the land leveling plan established by the Civil Buildings Department.

In 1900, a settler named Mr. Debaix Maurice decided to subdivide his land along the beach for the construction of several seaside houses [2]. During the same period, and for the development and growth of the city, the municipality authorized and encouraged new constructions (housing, infrastructures and services) according to a development plan established on the basis of an extension towards the interior land, in order to protect the shoreline from urbanisation. The new constructions were erected along a specific line: from the main square of the city to the inland. Many houses were then built, with tree plantations adding a beautiful touch to the town, sidewalks were incorporated, and street lighting was installed.

This urbanization has led to significant population growth. However, it must be remembered that the latter developed at the expense of the intensive deforestation of the land.

Between 1880 and 1920, the municipality[1] encouraged the realization of public amenities and places for leisure and entertainment, such as hotels, casinos, restaurants... [2].

During the war of liberation (1954-1962) investments dropped and tourists from clubs and casinos no longer wanted to venture into these public spaces for fear of attacks and shootings perpetrated especially on the road leading to Ain el Turc. Thus, the city was declared “off limits” and was accessible only to authorized people.

After independence in 1962, the city of Ain El Turc was deserted, due to the departure of its inhabitants. Furthermore, most of the hotels and casinos were then occupied by health services, while most of the dwellings were occupied by Algerian families and very few French families decided not to leave.

It is not easy to establish the architectural characteristics of the resorts in Ain El Turc, since no study has ever been conducted in this field. However, it should be noted that the buildings generally stand parallel to the sea and offer a panoramic view of the beach. The use of the sloping roof, in almost all the houses, offers a highly aesthetically pleasing appearance, as well as protecting it from the sun and providing thermal comfort inside the house.

Some villas have a pergola. This visible structure covers the terraces; it offers a semi-covered space that protects from the sun without reducing the opening on the outside. Their curved (concave) shapes face the prevailing winds and increase the width of the opening overlooking the sea.

### *2.2.2. Post-independence*

During the first decades that followed Independence, Algerians occupied the real estate legacy left by the French.

During the 1970s, the shoreline hosted various occupations, fishermen and the inhabitants of the houses located near the shore, which were erected without building permits, as well as shacks and boat garages with light materials, such as wood, sheet metal and so on.

In the 1980s, the owners of these shelters turned them into permanent constructions, without any authorization from the public authorities. During this time, population growth and rural depopulation led to an increase in the demand for real estate and tourism in Ain El Turc [10]. For example, allotments for individual dwellings and collective dwellings encroached upon lands set aside as areas for tourist expansion.

The land close to the shore was dominated by solid constructions, which were responsible for the narrowing of the beaches, since they hindered the sedimentary exchanges with the coastal dunes [11] (Sediment exchange occurs naturally between the coastal dunes, beaches and beach front, the reserves of sediment acting as a way of compensating for beach erosion deficit). The construction blocks situated very close to the shore prevented this exchange, causing the beach area to narrow.

The regulations in the 90-29 law of December 1, 1990 on urban planning set up the PDAU and POS[2] as urban planning instruments, as well as providing for the issue of building permits and other urban certificates [12]. For the first time, the coastal area was defined. On the other hand, it is with the enactment of this law that the “excesses” in urban planning and construction in Algeria started. This is not only closely linked to the political crisis that the country went through, but also, and above all, to the security situation[3] that followed [10].

The main directions of the Master Urban Planning programme recommended enhancing the tourist character of the region and to respect the standards of construction in order to preserve the urban skyline of the seaside town.

“*For this town, the extension of urbanization must preserve the spaces and enhance coastal sites and landscapes and the required environments for biological balances, and must take place in accordance with the provisions of the POS. Any construction on a strip of land of 100 meters wide from the shore is subject to non-aedificandi easement. However, constructions requiring proximity to water may be authorized*.”[4]

These studies warned against the misguided actions of the urbanization in the 90s. They even prescribed the demolition of buildings located in the 100-meter strip. These prescriptions, however, were not followed by any action from the authorities.

## 3. Analysis of the buildings in the study area (St Rock)

A field survey was conducted in the Saint-Rock district from a qualitative sample consisting of dwellings erected in three different periods:

1. Dwellings inherited from the colonial time.
2. Dwellings built between 1962 and 1990.
3. New dwellings built from 1990 to date.

The aim of this step was to check, on the one hand, if the seaside constructions had evolved and, on the other hand, if they met the specific features of the seaside site.

This study is based on the combination of several investigative tools: surveys, photos, archive consultation (graphic, iconographic and written documents), etc.

The bibliographic investigation stage enabled us to highlight the formal characteristics of the seaside dwelling namely the setting, the orientation and the relationship with the sea, through an analysis grid that lists the architectural elements that compose this dwelling.

Saint Rock, a district located east of the coastal town of Ain El Turc, is made up of 423 dwellings characterized by varied architectural typologies.

Based on the date of construction, the various criteria of the established analysis grid were applied to each of the houses in the study area.

## 4. Presentation and location of the studied area: “Saint Rock” district

The Saint Rock district is located at the eastern end of the city of Ain el Turc (Figure 1). Its perimeter covers an area of 89 HA and is bordered as follows:

To the North by the Mediterranean Sea
To the East by El Murdjajou Mountain
To the West by the Paradise Beach district
To the South by new urban extensions

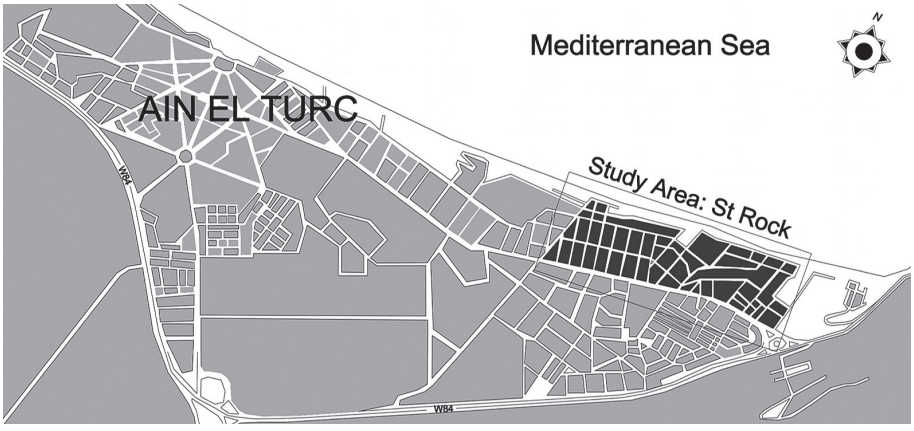


*Figure1. Location of the Saint Rock study area (Source: author).*

## 5. Results of the study

The houses were classified according to two construction times, the colonial period and post-independence period. However, the results showed that during the time of post-independence, and from 1990, a new architectural typology appeared: houses that look like "*immeubles-villas*"[5] that do not take into account the presence of the sea. This type of architecture has specific features: it is very high, with heavy land use, unsuitable colors and materials, very small openings, as well as commercial premises that occupy almost every ground floor.


*Figure 2. Typology of architecture in the study area (Source: authors).*

Out of the 423 studied dwellings, 115 houses, i.e. only 26% respect the characteristics of seaside buildings (Figure 2).

### *5.1. The seaside house dating from colonial times (1920-1962)*

The first historical period is thus illustrated by the colonial house designed with great respect for its environment and takes into account the presence of the sea.

This kind of house stands parallel to the seashore and offers a 180 ° panoramic view of the sea (Figure 3).

The analysis grid confirmed that 81% of the principles of seaside architecture were present, namely, the use of architectural devices and the use of outdoor spaces. The seaside style of the colonial period is present in more than 80 houses, that is to say 18% of the entire field study.

The table below represents the percentage of integration of the three parameters of the seaside architecture, the average sum of the latter, i.e. 81%, confirms the seaside style of this dwelling (Table 2)

*Table 2. Integration rate of architectural seaside elements for the 1920 -1962 colonial period (Source: authors).*

| 1920 - 1962 | Description of the devices | *INTEGRATION RATE OF THE PRINCIPLES OF SEASIDE ARCHITECTURE* | |
|---|---|---|---|
| Spatial composition & architectural shape | 1. Siting set back from the street | ● | 83% |
| | 2. Orientation towards the sea | ● | |
| | 3. Simple and multi-storey massing | ● | |
| | 4. Height: ground floor + 1 with basement | ● | |
| | 5. No addition | | |
| | 6. Materials: stone, wood, lime | ● | |
| Architectural elements | 1. Pitched roof | ● | 80% |
| | 2. Color fitting with natural space | ● | |
| | 3. Veranda | ● | |
| | 4. Canopy to protect from rain | ● | |
| | 5. No frontsteps | | |
| | 6. No loggia | | |
| | 7. Two dormers on the roof to light and ventilate the attic | ● | |
| | 8. Bow window | ● | |
| | 9. Pergola | ● | |
| | 10. Porch at front of the house | ● | |
| | 11. Ground floor balcony along the east side for moving around the house | ● | |
| | 12. Balcony in front of the daytime spaces | ● | |
| | 13. Path around the house that protects against infiltration | ● | |
| | 14. Threshold | ● | |
| | 15. No oriel | | |
| Outdoor landscaping & relationship with the environment | 1. Small wall fence with vegetation | ● | 80% |
| | 2. The terrace is oriented towards the sea | ● | |
| | 3. A 70m² gazebo to enjoy the sea view | ● | |
| | 4. No kiosk | | |
| | 5. The garden goes around the house | ● | |
| Number: 80 houses | | 81% = Seaside architecture | |

● Presence of architectural elements

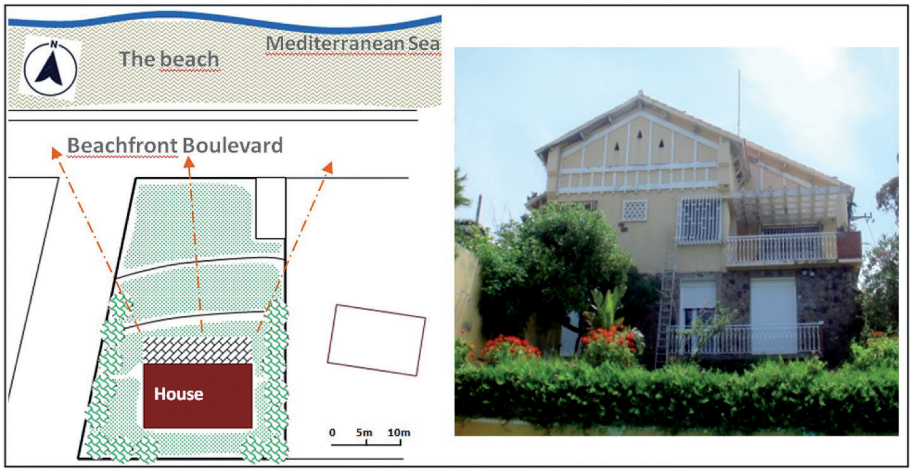


*Figure 3. Colonial house. Ground plan and photo (Source: authors).*

Houses are mainly set back from the street, often respecting lateral margins (set back from the terraced houses to free up large outdoor spaces around the house). Two major types stand out:

1. The one-storey houses (vertical houses) located by the sea on the lower part of the slope of Ain El Turc are often covered with steep pitched roofs, as also between the waterfront boulevard and Rue Melinette where the slope is very steep (Figure 4).

2. The elongated shapes (horizontal house) in the upper part of the city embankment are often single-storey constructions covered by a single roof made out of tiles (Figure 5).

*Figure 4. House with vertical shape (Source: author).*

*Figure 5. House with horizontal shape (Source: author).*

The layout of the house is essentially guided by the configuration of the parcel of land and its orientation: the constructions follow a landscape sequence. They are lined up next to each other overlooking courtyards that open out toward the sea.

The volumes are simple shapes.

On the seafront, small volumes come right next to the large ones, freeing up recesses. This arrangement allows the preservation of the privacy of the occupants (Figure 6).

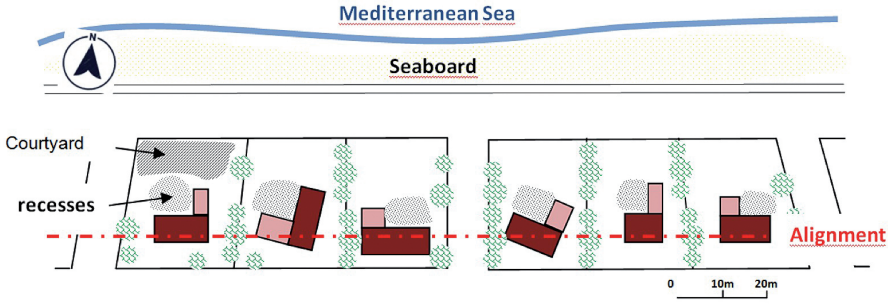


*Figure 6. Alignment of houses facing the sea (Source: author).*

Various materials are used, for example, stone and tile.

The large openings are mainly oriented towards the sea.

The fence surrounding the front garden creates a transitional space between private and public spaces. The fence generally consists of a small stone wall, on top of which sits an iron grid, the whole combined with vegetation. Many of the houses in the

St. Rock district have real heritage significance relating to their strong architectural quality such as:

- shape diversity;
- variety of architectural elements, including canopies, pergolas, loggias;
- variety of roofs with particular details, such as dormers;
- lime and sand plasters combined with stone and brick moulding;
- nice dainty wooden carpentry, colored shutters.

### *5.2. Post-independence habitat*

#### *5.2.1. The 1962 -1990 period*

Built in the 1970s, this typology is represented by 19 houses in the St. Rock area. Its architecture is related to the sea.

The analysis confirmed the presence and respect of 69% of the principles of seaside architecture.

The seaside style of the 1962-1990 period appears in 4% out of the total dwellings of the study area and represents 16% of the 115 seaside style houses.

The table below shows the integration percentage of the three parameters of the seaside architecture; the average sum of the latter, which is 69%, confirms the seaside style of these dwellings (Table 3).

*Table 3. Integration rates of seaside architecture elements for the post-independence period 1962-1990 (Source: authors).*

| 1962 - 1990 | Description of the Devices | *INTEGRATION RATE OF THE PRINCIPLES OF SEASIDE ARCHITECTURE* | |
|---|---|---|---|
| Spatial composition & architectural shape | 1. Siting set back from the street | ● | 83% |
| | 2. Orientation towards the sea | ● | |
| | 3. Cubic multi-storey shape | ● | |
| | 4. Height: ground floor + 1 | ● | |
| | 5. No addition | | |
| | 6. Materials: concrete, steel, glass | ● | |
| Architectural elements | 1. Flat roof | ● | 66% |
| | 2. White color, fitting in with the natural space | ● | |
| | 3. No veranda | | |
| | 4. Cantilevered canopy | ● | |
| | 5. No frontsteps | | |
| | 6. Two loggias- | ● | |
| | 7. No dormers | | |
| | 8.Glazing | ● | |
| | 9. Pergola | ● | |
| | 10. A cantilever instead of porch | ● | |
| | 11. No gallery | | |
| | 12. Several balconies | ● | |
| | 13. All facades in ceramic | ● | |
| | 14. Threshold | ● | |
| | 15. No oriel | ● | |

| | | | |
|---|---|---|---|
| Outdoor landscaping & relationship with the environment | 1. Very high fence | | 60% |
| | 2.Terrace is oriented towards the sea | ● | |
| | 3. A gazebo of 42m² to enjoy the sea view | ● | |
| | 4. No Kiosk | | |
| | 5. The garden surrounds the house | ● | |
| Number: 19 houses | | 69% = Seaside architecture | |

- Presence of architectural elements

Composed mainly of a pure form which occupies a small area in a large plot, the rest is a summer lounge, with vegetation surrounding and closing the parcel, thus giving a very pleasant micro-climate inside (Figure 7).

One distinct feature of the houses of the colonial period is found in the use of new materials, such as concrete, which allowed for larger openings, for example (Figure 7). The pitched tiled roof is no longer an obligation with the advent of concrete and new waterproofing techniques, which made it possible to create accessible terraces.

Concrete cantilevers have replaced canopies that used to be made with a wood and tile framework; bay windows on the façade facing the sea have been replaced by strip windows that provide direct views out onto the sea.

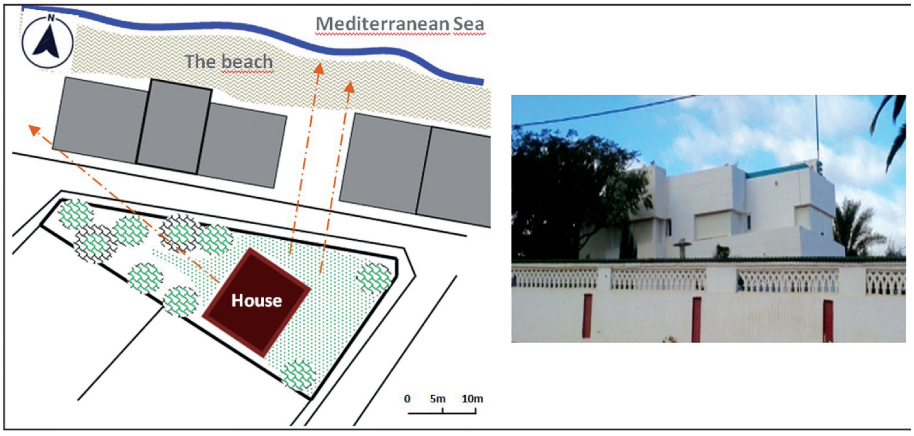


*Figure 7. Post-independence seaside housing: ground plan (Source: author).*

The design of the houses during the 1980s in St. Rock, that took into account some of the architectural seaside features, allowed the preservation of the architectural character of the coastal house as well as the seaside landscape.

### *5.2.2. The 1990 -2018 period*

This period includes two types of dwellings:

- *The contemporary "non-seaside" house*

These houses appeared in the 1990s and are the kind of dwellings that do not fit into the environment and do not include the sea as a key element in their architectural

design. Their height is very important; they occupy a large part of the parcel and are built with materials that do not adapt to suit the proximity of the sea.

The analysis grid confirmed that only 13% of the architectural composition elements linked to the seaside style exists. This architecture can be seen on 308 dwellings, i.e. 72% of the field study. 92% of these houses were built from the 90s on to the present day.

The table below shows the integration rate of the three parameters of the seaside architectural spatial composition, architectural elements, and landscaping. The average sum of these, that is to say 13%, confirms that these dwellings do not meet with the seaside style (Table 4).

*Table 4. Integration rate of seaside architecture elements for the contemporary time 1990-2018 (Source: authors).*

| 1990 - 2018 | Description of the Devices | *INTEGRATION RATE OF THE PRINCIPLES OF SEASIDE ARCHITECTURE* | |
|---|---|---|---|
| Spatial composition & architectural form | 1. Siting aligned with the street | | 50% |
| | 2. Orientation towards the sea | ● | |
| | 3. Cubic multi-storey shape | ● | |
| | 4. Height: ground floor + 4 | | |
| | 5. No addition | | |
| | 6. Materials: concrete, steel, glass | ● | |
| Architectural elements | 1. Flat roof | ● | 06% |
| | 2. Colors are not suitable | | |
| | 3. No veranda | | |
| | 4. No canopy | | |
| | 5. No front steps | | |
| | 6. No loggias | | |
| | 7. No dormers | | |
| | 8. No glazing | | |
| | 9. No pergola | | |
| | 10. No porch | | |
| | 11. No gallery | | |
| | 12. No balconies | | |
| | 13. No free space surrounding the house | | |
| | 14. Threshold | | |
| | 15. No oriel | | |
| Outdoor landscaping & relationship with the environment | 1. No fence | | 00% |
| | 2. No terrace | | |
| | 3. No gazebo | | |
| | 4. No kiosk | | |
| | 5. No garden | | |
| Number: 308 houses | | 13% = non-seaside architecture | |

● Presence of architectural elements

This type of house is dominant in St Rock and represents more than 308 buildings built from the 1990s on; they are unconnected with their environment, the sea (Figure 8). The fences of the new constructions are very high walls, sometimes more than 3 meters high, which block the view (Figure 9). Most of the time they are multi-storey buildings with ground floors dedicated to commercial activities (Figure 10).

This type of construction does not fit into the seaside site, its structure usually lending itself to making a profitable income because they include rental apartments. We have even observed the division of certain parcels of the colonial era into several lots (the original houses, whose surface area allowed development of the immediate exterior, have undergone inappropriate modifications for lucrative reasons).

Given the observations made during the field study, it is evident that most of the recently built dwellings in Ain El Turc do not bear the most expressive features of seaside architecture.

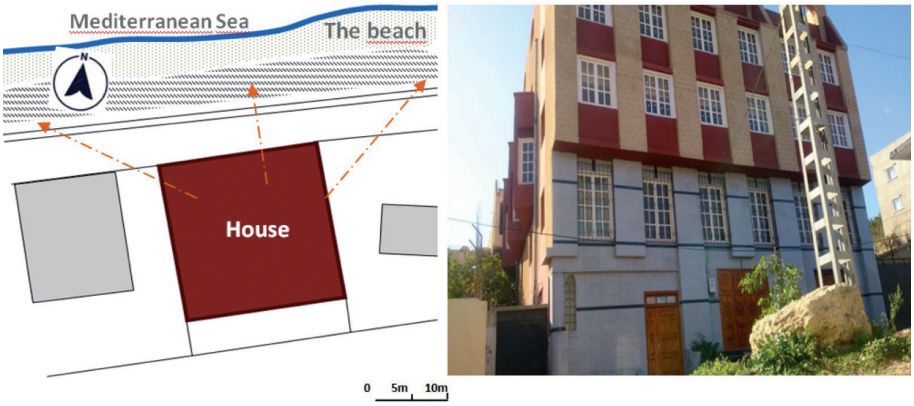


*Figure 8. Contemporary non-seaside house: ground plan (Source: author).*

*Figure 9. New house in St Rock with walls that exceed 3m in height (Source: author).*

*Figure10. Individual house at St Rock more than 19 m high, standing only a few meters from the sea (Source: author).*

- *The contemporary "seaside" house (2010-2019)*

This new generation of housing on the seaside fits in with a lifestyle that favours the sun as well as the view, due to the fact that improved comfort is sought by paying attention to the environment. It represents 3% of the seaside houses in the field study, i.e. 16 houses.

The table below represents the integration rate of the three parameters of seaside architecture. The average sum of the latter, that is to say 77%, confirms the seaside style of these dwellings (Table 5).

*Table 5. Integration rate of architectural seaside elements for today 2010-2019 (Source: authors)*

| 2010 - 2019 | Description of the Devices | *INTEGRATION RATE OF THE PRINCIPLES OF SEASIDE ARCHITECTURE* | |
|---|---|---|---|
| Spatial composition & architectural form | 1. Siting set back from the street | • | 100% |
| | 2. Orientation towards the sea | • | |
| | 3. Complex shape | • | |
| | 4. Height: ground floor + 1 | • | |
| | 5. Extension | • | |
| | 6. Materials: high-performance concrete, smart glass | • | |

| | | | |
|---|---|---|---|
| Architectural elements | 1. Flat roof | ● | 53% |
| | 2. Suitable colors | ● | |
| | No veranda | | |
| | 4. Cantilevered canopies | ● | |
| | No front steps | | |
| | 6. Several loggias | ● | |
| | No dormers | | |
| | 8. Abundant glazing | ● | |
| | No pergola | | |
| | 10. Concrete porches | ● | |
| | No gallery | | |
| | 12. Balconies | ● | |
| | No free space around the house | | |
| | 14. Threshold | ● | |
| | No oriel | | |
| Outdoor landscaping & relationship with the environment | Low fence in printed concrete | ● | 80% |
| | Several terraces | ● | |
| | Gazebo with a pool. | ● | |
| | No Kiosk | | |
| | Gardens | ● | |
| Number: 16 houses | | 77% = Seaside architecture | |

● Presence of architectural elements

Out of the interviews we had with some of the owners of these houses, it turns out that the architects who designed these homes were inspired by the old colonial houses. Among the principles that were followed we can name contemplation, protection, and transition. However, new techniques and materials have been used, such as high-performance concrete and special glass. This kind of glass allows large openings overlooking the sea to be included and at the same time provides protection from the sun's rays (Figure 11).

As regards the interior layout of the house, several bathrooms and a fully fitted kitchen can be found, the open plan allowing flexibility and great transparency between indoor and outdoor spaces.

The pitched roof disappears and is replaced by accessible roof terraces that contribute to the lightness of the volume and act as a gazebo.

As in the colonial house, the first floor includes a living room, whereas on the ground floor are the annexes: kitchen, terraces, pergolas, swimming pool, etc.

The new seaside house is geometrical and minimalist; it fits well into the environment and is surrounded by walls that provide protection against intrusion and also against prevailing winds. Its level varies from one to two storeys with a terrace facing the horizon (Figure 11). The interior is bright; the lines are pure, and the large windows give a feeling of freedom. This architectural trend is increasing in the Bay of Ain el Turc.

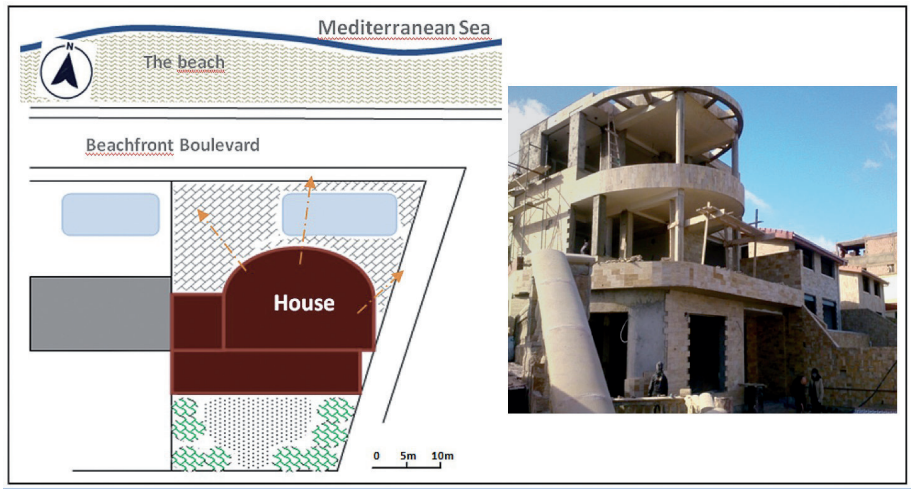


*Figure11. Ground plan of a contemporary seaside house (Source: author).*

## 6. Conclusion

The coastline is a geographical entity that calls for specific urban planning and architecture.

In its design, the seaside house has an association between the elements used and the constraints of the site. Thus, the view is associated with the bow window and weather protection with the use of awnings and protruding roofs.

Ain El Turc seaside resort has seen its architecture changing and evolving in the past decades. It has several types of architectural structures, some of them taking into account the specificities of the coast and the sea, while others disregard them.

The first historical period is thus illustrated by the colonial house (represented by 18% of the houses in the study area), which was designed with respect for its environment.

During the 1980s, the design of houses in St Rock took into account certain characteristics of seaside architecture, but the material used in its construction was mainly concrete (represented by 4% of houses in the study area).

From the 90s on, the constructions are houses which do not respect the environment and do not integrate the sea as a primary element into their architectural design. This is a new architectural typology very common in the study area (72%) resembling apartment buildings. From the early years of the 21st century, a new generation of house, adapted to a lifestyle that favors the sun and scenic views, very rare in Ain El Turc (only 3%), has appeared.

From now on, the notion of seaside house is doomed to disappear, contained by the emergence of new detached houses, much more like buildings which disfigure the coastal landscape. Thus, the architecture is changing and leading to an incoherence in the coastal landscape, distorting the notion of seaside architecture to the detriment of the maritime landscape.

### Notes

[1] Led by a new mayor of the municipality of Ain el Turc, August Pessoles during the period 1943-1947.

[2] PDAU Master Plan of Planning and Development, POS land use plan.

[3] During the period of civil war that affected the country in the 90s.

[4] Study of the PDAU Ain El Turc, developed by the URBOR design office, in 1997.

[5] Very large high villas that look like blocks of flats.


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**Summary**

The sea strongly contributes to the identity of coastline areas. Moreover, it has been demonstrated that the coastline is a geographical entity which calls for specific organization.

From an architectural point of view, design elements have been associated with the assets (or constraints) of the site. Thus, the view is associated with the bow window, protection against the climate with canopies and protruding roofs, and quality of the soil and bedrock. Integration into the site is also highly desirable, both in form (ship) and in construction materials.

The urbanization of coastal areas in Algeria is a colonial fact. In pre-colonial times, little importance was given to these areas, whereas later they became a priority: port sites, the speed of communications with Europe, rich agricultural plains, a mild climate and welcoming beaches. The developments and seaside constructions carried out during this period were part of the logic of attractiveness to welcome more European settlers and promote the sedentarization and growth of those already living in Algeria.

After independence, political and economic choices did not unfortunately take into account the geographical and climatic specificity of Algeria's coastal zones. Thus, population growth and rural depopulation have led to a sharp increase in the demand for real estate, which has resulted in unbridled urbanization, regardless of the seaside vocation of these territories.

In this article, based on the case of the seaside resort of Ain El Turc, which has colonial architectural production of an exceptional quality that takes into account the

specificities of the coastline and the presence of the sea, the aim is to assess and verify if this architecture was perpetuated after independence.

To this end, we have highlighted, through bibliographic research, the characteristics of seaside architecture from the 19th and 20th centuries and those of the contemporary time.

An analysis of all the dwellings located in the Saint Rock district in the municipality of Ain El Turc consisted in identifying these characteristics and establishing a classification of these constructions.


**Riassunto**

Il mare contribuisce fortemente all'identità delle zone costiere. Inoltre, è stato dimostrato che il litorale è un'entità geografica che richiede un'organizzazione specifica.

Da un punto di vista architettonico, elementi di design sono stati associati agli asset (o vincoli) del sito. Pertanto, la vista è associata al bovindo, alla protezione dal clima con tettoie e tetti sporgenti e alla qualità del suolo e del substrato roccioso. Anche l'integrazione nel sito è altamente auspicabile, sia nella forma (nave) che nei materiali da costruzione.

L'urbanizzazione delle aree costiere in Algeria è un fatto coloniale. In epoca precoloniale, a queste zone veniva data poca importanza, mentre in seguito divennero una priorità: siti portuali, velocità di comunicazione con l'Europa, ricche pianure agricole, clima mite e spiagge accoglienti. Gli sviluppi e le costruzioni marittime realizzate in questo periodo facevano parte della logica di attrattività per accogliere più coloni europei e promuovere la sedentarizzazione e la crescita di coloro che già vivevano in Algeria.

Dopo l'indipendenza, le scelte politiche ed economiche non hanno purtroppo tenuto conto della specificità geografica e climatica delle zone costiere algerine. Pertanto, la crescita della popolazione e lo spopolamento rurale hanno portato a un forte aumento della domanda di immobili, che ha portato a un'urbanizzazione sfrenata, indipendentemente dalla vocazione balneare di questi territori.

In questo articolo, basato sul caso della località balneare di Ain El Turc, che ha una produzione architettonica coloniale di una qualità eccezionale che tiene conto delle specificità della costa e della presenza del mare, lo scopo è valutare e verificare se questa architettura è stata perpetuata dopo l'indipendenza.

A tal fine, abbiamo messo in luce, attraverso la ricerca bibliografica, le caratteristiche dell'architettura balneare dei secoli XIX e XX e quelle della contemporaneità.

L'analisi di tutte le abitazioni situate nel distretto di Saint Rock nel comune di Ain El Turc è consistita nell'individuare queste caratteristiche e stabilire una classificazione di queste costruzioni.