

The port of Algiers, a territory of anchorage, exchange, and defense: Reconstruction of the process of its consolidation until 1830

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Abstract

The port of Algiers is one of the natural ports that have hosted port towns throughout all times and worldwide. It was at the origin of the birth of today's city: Algiers, the capital of Algeria. Its consolidation, throughout history, has made the port of Algiers an area of relevance necessary for its development, from the first act of its anthropization by constructing the Penon of Algiers to its consolidation in the 16th century into an urban entity. Thus, it was equipped with its fortification system to ensure the protection and defense of the city against European attacks coming from the Mediterranean Sea. Today, it forms a detached part of the urban dynamics of the city. The old Turkish port (the admiralty: the arsenal, the admirals' house, the stores, etc.) is occupied by the military, and the quays (built during the ports' extension from 1830) are used for port traffic. This paper presents historical research that allows us to recognize the mode of the formation and the consolidation of the port of Algiers and to understand its urban structure: the port buildings that compose it and their interrelations. Thus, it allows us to answer the question: how can the port of Algiers provide capital gain to the development of the thousand-year-old city whose historic district "the Casbah" has been classified as a world heritage site since 1992? Methodologically, the research is based on an exploratory approach through the return to historical literature and cartography provided by archival services, notably the Simoncas archives in Spain and the French military engineering fund in Vincennes.

Keywords: Port of Algiers, Admiralty of Algiers, coastal fortification, port buildings.

1. Introduction

According to historians, the meaning of the toponym Algiers, *El-Djezaïr*, refers to the islands *djouzours* (several islands), plural of *djézira* (an island) in Arabic. It is the island located opposite the city, and mentioned by *Ibn Hawqal*, a historian and chronicler in the 10th century (Hawqal, 1992, p. 78). The islet spreading in width from East to West formed a well-sheltered natural port allowing safe wintering. Moreover, the place was designated, in the 11th century, by the port of the islands or *Merça El-Djezaïr*, a port very frequented by sailors from *Ifrikia*, Spain and other countries (El-Bekri, 1913, pp. 136-137). Thus, it turns out that the port of Algiers

constituted an area, which contributed to the birth, development, and flourishing of the city until today (Menouer, 2018). This article is intended to contribute to the recognition of Algiers's port as an urban entity forming part of the whole city. This urban part contributed, for a very long time, to the urban dynamics of the city until its isolation as a military zone (seat of command of naval forces) and commercial transit zone. The objective is to highlight all of its heritage resources capable of adding value to the protected sector, which was declared a world heritage site in 1992. Methodologically, the research is based on an exploratory approach,

returning to historical literature and cartography provided by archival services, notably the Simoncas archives in Spain and the French military engineering fund in Vincennes.

2. The port of Algiers: a humanized natural island situation

The rocky point penetrating the sea at 36 degrees North latitude and 0°44 East longitude was a natural site favorable to the formation of human settlement. This situation is the exact position of the lighthouse of Algiers's port. Indeed, the urban core has evolved to give birth to the city of Algiers, the capital of the central Maghreb from the 16th century, and the capital of Algeria today. The origin of Algiers toponym refers to the presence of a series of reefs aligned in the water, over a length of two hundred meters and four islets arranged in such a way as to constitute with the line of rocks a "natural basin in the shape of a T" (Belkadi & Benhamouche, 2003, p. 26). The emplacement's geomorphology allowed very early anchorage because it was protected from the west winds by the Bouzaréah massif and the east winds by Cape *Temenfoust* (1). In addition, the island opposite the cape constituted a natural breakwater on the east side. Later it was used to consolidate the Admiralty Darse (Navy command headquarters), the old Turkish port of Algiers. The rocks' series aligned in the water served as foundations for *Kheireddine* pier and the main island among the four for the solid ground of the former Grand Môle on which the famous Spanish fortress, the Penon of Algiers will be erected.

2.1. Cape's Island: future Admiralty of Algiers

The natural port of Algiers must have been one of the Phoenician relays, which gave rise to island establishments where places of exchange were established: the Punic trading posts (Carayon, 2008, p. 494). These island situations have often originated from the consolidation of several urban centers along the coasts of both shores of the Mediterranean. In the case of Algiers, the port remained a natural shelter until the arrival of the Turks; unlike the ports of Tipaza, a Phoenician Môle with a sea wall, and Cherchell, which was equipped with some arrangements in the Punic period. In Cherchell, Phoenician and Punic sanctuaries, and a causeway between the island and the continent testify that its port played the role of ship guiding (Carayon, 2008, pp. 1355, 1367).

The development of the Algiers port, from 1830, prevented any excavation undertaking already in the colonial period (Lespès, 1930, pp. 51-53). Thus, in the absence of archaeological traces, a comparative study of Phoenician and Punic ports makes a connection between the configuration and layout of the admiralty islet of Algiers and that of Carthage: "The similarity of shapes with the circular port of Carthage is striking" (Carayon, 2008, p. 495). This comparison was based on some topographical elements, in particular, the presence, on the western façade of the bay, of a circular islet that appears in the middle of a small cove. The islet was still visible in a representation of the port dating from 1837.

Arabic literature attests to the defensive role of the island in front of the city, already in the 10th century. According to *Ibn Hawqal*, it had constituted a place of refuge for the city's inhabitants during possible attacks to which it was subject, during this period (Ibn Hawqal, 1992, p. 78). Later, and from 1523, the line formed by the reefs served as foundations for the pier that connected the continent to the sea. It was the first undertaking in the humanizing process of Algiers port, after the construction of the Spanish tower: the penon. (Berbrugger, 1860, p. 6).

Indeed, the Penon (2) was a defensive work erected in 1510 by Pedro Navarro, on the largest of the islets opposite the city (Devoulx, 1876, p. 480). It was thus called because of the rock base that served as its foundation (Berbrugger, 1860, p. 16). According to Rang Sander, the Penon was built in place of a tower established by the first Andalusians who arrived in the city. According to the author, it was intended to serve as a lighthouse for ships (Rang, 1837, p. 363). The Spanish fortress consisted of two works, as indicated by

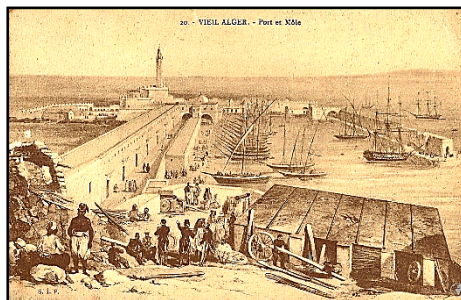


Fig. 1- The *Kheireddine* pier and the Môle (<https://www.geneanet.org/cartes-postales/view/158715#0>, last access October 2024.)

an extract from an Arab chronicle entitled “*Zohrat en-Nayerat*”: “It existed, in the very place where we see the tower today of the lighthouse, two fortified works occupied by Christians”.

2.2. Creation of the Darse: The old port of Algiers (the Turkish port)

As soon as he arrived in Algiers, *Keiredinne Barberousse* began the construction of Algiers’ port. He began demolishing the Spanish fortification on Friday, May 21, 1529. The rubble of the fortress had been used to fill “the intervals between the different heads of rocks, the series of reefs and the four islets” (Berbrugger, 1860, p. 6). According to Albert Devoulx, many stone blocks were recovered from the ruins of *Tamentfoust* to complete the work (Devoulx, 1876, pp. 50,51). The objective was to constitute a form of Darse, a worthy port for racing and privateers. Thus, its construction consisted of two major works: the *Kheireddine* pier and the large Môle known as the Admiralty.

2.2.1. The *kheiredinne* pier

Alphonse Rousseau used the Arabic text ‘*Zohrat en-Nayerat*’ to translate the term ‘pier’ to “*Kantra*” or bridge (Rousseau, 1841, p. 16). The structure allowed the four islands in front of the city to connect to the mainland. It was named in homage to its builder *Kheireddine Barberousse* (Bernard, 1931, p. 202). Its construction lasted around two years, and the work consisted of establishing a roadway twelve meters above sea level on a development two hundred and ten meters long on a gentle slope (Devoulx, 1876, p. 475) (Fig.1).

The use of the passage created between the city and the islets opposite, required a system of protection against sea waves, which often beat in the direction of the East and the North. It was established in two phases. First at the time of *Kheireddine* in 1532, by creating a wall fitted with embrasures (Devoulx, 1876, p. 470). Then, later in the time of *Salah Rais* in 1560, an elevation by “a masonry causeway which defended to the North against the sea by a pile of rock” (Imbert, 1907, p. 421).

2.2.2. The Grand Môle and the Penon

Once the pier is consolidated, a median is established by filling a part of the canals that

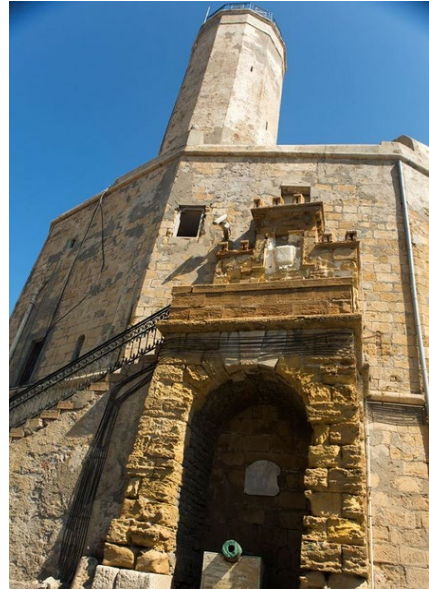


Fig. 2- Algiers Penon now
<https://www.facebook.com/2012259055674869/photos/2798718437028923/>.

separate the four islands. This is how the Môle was created and the contours of the port of Algiers began to take shape.

Under the reign of *Hassan Agha* (3), the land created was protected by erecting several batteries in the form of simple walls pierced with narrow embrasures and sheltering a few small-caliber cannons (Devoulx, 1876, p. 351). The end of the works of the Môle was commemorated by the manufacture of the *Baba Merzoug* cannon in 1542.

The French called it “the consular”. It had been transferred, on July 27, 1833, to Brest where it was erected in the middle of the “Place d’Armes” (Klein, 2003, p. 33) (Fig.2).

The preserved part of the Spanish fort was later used to build *Bordj El-Fanar*, or the lighthouse (Berbrugger, 1860, p. 6). The work was a twelve-sided tower raised on an octagonal base (the rest Spanish Penon) and topped with a lantern forty meters above sea level. The tower was built during the reign of *Arab Ahmed Pasha* in 1573. It has had several names: the lighthouse castle, the round castle, and *Bordj el Fanar* (Devoulx, 1876, p. 481).

Due to its importance, it constituted “the headquarters of the gunners and the place of their

meetings” (Tassy, 1725, p. 162). It had fifty-five cannons arranged on four floors. *Bordj el-Fanar* also contained a large cistern and a powder magazine that exploded in 1845 (Klein, 2003, p. 33). To strengthen the defense of the Môle, *Arab Ahmed Pasha* built a second tower, more modest than the lighthouse, to guard the port. (Devoulx, 1876, p. 471). Thus, the development and consolidation process of the Algiers port began through the development of several maritime structures. It therefore became an urban part in its own right and was equipped with its defensive system.

2.3. The fortification works of the Darse (the old Turkish port)

From the arrival of the Turks until the eve of the capture of Algiers by French military troops, the Darse constituted its strongest part (Devoulx, 1876, pp. 473-489). Its security was reinforced particularly in the 17th century following Duquesne's attacks on the city. Indeed, the fortification of the port for this purpose has seen the construction of several works (Benselama-Messikh, 2014) (Fig.3).

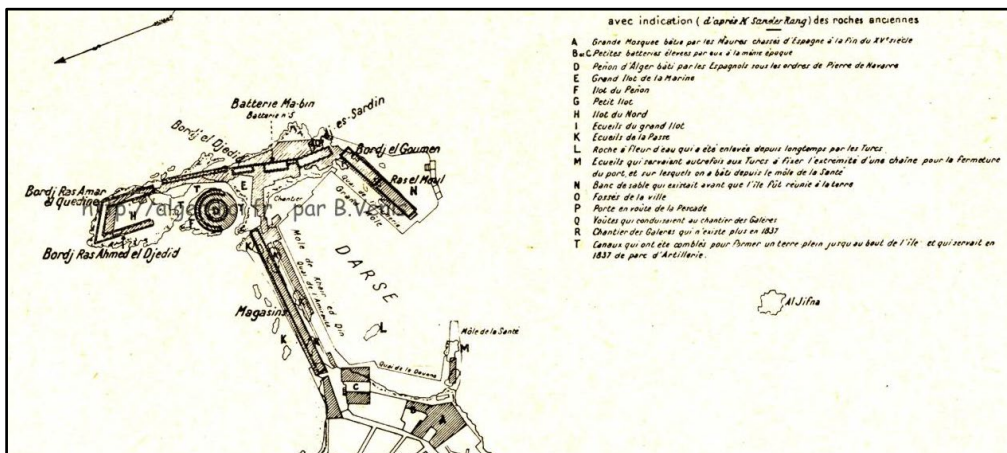


Fig. 3- The old port of Algiers and its fortification system (Klein, 2003).

- *Bordj Ras Ammar El-Kedim*, where the battery of Cape Ammar the Elder, was raised on an islet that remained isolated from the lighthouse islet for a long time. After 1830, it was designated Battery No. 13.
- *Bordj Ras Ammar El Djedid*, raised on the canal embankment between the lighthouse islet and that of *Bordj Ras Ammar El-Kedim*. It was built on two floors during the time of *Houssein Dey*.
- *Bordj El-Djedid*, *Bordj Mohamed Pasha* or the new fort, it was raised in 1773-1774 to defend the Môle (Devoulx, 1876, p. 48). After 1830, it was called the lower battery n°4.
- *bordj mabbin* (the middle fort), established in an interval, “left until then devoid of cannons”. It was used to give the traditional 21-gun salute to foreign warships. On the screen, the salute was distributed between several forts: “*Bordj-el-Fenar*, 5 shots; *Bordj-el-Djedid*, 4 shots; *Bordj-Essardine*, 4 shots; *Bordj-el-Goumen*, 4 shots; and *Bordj-Ras-el-Moul*, 4 shots. The innovation of firing 21 shots from the same fort was the work of *Husseïn Pasha* (Devoulx, 1876, p. 48).

- *Bordj El-Goumen* or the cable fort. It was thus named because it was located near the rope store. The fort was built on the site of the old lookout battery erected in 1573. After 1830, it bore the number 01.
- *Bordj Es-Serdine* (the sardine fort) was built in 1666-1667 and rebuild in 1776-1777. A marble



Fig. 4- Algiers port, an area open to citizens (<https://www.algerie-philatelie.net/algerie-cpa-cartes-postales-ville-detail-PC00000676>).

plaque with a fish still exists on its face. (Colin, 1901, p. 60).

- The battery housing the *Baba-Merzoug* cannon called the consular by the French (Devoulx, 1877, pp. 54-56). It was a vault that connected *Bordj Es-Serdine* and *Bordj el Goumen* (Colin, 1901, p. 199).

- *Bordj Ras el Moul* (the head of the Môle) was erected in 1704. It was also, called *Bordj El Hadji Ali Ben Hussein*, who restored it between 1703-1707 (Devoulx, 1877, p. 59).

3. The Darse: a commercial urban area

In the 16th century, the old port constituted a commercial transaction zone between Algiers and several cities and abroad, notably Europe. It was the main area of activity for the city (Fig.4). At this period, it had several commercial buildings and infrastructures, including:

3.1. The port stores

According to an epigraphic document, *Ibrahim Ibn Moussa* (4) built a grain store at the Algiers port (Colin, 1901, pp. 63,64). In 1814, seven more stores were added, during the reign of *Hadj Ali Pasha*. They were built along the pier, on the north side, looking at the *Bab el-Oued* gate (Devoulx, 1876, pp. 478,479). On the eve of the city's capture in 1830, the port had ten to twelve stores, according to Vincent-Yves Boutin: "one butter store, one oil store, and eight to ten wheat stores" (Boutin, 1830, p. 207). In addition to these commercial infrastructures, Haëdo mentions military stores in the port of Algiers. These beylik stores (government stores) were used to store the oars of the ships, which were kept with great care. According to Haëdo, "We did this so that while the Turks were on land with their baggage, the rowers who were Christians would not flee with the ship" (Haëdo, 1612, p. 83)

3.2. The arsenal

According to historical descriptions of Algiers, the arsenal, or the site of the galleys and other naval buildings, occupied a vast area accessible only by sea through two gates "in the form of arches built in stone, and having the necessary dimensions to give free passage to an unarmed galley" (Haëdo, 1612, p. 25). The first door was closed by an adobe wall raised about a meter high (Braun & Hogenberg, 1575, p. 59). It had to be demolished each time a ship to be repaired had to

enter the arsenal. The second door was closed by a wooden door with a lock and padlock and was used for access by arsenal workers. The arsenal itself was made up of two buildings. The first in the shape of a semi-circle was built, according to Haëdo, later than the surrounding wall (Haëdo, 1612, p. 25). It was intended for the construction of light galiotes, called in local language, *frigates* (Haëdo, 1612, p. 74). The second building was edified on the Môle, in its southern beach. The build was intended for the construction of large ships (Peyssonnel & Desfontaines, 1838, p. 449). The wood needed for that had to come from the mountains around the Chercell (Pantera, 1614, p. 427). When "this wood is cut, it is carried to the point of embarkation sometimes by pack animals, sometimes by slaves" (Haëdo, 1612, p. 75). The arsenal also contained a house between the two gates. It was used to house "captains of ships under construction who should not enter the city" (Haëdo, 1612, p. 75). Near the arsenal, a reservoir supplied the port with fresh water which was conducted by an aqueduct from the natural source of Bir-Traria located on the city's northern edge (Imbert, 1907, p. 422). It passed through an Arab cemetery and then penetrated the city at the level of the gate *Bab-El-Oued* (Péré, 1891, p. 80). The Bir-Traria aqueduct was probably, built during the reign of *Arab Ahmad Pasha*, in 1573 (Cresti, 1984, p. 44). Unfortunately, the structure fell into disrepair very early due to lack of maintenance. In addition, the port had to be supplied by a water source converted into a fountain.



Fig. 5- The Admirals' residence and the port fountain (<https://www.vitamedz.com/fr/Algerie/l-amiraute-alger-229637-Photos-0-0-1.html>).

3.3. Admiralty Fountain (or Marine Fountain)

Historical texts mention the presence of a natural source, perhaps the most important for supplying

the city at the time. According to El-Bekri (12th century), it was located, by the sea, near the great vault of the port (1913, p. 136). In 1764-65, the source was equipped with a remarkable edifice by the *Dey Aly pasha* (6). The fountain was named *Aïn* (the source) *Sidi Brahim El-Ghobrini* and then, after 1830, as the Admiralty fountain (Colin, 1901, pp. 125-126). It presents "old earthenware and decorated marble slabs. A grid has protected it since 1934" (Klein, 2003, p. 46). Today, it is located in the military zone of the port (Fig.5).

In 1820, *Hussein Dey* built another fountain. It is *Aïn Bab el-Djezira* named, also the Wine Stall fountain. In 1867, it was moved to the port quay near the vaults, to allow the development of the Boulevard of France. In 1935, the fountain was moved, a second time, to decorate the Antiquities Museum Garden (7) where it is located today in a relatively degraded state.

3.4. The customs house

Unlike the goods of Turkish and Moorish traders that were unloaded at the Môle, the unloading and registration of those of Christian traders had to pass through the customs house. The building is located near the fishery gate, approximately fifteen meters south of the arsenal (Haëdo, 1612, p. 26). The customs house had a courtyard that looked like "a veritable garden planted with lemon trees, banana trees and covered with hornbeams" (Desprez, 1868, p. 56).

3.5. The admirals' residence

The admirals' residence was the gathering place for naval officers. Its construction was completed during the reign of *Dey Hussein*, in 1826-1827. It is located at the end of the Môle above the fountain erected by Baba Ali in 1765.

According to an epigraphic document, the building was quadrangular and topped with a dome "rising to the peak of the sky" (Colin, 1901, p. 231). The house courtyard had four fountains. It was surrounded by a gallery with square pillars (Peyssonnel & Desfontaines, 1838, p. 449). Its windows faced the sea and opened onto the pier towards the interior of the port.

According to the same epigraphic document, the architecture of the admirals' residence was "a new model having been created, ..., and whose plan is a work of art above all praise" (Colin, 1901, p. 231). However, the traces of the original building had been erased completely. In the beginning

of the 19th century, the building was replaced by a new building in neo-Moorish style: the Admiral's Pavilion (Fig.5).

3.6. the port's mosques

Before 1830, the port had two small mosques. The first, *Mesdjid El-Mersa*, the mosque of *Bâb-el-Djezîrà* named, also the mosque of the port, was located to the East, against the residence of the admirals and to the North of the construction site of the large ships. It was a small mosque without a minaret built in 1694-95 by *Hadj Cha'ban* (Colin, 1901, p. 66).

Not far from the mosque, a *Koubba* (a dome) was built in the fortifications. It sheltered the saint *Sidi Brahim El-Robrini El Bahar*, son of *Sidi Brahim El-Robrini* of ChercHELL. The Holy Person must have been buried in this place before the construction of the batteries (Imbert, 1907, p. 435). The second mosque in the port is *Mesdjid El-Houatin* or the fishermen's mosque. It was a small mosque attached to *Djamaa Djedid*. It had two rooms, a *maida* (room used for ablutions) and an oratory above (Devoulx, 1876, p. 150).

4. the old port of Algiers after 1830

At the beginning of colonization, the port was seen as a place of supply of food, ammunition, and materials, for the fleet and the French army operating in Algeria (Lespès, Le port d'Alger, 1921, p. 198). It will be the first step in its isolation from the rest of the city. Until 1848, only a pier anchored on the southern tip of the naval island was built. It was erected in the South direction with an inflection towards the southeast, in the form of a dike of more than 600m. Since then, the port of Algiers has undergone various operations for its development: the creation of a closed port of 90 hectares, preceded by a covered harbor, the joining of the *Djefna* islet to the land, and the installation of navy establishments. All of the planned developments were aimed at its military destination.

The port of Algiers then experienced a second vocation around 1851: the commercial vocation. The result was the development of more than 600 meters of quays, with ramps and staircases linking them to the city. The development of the port also involved the creation of 'The Empress Boulevard' in August 1866 on a set of vaults that housed several stores and a railway station.

Around 1892, there was a second expansion of the port, with the construction of an inner harbor in Agha Bay in the south direction. Thus, the extent of the current port is outlined, an urban entity in the form of a strip extending from the old Turkish port, the Darse to the new Nozhat Esablat port. The main activities of the modern port are economic (import and export of goods) and tourist (passenger traffic). The old port for its part, houses the headquarters of the naval forces command.

Today, the entire port complex constitutes an area separated and isolated from urban dynamics. On the one hand, the possibility of extension seems almost impossible. On the other hand, its position in the city Heart generates social and environmental inconveniences for the population (Fig.6).



Fig.6 - Overview of the old Turkish port of Algiers (<https://www.geneanet.org/cartes-postales/view/7683548#0>).

Thus, the idea of the total or partial transfer of the Algiers port activities arises on the institutional level, within the framework of the Port Master Plan (SNAT, 2030, p. 63). In 2015, the project to create a central port in the locality of *El-Hamdania* in the surroundings of Cherchell was launched, then relaunched in 2020. The mega project was designed as a port city between Algiers and Ténès (Aouissi & Madani, 2017, p. 160). At the same time and as part of the permanent plan for the conservation and development of the Kasbah, the idea of opening up the port is being considered, in particular by moving the headquarters of the naval forces to *Tamestfoust*, the port at the other end of the Bay of Algiers.

5. Conclusions

The current size of the Algiers port is the result of a long process of consolidation, which allowed its evolution from a natural anchorage providing shelter, refuge and exchange to the commercial port of today. This attempt to reconstruct the

process of its formation is intended to be a pretext to initiate reflection on possible methods for the valorization of the old Turkish port as a historic urban entity forming part of the Kasbah protected sector. And therefore deserving to be considered as the homeland of the cultural center of Algiers, an urban part capable of constituting benefit to the development of the thousand-year-old city including the historic district the *Kasbah*, which has been a World Heritage Site since 1992.

Even if the idea of moving the command headquarters of the naval forces seems difficult to envisage, other possibilities prove feasible, such as the recovery of public spaces such as the passage of the *Kheredinne* pier, the square near the fountain and the residence of the admirals, ... These public spaces can reintegrate the urban dynamics of the city while retaining the administrative function of the military zone in some buildings that it already occupies.

Finally, it remains legitimate to ask the question of considering new valuation perspectives; perspectives allowing us to consider what makes the fortune of the largest ports in the world and which is lacking in the port of Algiers. Les expériences étrangères, autour du bassin méditerranéen, mais aussi à travers le monde, peuvent constituer un enseignement fructueux. The first is the port's idea as a new centrality in the city by providing new cultural, tourist, and recreational functions. For example, the port of Baltimore was converted into commercial and recreational areas with marinas and hotels. The second attitude is mainly based on the economic development of ports, like England inspired by the model American to create the Canary Wharf.

It is a business district in London with several high-end businesses and residential areas. In Algiers, the ideal is to find the right measures to promote its ancient port and heritage resources. At the same time, it should be part of the city's dynamism and economic viability.

Notes

- (1) *Temenfoust* is Rusguniae, the Roman city located at the eastern end of the Bay of Algiers
- (2) Penon is the augmentative of Pena, meaning large rock, in Spanish.
- (3) *Hassan Agha* was the successor of *Kheireddine Barberousse*.

(4) *Ibrahim's Ibn Moussa* was an architect, under *Ismail Pasha's* reign between 1669 and 1671.

(5) Cherchell is a town located at 75 kilometers on the West of Algiers.

(6) *Dey Aly pasha* known as *Aly Neksis* or *Bâbâ 'Aly*. He was Dey of Algiers from December 1754 to February 1766).

(7) The Antiquities Museum Garden is the present Garden of Liberty and the former Garden of Galland.

(8) *Hadj Cha'ban* was Dey of Algiers between 1688 and 1695.

(9) The Kasbah is the historic district of Algiers, the part that escaped the demolition that the city experienced during the colonization period.

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