MODERN AGE FORTIFICATIONS OF THE MEDITERRANEAN COAST: EXHIBITION CATALOGUE

Alessandro CAMIZ, Giorgio VERDIANI
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EXHIBITION CATALOGUE

Editors

Alessandro Camiz
Girne American University
International Centre for Heritage Studies
Faculty of Architecture, Design & Fine Arts

Giorgio Verdiani
Università degli Studi di Firenze
Dipartimento di Architettura

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This publication presents a selection of the posters designed by the students of the course entitled History of modern architecture (Arc142) that I taught in the spring semester 2016 at the Faculty of Architecture, Design & Fine Arts of Girne American University. Given the limited space available at for the exhibition of these posters, out of 248 posters we selected only 69, avoiding repetition of the same subject and preferring those bearing high quality in graphic design and presenting contents without big mistakes. All the selected posters are therefore acceptable to be shown in the prestigious venue at the Faculty of Architecture of the University of Florence and published in this catalogue.

The course: History of Modern Architecture

The course, History of Modern Architecture, introduced students to the knowledge of history of architecture, from the late middle ages to modern times. We asked each student to select a case study, in accordance with the FORTMED 2016 conference topic, Modern Age Fortifications of the Mediterranean coast. Our university hosts students coming mostly from Turkey and middle-eastern countries it was therefore an interesting experiment to guide them through the understanding of an important part of history, by analysing the castles, the city walls and towers of their home towns. Some students selected examples from their countries, others selected works from Cyprus, the country where they are currently attending the bachelor in Architecture or in Interior Architecture, others instead selected works on the base of the availability of information and drawings. We asked all the students to select a case study filling in an online Google-spreadsheet, so to avoid duplicates of the same subject. The case study selection using an online list was the first assignment for the class. The exercise was finalised to the understanding of the horizontal organisation of a cooperative research group. The experiment was successful and the students selected 248 different case studies of modern fortifications, constituting a research database with basic information, such as the name of the building, the place, construction year, the height on sea level, the designer, and the geographical coordinates. Some restraints were given to the class for the case study selection: it had to be a military architecture, it had to be built after 1492, it had to be on the Mediterranean. Students were aware that the course was following the requests of an International Conference, and we invited them all to continue their work to be presented as an abstract for papers at the conference. Six of them did and quite successfully are today presenting their paper here in the conference. I would like to name them, thanking for their efforts in this research: Siepan Ismail Khalil, Sara Cansu Demir, Seda Baydur, Göksu Atmaca, Hande Kozan, Ibrahim Suleiman. Alessandro Bruccoleri and Hassina Nafa, both Ph.D. candidates and lecturers at the Faculty of Architecture, Design & Fine Arts of Girne American University, joined later these three groups of students helping with the organisation of the research and the editing of the manuscripts, I would like here to thank them as well. We asked to all the students of the course were to conduct a research on the selected case study. In subsequent steps, they presented the plan, the section and the elevation of the chosen architecture, and a list of references. Then we requested them to write a 100 years chronology with the building as a centre point, and including a list of events in the 50 years after and before the building, including other military architectures, the publication of treatises on military architecture, and literature, art and political events in the
same area or the selected case study. We asked the students to write a short essay describing the artefact, and comparing it with other military architectures taken from the main research database they could access on line, and finally they presented their research in a poster for the final exam.

The functional character of military architecture

The historical thesis that lies behind the course, and therefore behind the exhibition, is that Modern Architecture begins in the XV century in Italy and not in the XX century in England as generally acknowledged. It is generally accepted that Modern history starts in the XV century, usually the date of 1492 is used as a milestone for its beginning, so it is difficult to explain why architecture should follow a different periodization in time. What begins in the XX century is modernism not modernity. Modernity is the consequence of a different way of thinking and organising knowledge, it does reflect directly in architecture with the definition “alla moderna” introduced in this time. In military architecture the necessity to redefine the defence in accordance with the new assault techniques that followed the introduction of gunpowder, is the cause of the modern revolution. But what origins in military architecture at the beginning of the XV century, includes the concepts of rationality, function, economy, site, optimisation, that evidently enter in the domain of architecture way before the statements of the modern movements transformed them into an ideological manifesto. It is in these fortified structures that we find for the first time in history an attempt to define scientifically,

Giacomo Barozzi, Regola del cinque ordini d'architettura con la nuova (sic!) aggiunta di Michelangelo Buonaroti di carte sette, apresso Francesco de Pauli, Roma 1630. Frontispiece.

Michelangelo Buonarroti, Study for the elevation of Porta Pia, (1561 ca), Rome, Drawing n. 102 Ar, Casa Buonarroti, Firenze.
devoid of stylistic references to the past, the discipline of architectural composition. Based on the necessity for the form to solve problems, in this case defence problems, and not only to symbolise something. The architecture that emerges from the examples illustrated in this catalogue offers a wide panorama on modern architecture in the Mediterranean, another type of modern architecture that we can use today to reinstate modernity instead of discontinuing it as postmodernism did. The attention to the function of the building, the use of local materials, the importance of the site, the use of thick and powerful masonry structures, the inclusion and modification of former buildings in the new architecture, are some of the characters that emerge from the analysis of the case studies presented. Could these be taken as a new manifesto of modern architecture?

References


Discovering old places, referencing new ideas

Giorgio Verdiani

“The only true voyage of discovery, the only fountain of Eternal Youth, would be not to visit strange lands but to possess other eyes, to behold the universe through the eyes of another, of a hundred others, to behold the hundred universes that each of them beholds, that each of them is”

Marcel Proust

The Built Heritage of the Mediterranean coasts offers a rare and complex system of traces, of relevant elements, of rich constructions embedded in a wonderful landscape. The intense feelings produced by the sea, the strong fascination raised by the historical and legendary stories, create a very specific and irresistible mood. The mix of many traces may look, sometimes chaotic, the recent expansion of the townscape, the saturation of large areas and the poor architectural beauty of many new building seem to greatly reduce the possibility in having a clear perception of the original value of this territory. But the powerful message of a tower, the majestic presence of a fortress, are often capable to protect the beauty of place, apparently keeping away improper transformations and preserving a wonderful environment made of human and natural transformations. Like it may be seen for the St, Nicholas fortress in Sibenik, Dalmatia, built in the middle of the XVI century. Or at least this feature seems to exist just for the most robust and large and, in the end, lucky of these structures. It happens, just to extract some examples, for the Fortress of Taranto Aragon in Italy, developed starting from 1486 and still in place, or the Fort of San Lucian in Marsaxlokk, Malta, built from the 1610. At the same time there is a large set of fortifications and settlements that have to left their original asset after a rapid or slow siege of new constructions and new urban and/or touristic needs. The many towers incorporated in new urban blocks or even changed into apartments are a clear sign of this defeating of the ancient defensive system. Torrenostra in Torrenostra, Castellón, Spain is a clear sample of this odd conversion and transformation, of this living a previous condition to move into the new urban fabric and being transformed. A large number of samples from Italy and Spain shows these behaviours that somehow “preserve” the building keeping it alive, avoiding its destruction, but at the same time transforms and obliterate many specific aspects. A significant case can be found in the lighthouse of the Cabo de Santa Pola, former the Atalayola tower, near Alicante, Spain, changed into a lighthouse and still working at the safety of the maritime routes. For sure a better destiny for these architectures than been used as a quarry of materials and then falling into pieces. Discovering back the value of these buildings is always worth the effort, understanding the importance of those signs is a significant passage, it teaches about architecture, it teaches about landscape, it teaches about how to create relationship between two very complex design environments. Approaching a tower, a fortress, a defensive settlement, is a learning experience, it can be done in place, on books and online, using the articulated set of digital resources and always developing a better knowledge about a place, an architecture, a relationship between defensive aims and construction science. The subject of the defensive architectures is always fascinating, the strength of the story, of the reason why these architectures have been built, capture the attention and promise a special satisfactory price to all the scholars, students and researchers involved in their personal encounter with this particular built heritage. For this reason, the experience presented here, with its selection of architectural wonders from so many places around the Mediterranean, is not only a catalogue of interesting and rich pieces, but it is a set of meaningful steps in the fields of our past and in a very specific understanding of architecture and its
relationship with the environment. So, it may not be very important how complete, how detailed and accurate, or based on absolutely original representations are the drawings, the models, the texts, the operation of entering the “discover” of a place is a first and important step toward the understanding of architecture of building construction and of defensive techniques. To go in depth in the knowledge of places like those presented in these studies, it is asked to understand the robust link between the needs, the technologies, the social and cultural behaviours of their time, it is asked to completely realize that each architecture is first of all an expression of its own time. And obviously this is not an exclusive of the ancient times, it is a continuous rule. In a certain sense, an architecture of the past, an architecture of the future really does not exist, the only existing architecture is the architecture of the present time. A manifestation of layered decisions of articulated mix of choices, a set of opportunities and twists of fate. An architecture can start in its own environment, it took parts from it, it exploited it and changed it, but it will be changed by the changes, it will face fast transformations, but to the eyes of an acute observer it will show the rich articulation of all the events. It will demonstrate how variable and ever-changing is the landscape and the environment in itself, an island can be changed into peninsula, like it happened in Tabarka, along the Tunis coast, with its Genoese walled city, destroyed in 1741 after an order of the Tunis Bey in the try to avoid any further stranger presence after the Tabarkinian diaspora. A small river or a source of fresh water can get dry, or the seaside can extend its border where before there was only the sea. The towers and the castles show now themselves in the environment of our time, the capacity to recognize the original asset of the territory, the possible changes happened in the surrounding area, are a way to investigate and better understand not only the past story of an area, but also to have some suggestion about what will be its future evolution.

References


Ferraro G. (2002), Da Tabarka a S. Pietro, Nasce Carloforte, Edizioni Grafica del Parteolla


The lighthouse of the Cabo de Santa Pola, former the Atalayola tower, Spain.
List of the poster authors and of the subjects

ADNAN ILTER; Ram Castle, Veliko Gradište, Serbia;
AHMAD ALTALA; Krak Des Chevaliers, Homs, Syria;
AHMED MOHAMED ALI ABU ANZA; Ferretti battery, Qajjenza, Malta
AHMED NAWZAD SALAM; Tour de la Parata, Ajaccio, Corsica, France;
AHMET DEMIR; St. Hilarion Castle, Kyrenia, TRNC (Cyprus);
ANIL EREN; Metochi of Agia Anastasia, Thermaikos, Greece;
AYAH AL MOKDAD; Martgat Castle, Baniyas, Syria
BAGZAD AZAD SHAREEF SHAREEF; Fort Chambray, Ghajnsielem, Gozo, Malta
BEGÜM KIROGLU; Rocca di Mondavio, Marche, Italy
BERFIN BUKAN; Old Navarino Castle, Pylos, Greece
BURAK AYGÖREN; Lascaris Battery, Valletta, Malta
ÇAGATAY LEVENTERLER; Castle of Zarnata, Campos, Greece
CEREN SEN; Kalamata Castle, Kalamata, Greece
CEYDA OFLAZ; Fort Boyard, Petruis d’Antioche, France
DAMLA ALKAN; Fort St. Angelo Castle, Birgu, Malta
DERYA ATES; Fort de l’Estissac, Port-Cros, France
DIKO RASOULI; Qaitbay Castle, Alexandria, Egypt
DILAY SARI; Torrellobatón Castle, Torrellobatón, Spain
DINARA NURMATOVA; Castello di Gaeta, Gaeta, Italy
DOAA AHMAD BAHLOL; Alhambra, Granada, Spain
EYLAF MOHAMED ELDAW ABUNA; Fort Manoel, Gzira, Malta
FEYZA ÜN; Montjuic Castle, Barcellona, Spain
FURKAN SAHIN; Royal citadel, Plymouth, UK
GONCA GÜL; Castel Nuovo, Naples, Italy
HABIBE BOZOGLU; Eilean Donan Castle, Dorne, UK
HALIL MERT TUGRAL; Bellver Castle, Palma, Spain
HAMIYE GÜRSOY; Sirmione Castle, Sirmione, Italy
HARRY JAKE WADSWORTH; Carcassonne city walls, Carcassonne, France
HASAN BERKAY KILIÇ; Fort Mosta, Mosta, Malta
HAZAL OKUMUS; Fort Tigné, Sliema, Malta
HELIN KARACA; Castle of La Luz, Las Palmas, Gran Canarias, Spain
HEMRA ARZYMEDOV; Fort Chikly, Lake of Tunis, Tunisia
IPEK AKYILDIZ; Sidon Sea Castle, Sidon, Lebanon
KAAN BENLI; Neratzia Castle, Kos, Greece
KAAN KIRIK; Bourtzi fortress, Naflpio, Greece
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<td>KEVSER YA VUZYIGIT</td>
<td>Camber Castle, Rye, UK</td>
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<td>LEYAN WA’EL BASHIR AL ZU’BI</td>
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<td>Fort Louvois, Louvois islet, France</td>
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<td>SAMET KARATAS</td>
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<td>SARA CANSU DEMİR</td>
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<td>SELIN ÖZBILGIN</td>
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<td>SERIFE KOYUNCU</td>
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<td>SEVVAL ACAR</td>
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<td>SHEIDA MOHAMMADI</td>
<td>St. Nicholas Fortress, Šibenik, Croatia</td>
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<td>YUDUM ÜLMENT</td>
<td>Pahos Castle, Paphos, Cyprus</td>
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Poster selection
Information About Castle:

It was originally built as a Byzantine fort to protect the harbour. It was then rebuilt by the Lusignans in the thirteenth century after being destroyed in the earthquake of 1222. In 1570 it was dismantled by the Venetians. After capturing the island, the Ottomans restored and strengthened it. Throughout the ages it has seen many uses. It has served as a fortress, a prison and even a warehouse for salt during the British occupation of the island. More recently the castle serves as a backdrop to the annual open air Paphos cultural festival which takes place in September.

It was declared a listed building in 1995 and represents one of the most distinctive landmarks of the city of Paphos. Several archaeological excavations have taken place to investigate its past.

LOCATION AND MASTERPLAN:

ELEVATIONS OF THE CASTLE:

PLAN

BACK ELEVATION

FRONT ELEVATION

LEFT ELEVATION

RIGHT ELEVATION

SECTION OF THE CASTLE

PICTURES OF OUT OF THE CASTLE:

PICTURES OF IN OF THE CASTLE:
The superintendent of Siena by the architect Nicoletta Urbini guide Maioli, completed the work in 2001 and sponsored by the City of Monte Argentario, a complete publication of the details of the work is available at the ticket office of the fortress along with other publications related.

The coats of arms which were originally located at the entrance, now located inside the structure after restoration.

**CHRONOLOGY / 1494**
- 1494: First Italian war begins marking the first major battle.
- 1497: The first Italian wars end in a victory for the besiegers, Venice.
- 1499: Second Italian war begins.
- 1504: Second Italian war ends in a Spanish victory.
- 1551: Last Italian war begins.
- 1559: Peace treaty signed between Henry of France.
- 1774: Antonio Vivaldi dies of pneumonia during the night.
Verrès Castle

Abstract:
This castle is built as a military fortress. Its free of decorative elements located above the river evensong, it is the importance construction for this town now it's used as a guide tour. It consists of two large halls and surrounded by circle walls so it needs some of repairing and coloring for more attraction to the tourists.

BUILDING INFORMATION:
Building name: Verrès Castle
Year of construction: 14th-century
Architect: military fortress
Place: Verrès, northwestern Italy
Geographical coordinates: 45.6700°N 7.6958°E
Height on sea level: 391 M
Title of your research: repair

REFERENCES:
**Abstract**

Saint Thomas Tower is a large watchtower in Malta. It is the third tower of the Vittoriosa Towers. An additional battery was added later in the early 17th century. This tower is the largest watchtower in Malta, and it is an essential structure for monitoring the landings of troops in that area. Its thick walls and high towers make it one of the most robust historical watchtowers.

**Chronology**

- Early 17th century: Several watchtowers were maintained around the island.
- 1603: Saint John took the control of the Maltese islands.
- 1618: Resurgence of Turkish naval activity.
- 1619: Extension of St. Thomas Tower by the Knights of Malta.
- 1639: Saint Thomas Tower was built by the Knights of Malta.
- 1715: An additional battery was added to the Saint Thomas Tower.
- 1789: The tower was captured by French troops.
- 1802: A fort was built and was named the fort.
- 2008: The tower was declared over to a heritage foundation.
- 2016: The National Trust organized some events in the tower to commemorate its 400th anniversary.

**Description**

Saint Thomas Tower was built in 1614, It is the third of 64 Vittoriosa Towers. The system of guarding a watch around Malta's coast goes back to the early 17th century, for enroaing the coastline of Malta has an important role in protecting the island.

**Construction of the tower**

- The tower was completed in 1614. It is located near the Mediterranean Sea, facing the island of Gozo. The tower is an example of Renaissance architecture and is considered one of the most significant towers in Malta.

**References**

St. Nicholas Fortress, Sibenik

The proposal to build a fortress existed in 1524, and the construction works of St. Nicholas began when two engineers, Michele and his nephew Giangiacomo (both from Sansicardi), came to Dalmatia. He designed a solid and secure fortress in the shape of a triangle with three defensive bastions.

One of the most valuable and best preserved examples of military architecture in Dalmatia, St. Nicholas Fortress, was built on the left side at the entrance of the St. Anthony channel. On the island called Lopud, in front of the Sibenik port it was built in the mid-16th century and for construction was used the stone of Skradin under the assault of the Turks in 1523 year.

Fort has an interesting form. General layout of the fortress in the shape of a triangle which was rare in Croatia at that time, as well as in Europe. The shape of the fort St. Nicholas influenced the shape and amount of space of the island.

St. Nicholas Fortress was armed with 32 cannon.

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Chronology

- 1417: Venetian authorities were envisioned
- 1522: Attack of the Turks
- 1523: The Venetian captain Alberico da Genova decided to build a fort on an island in the entrance of Sibenik
- 16th century: St. Nicholas Fortress was built to prevent Turkish ships from reaching the port
- 17th century: its fortifications were improved again by the fortress of St. John and St. Casimir

For the interior used great amount of limestone.

White stone was used for building the lower parts of the fortress and real stones for the upper parts. Brick is the material which was used for upper parts which offering resistance. Lower range of the fort built of stone (parts below sea level and directly above it).

The fort never really fulfilled its role, except siege of Spain Army. The fortress from the sea looked so powerful that no one dared not even get close. The main task of the fortified building is to scare the possible attackers.

References:

Fort San Lucian

Year of construction: 1610-1611
Architect: Order of Saint John by the British Empire
Place: Marsaxlokk, Country: Malta
Geographical coordinates: 35°49'49.8"N 14°32'35.5"E
Height on sea level: 16m

A picture was taken in recent time showing the elevation of the fortress.

Chronology

1557-21 August: Jean Parisot de Valette is elected Grand Master of the Knights of Malta.
1560: The Knights of Malta escalate their corsairing activities in the western Mediterranean.
1561: The Holy Inquisition is established in Malta. Domenico Cubelles is the first inquisitor.
1564 December: The Ottoman war council in Constantinople decrees that Malta is to be invaded and conquered.
1565-18 May: Ottoman armada sighted off the coast of Malta, signaling the start of the Great Siege of Malta.
1566-28 March: The founding of Malta’s new capital city, Valletta. A general strengthening of Malta’s fortifications is undertaken.

1605: Garzes Tower built
1610-16 February: Fort San Lucian towers built (Wignacourt)
1615-21 April: Wignacourt Aqueduct inaugurated
1637: Lascaris towers built
1658 March: De Redin towers built
1667: Isopu Tower built
1670: Fort Ricasoli built
1720: Perellos Tower built
1723-14 September: Fort Manoel built
1758: Fort Chambry built
1792: Fort Tigné built

Fort San Lucian, also known as Saint Lucian Tower. The original tower was built by the Order of Saint John between 1610 and 1611. In 1614 a large Turkish expedition attempted to enter the harbor but was repulsed by a bombardment from the guns of Fort St Lucian. However, the castle was rebuilt by the British Empire in 1870s.

Fort St Lucian is surrounded by a rock cut ditch and it has a curved entrance ramp. In the fort, there’s also a small chapel dedicated to St Lucian.

The new entrance that was built by the British Empire & that we can see the FORT ELEVATION.
PALAMIDI CASTLE

Location & Strategic Scope
Palamidi castle is built on a 216-meter high hill. Palamidi castle is controls the city of Nauplion, the seaport, the entrance to the gulf of Argolis.

Structure, Fortification & Buildings:
The castle designed and built by Lasalle (LaSalle) and Zavich (Gionich). Based on the fortress plan Diapla developed in the West-East axis and the walls are connected mutual bastions system with the bartists if one of them occupied, the defense is done by others part, so a total of eight independent castles.
There are 857 steps in the winding stair from the town to the castle. However, to reach the top of the fortress there are over one thousand. Locals in the town of Nauplion will say there are 999 steps to the top of the castle.
The most important monuments of the site are:
- The Castle consists of eight bastions surrounded by walls. A long stairway reinforced with small battlements starts at the foot of the northwest slope and leads up to the fortress on the top of the hill.
- St. Andrew church is a barrel-vaulted church with the eastern half built under one of the arches supporting the walls. Its free-standing part is two-aisled.
- One of the bastions was used as the prison.

History:
The castle was finished within a relatively short period from 1711 until 1714. The works were started and were carried on till the last years of the Venetian occupation (1686 - 1715). It is a typical Baroque fortress. In 1715 it was captured by the Turks and remained under their control until 1822, when it was captured by the Greeks.

Chronology:
1470 - The city suffered Venetian invasion.
1540 - At the end of a 3-year siege of passed into the hands went to Turks (1537-1540).
1686 - The city passed into the hands of Venetian again and began construction of the castle.
1714 - The castle was completed. (Completed by reinforcing 1711-1714)
1715 - The city was occupied by the Turks.
1822 - In again it passed to the Greeks.
1834 - Besides the castle was in prison for notorious criminals.
1926 - Castle was abandoned from being used as a prison.
1962 - GNTO was accepted under the archaeological site
1969 - The castle was repaired.
The Castle of Taranto (called Castle S. Angelo) is located in the historical city of Taranto, Italy. It is a medieval fortification, built during the 14th century on a rocky promontory by the sea. The castle was constructed in response to the threat posed by the Ottoman Empire's expansion into the Mediterranean. The first fortifications were built in the 12th century, but the castle was extensively reconstructed in the late 14th century by the Aragonese dynasty, which ruled Taranto from the 14th to the 17th centuries.

### Chronology
- **14th century**: The French Angiòvis arrive and Puglia becomes part of the Kingdom of Naples.
- **1463**: Isabella of Clermont, grand daughter of Giovanni Antonio.
- **1480**: Turkish force under the command of Sokollu Pasha lays siege to the castle. After capturing the town, all male inhabitants over the age of 15 (numbered in the 4,000) are killed. The aging Archbishop, refusing to renounce his faith, is cut into pieces in public and his decapitated body passed through the town on a pike.
- **1486**: The Aragonese Castle of Taranto was built.
- **1487**: The Aragonese Castle of Taranto was reconstructed following perhaps the specific design of the great Senese architect Francesco di Giorgio. It was facing the outside harbour, according to the probable design of Francesco di Giorgio, a triangular bulwark, later added in 1491 to reinforce the southern curtain wall and improve the defense capability of the access to the mount that was enlarged to connect the outside with the inside harbour.

### References
e.
The fortress of Rûmeli Hissar is the earliest of Fatih's constructions in Istanbul, built in 1462, and we have noted, to cut off the ramifications from the Black Sea in preparation for the siege of Constantinople the following year. The fortress is on the European shore of the Bosphorus at the narrowest point of the strait, about 266 meters from the summit of Anadolu Hisar, built on the Asian shore by Barrak in 1356.

**Construction**

According to Ertugrul, Fatih began preparations for the construction of this fortress in the winter of 1461. When he ordered all the materials to be prepared for building, Fatih broke and workers and labor and whatever else would be of use for this purpose. He set the best and most experienced workers over the work, and they built the walls, specifying everything exactly in the best order, so that when spring came, he could undertake the task.

A curtain wall, defended by three smaller towers, which the three main walls, forming an irregular figure some 200 meters long by 125 meters broad at its maximum. Fatih spent much time in designing the work of the 1,000 skilled and 2,000 unskilled workers he had collected from the various provinces of the empire. He entrusted each of the main towers to one of his viziers, the viziers, Sskipas, the viziers, and the viziers, with the private living quarters and the private living quarters, and the private living quarters of their families, with one another to complete the work within a speed and efficiency.

**Rûmeli Castle's Three Major Towers**

The world's largest castle, Rûmeli Hissar, looks like the map of it was of signature 1462 that the employee personally, as in the topography to the signs of the rooftops to the college except to drive his horse with the flag staff would have nothing with you can see the inside.

**Sarucu Pasha Plan and Sections**

**After the work the Sarucu Pasha Tower was used like a prison, the area tower was bombarded.**

**View from the Bosphorus Looking South, with the Sarucu Pasha Tower seen at the upper right and the Bosphorus towers seen lower left.**

**View of the Sarucu Pasha Tower from within the fortress grounds, looking northwest.**

**From the Sea.**

E-mail: umutumut@gmail.com

May 30, 2019
EL BADI PALACE

GENERAL INFORMATION

Type: Palace
Location: Kasbah Lhass, Marrakesh, Morocco
Coordinates: 31.6183°N, 7.9858°W
Construction started: 1572
Completed: 1593
Demolished: Circa late 17th Century

CONSTRUCTION AND DESIGN

The palace took twenty-five years to build, with construction finally completed around 1593. It was a lavish display of the best craftsmanship of the Saadian period. Constructed using some of the most expensive materials of the time, including gold and ivory, the columns are said to be constructed from marble exchanged with Italian merchants for their equivalent weight in sugar. The original building is thought to have consisted of 360 richly decorated rooms, a courtyard (75,400 m²) and a central pool (220-250 m²). It was designed by Ahmad Al Mekki, an 18th-century architect. There are several large pavilions on the site, which are believed to have been used as summer houses. The largest on the site is known as the Koubba or Koubba Almoravia, which translates into "The Fifty Pavilions," named either after its surface area of some 50 square meters or the fact that it once contained 50 columns. The site also includes several stables and dungeons.

CHRONOLOGY

1529 - Saida built by Saadi
1574 - Mohammed El-Saadi in power
1577 - Sidi Ishaq hospital built
1578 - Ben Youssef Madrasa built
1579 - Sidi Moulaye built
1585 - El Bah Palace built
1585 - Saadian Tombs built
1664 - City taken by forces of Aḥmud Al-Mansūr of Nībūm.
YEAR OF CONSTRUCTION: 1807
ARCHITECT: Unknown
PLACE: Preveza
COUNTRY: Greece
GEOGRAPHICAL COORDINATES: 38°56′42″N 20°44′19″E
HEIGHT ON SEA LEVEL: Zero Altitude

It is located at the south near the beach of Kyani Akti. Castle of Pantocrator was built by Ottomans. It was built by Ali Pasha, with drawings of French engineer Yaudicourt. A small church built on its top. The site is now abandoned and because it is very easily accessible it looks bound for a rapid deterioration.
Cottonera Lines

The British modified the lines in the 19th century with the construction of St. Clement's retrenchment, which connected the Cottonera Lines with the Santa Margherita Lines. In the 1870s, Valperga Bastion and St. Paul's Curtain were demolished to make way for an extension of the Malta Dockyard.

Santa Margherita & Cottonera Lines

The Cottonera Lines (Maltese: Is-Swar tal-Kottonera), also known as the Valperga Lines.

In the early 18th century, some efforts were made to complete both the Cottonera and the Santa Margherita Lines.

The new line was named the Cottonera Lines after the reigning Grand Master, Nicolas Cottoner.

Construction of the Cottonera Lines began in August 1670. The lines were called the "most ambitious work of fortification ever undertaken by the Knights of St. John in Malta."
Building Name: Maiden's castle
Year of construction: 1448
Architect: Ibrahim Bey
Place: Mersin
Country: TURKEY
Geographical coordinates: 36°27' 25"N, 34°08'54"
Height on sea level: 0

LOCATION:

Castle about 300 metres (980 ft) off shore in the Mediterranean Sea.
Part of Erdemli district which in turn is a part of Mersin Province. Kizkalesi is west of Erdemli and Mersin.

REFERENCES:
- By Aldo Rossi, The Architecture of the City (1962)
- Mehmet Masak, Oramru Dendi: Tlarotin F Ykeden Deqeri Mersin 1812-1922
- Aishawajek, Y, "Integration of Laser Scanning and Photogrammetry for Heritage Documentation".
- Birelli G, Dubhini M, Zanatu A, 2004
- Kapceki Laser Scanning and Digital Photogrammetry
- http://www.mersinkulturizm.gov.tr/
- http://www.mersin.web.tr/kizkalesi
CASTLE OF GRIVAS FAMILY

Building name: GRIVAS CASTLE
Year of construction: 1806
Architect: Ali Pasha
Place: Aktio Vonitsa
Country: Greece

DESCRIPTION

When the war started between Russia and Turkey in 1806, Ali Pasha built two parts on the coast Akarnania one at each end of the Lefkas Channel. Castle of Grivas is the northern fort; it is one and half kilometres from the castle of Santa Maura. It was constructed with French assistance however once the treaty of Tilsit was signed in September 1807 ended the help of the French.

CHRONOLOGY

1503 - 1684: The island is re-conquered by the Turks.
1797: The Republican French take control of the island.
1798 - 1807: Russo-Turkish occupation.
1807 - 1810: The Island is conquered by the Imperial French.
1810: Rule of the British, who incorporate it into what they called the United States of the Ionian Islands.
1864: Lefkada is united with Greece, together with the other Ionian Islands.

The castle is 60m by 30m in a rectangular shape. The castle is supported by two towers to the north and one tower to the South, which are projecting several angles.

A square tower is positioned to the southeast which protects the gate. The outer gate is followed by the ground floor Chamber. It would then be leaded by an arch and then a vaulted corridor and then finally a ramp in to the interior.
FORT RICASOLI

Building name: Fort Ricasoli
Year of construction: 1670-1698
Architect: Saint John
Place: Kalkara
Country: Malta
Geographical coordinates: 35°53'51"N 14°3'33"E
Height on sea level: up to 20 m

Abstract: Fort Ricasoli a mega limestone old building, entrance the Grand harbour in Kalkara, Malta. This fortification largest fort in Malta and also all Mediterranean islands. Fort Ricasoli in the list of UNESCO since 1998. Fort Ricasoli saw use during the French invasion of Malta (1798), Siege of Malta (1798-1800), World War II. Fort Ricasoli a strong, big, heavy view and also good history.

Chronology
1649
1658 The De Redin Tower constructed in Malta.
1667 Sea, Blu Tower constructed in Malta.
1669 Ottoman attack to Malta.
1670 The first stone was laid down in Fort.
1674 The Fort accepted skeleton garrison.
1693 Fort is damaged by earthquake.
1697-1698 Fort Ricasoli constructed in Malta.
1710 First grant in of a title of nobility to created by the Grand Masters.
1714 The French engineers small size of the fort's bastions.
1715 Many coastal batteries and redoubts are constructed in Malta.
1726 The Mega tower turrets constructed in Malta.
1722 Constructed due to a lack of funds in Malta.
1731 Work started on Fort Manoel in Malta.
1732 Fort Manuel constructed in Malta.
1733 The Manuel Theatre opens in Valletta/Malta.
1748 Cathedral Museum in Mdina was constructed.

5 References (Books and Journals)
FORD LUPHIN

ARCHITECT: Frédéric Ferry
Type: Coastal fort
Year: 1683
Commune: Saint-Nazaire-sur-Charente
Department: Charente-Maritime
Region: Poitou-Charentes
45°35'75" N ; 1°03'28" E

Fort Luphin was built on the southern bank of the Charente, and commanded the approach to Rochefort and its arsenal along with Fort Lapointe on the opposite bank of the river. The first proposal to build a fortification in the area was made in 1672 by the engineer La Pavarotière, and it was eventually built between 1683 and 1686. The fort's initial design was made by François Ferry, but the plans were extensively modified by Sébastien Le Prestre de Vauban, who reduced its size due to a lack of funds.

Besides Fort Luphin, the most representative of these beautiful forts are the near by Fort du Chapus, protecting the Oleron channel, the tower and battery at Camaret near Brétz and Fort Saint Louis, one of the forts guarding Toulon harbour.

View from the west.
View of the fort and its ditch.
The gate as seen from the glacis.
Kilitbahir Castle

The Mediterranean Castle after 1492

Abstract: Just across the narrows from Canakkale and easily accessible by small ferry, Kilitbahir is a dry-fishing harbour dominated by a massive fortress built by Mehmet the Conqueror in 1452 and given a grand seven storey tower by Sultan Selim the Magnificent. The castle was built with rough-hewn stone and is thought to be the first of its kind in the Ottoman Empire. It was used as a naval fortress and a prison, and later became a museum.

Description:
The fortress of Kilitbahir is the second strongest of Sultan Mehmet II located in the Strait of Sifah between Asia and Europe. It is named Kilitbahir meaning 'lock of the sea'. The fortress was built in 1454 and erected on a rocky jut surrounded by the sea. The fortress is built in a hexagonal shape with a total of seven sides, each side having a sea gateway. The fortress is protected by a moat filled with water and is connected to the sea by a gate leading to the sea.
**Château d'If**

Year of construction: 1524-1531  
Place: If Island, Marseille  
Country: France

**Description:**
Château d'If is a small island near Marseille. The big castle located on the Château d'If Island. Castles have square shape and consist of a square and a tower. These three towers have circular shape and this tower on different levels. These towers have names and were seen on the plan. The castle was built by the King of France.

**Chronology:**
- 1524-1531: Construction of the Château d'If began.
- 1531: The castle was completed.
- 1572: The castle was destroyed by the English.
- 1692: The castle was rebuilt.
- 1856: The castle was turned into a museum.

**Map:**
A map of the Château d'If is shown, with different sections marked:
1. Tour Saint-Jean  
2. Tour Saint-Sauveur  
3. Tour de la chapelle  
4. Tour de la mer

**References:**

**Images:**
- Aerial view of the Château d'If
- Close-up of the castle.
- Plan of the Château d'If
LOCATION: town of Bourcefranc-le-Chapus.
ARCHITECT: François Ferry Vauban.
YEAR OF CONSTRUCTION: 1691-1694.

Abstract: A small fortification that gives a huge dominance; I chose it because I liked the feeling of strength and greatness when looking at it, despite the size of it, also the design of the fort is well created for many reasons, such as the long walkway towards the fort, and the round shape hence for extra precaution and protection for the fort. Also the centered circular tower is high enough for further eye view for similar reasons.
The Citadel of Damascus

Building name: Citadel of Damascus
Year of construction: 1076–1078 and 1203–1216
Architect: Atsiz bin Uvak and Al-Adil I
Place: Damascus
Country: Syria
Geographical coordinates: 33.511667°N 36.301944°E

The current castle site was established in the year 1076 AD by Ben Atsaz Oouk, a warlord Turkmen and Damascus Citadel was built on level ground at the same level of the rest of the city of Damascus, unlike most castles in the Middle Ages which were located on the hills prominent peaks. They found on the castle 12 towers, so there is only one tower at each corner and three along both the North and South of the castle walls and two in the East, was the castle originally 14 towers, but the two towers that were on the west wall collapsed because of the earthquake that hit Damascus in 1759 and there are three gates are located in the castle, one in the North side and one on the eastern side, while the third is in the West End.
FORTIFICATIONS OF THE RHODES (PALACE OF THE GRAND MASTER)

PLACE: Rhodes, Greece

YEAR: 7th Century (Citadel)
15th Century (Palace)
1937-1940 (Restoration Work)

ARCHITECTS: Byzantine Empire
Knights Hospitaller
Kingdom of Italy
TOUR ROYALE, THE HARBOR FORT OF TOULON
A FORTIFICATION OF THE MEDITERRANEAN COAST

BUILDING NAME: TOUR ROYALE
YEAR OF CONSTRUCTION: 1514-1524
ARCHITECT: GIAM-ANTONIO DELLA PORTA
PLACE: TOULON
COUNTRY: FRANCE
GEOGRAPHICAL COORDINATES: 43° 6' 9.702" N 5° 55' 33.628" E
HEIGHT ON SEA LEVEL: 6 METRES

TOUR ROYALE STRATEGICALLY SITUATED AT THE ENTRANCE OF THE HARBOR TO FIRE AT SHIPS COMING FROM THE SEA

PLAN OF THE ROYAL TOWER WAS ELEVATED IN RESPECT TO THE RELIEF PLAN OF THE CITY OF TOULON

ELEVATION OF THE ROYAL TOWER SHOWS EMBRasures ON THE TOP OF THE TOWER, SURROUNDING PROJECTIONS AND WIDE PORTS LOWER DOWN ALL DESIGNED TO FIRE GUNS AND AMMUNITION

SECTION OF THE ROYAL TOWER REVEALS HOW THE WALL THICKNESS Varies FROM 5 M TO 3 M, TO ACCOMODATE A CENTRAL CORE AND MILITARY-FORTIFIED SPACES

REFERENCES
Fort Du Portales

The Portalet castle known as Fort du Portalet is a fort in the Aspe Valley upper than 765m from sea level in Bearn, French Pyrenees. It was built between 1842 to 1870 by King Louise Philippe I. At the same time, it was located on the border of Spain and this location has a great importance. It is designed to keep 400 soldiers that means it can defend for a week under attack. Fort du Portalet used for Pau infantry regiment between 1971-1975. After that time it was emptied for military area. Until 1939, there was used for government employers in summer holidays. During WWII, the Vichy regime arrested and interned Léon Blum, Edouard Daladier, Paul Reynaud, Georges Mandel and Maurice Gamelin as political prisoners at the fort. After the war, Philippe Pétain who is the head of Vichy government, was imprisoned in the fort in 1945. After the government abandoned the fort, it was bought by the local authorities in 1989. When they bought the area, the castle was a ruin. They restored it and fixed the stairs. Nowadays it is open for tourist view.
The islet of Bourtzi, situated just at the entrance of the bay of Nauplia, was fortified by the first Venetian rulers of Argolis (1389-1540). The fortress was built by the architect and sculptor Antonio Gambello (1481) and is a typical example of the Italian Renaissance military architecture, bearing all the defining features of a massive defensive structure, intended to repel invaders and to withstand siege.

The design was made specifically to fit the narrow shape of the island. The castle, with entrances to the north and south, has three floors connected by movable stairs. A small harbor on the northeastern side offered easy and safe access between the sea and the fort. To get protected by their enemies, the Turks had laid the surrounding sea bed with a large barricade of stones that made it impossible for large ships to approach the island and the fort.

Later on, after the deliberation of the town in 1821, it was turned into the residence of the executioner for the convicts of the Palamidi castle. Between 1930 and 1970, after alterations by the German architect Wolf Schaeffer, the Bourtzi Castle was used as a hotel.
NERATZIA CASTLE

Building name: Neratzia Castle
Year of construction: 1480
Architect: Unknown
Place: Kos
Country: Greece
Geographical coordinates: 36° 54' 0" N, 27° 14' 0" E
Height on sea level: 0

Neratzia Castle is located in the Mediterranean Sea. It was built in 1480 in Kos Island, Greece by Knights Templar for the fear of Ottomans. It was finished at the end of the 14th century and early years of the 15th century.

In the construction of the castle, many architectural elements from the ancient city of Kos were used.

References
OTHELLO CASTLE

INFORMATION ABOUT OTHELLO CASTLE

Othello Castle was built in the 14th century by the Lusignans (who ruled the Kingdom of Cyprus) to protect the port against possible enemy attacks. It was also used as the main entrance to Famagusta. It used to be called “impenetrable fortress” due to it being nearly impossible to attack because of very deep ditches surrounding it.

After Cyprus was sold to the Republic of Venice, the castle’s square towers were replaced with circular ones to suit more modern artillery. After these modifications, a relief of the Lion of St Mark was engraved above the castle’s main entrance. The name of Captain Nicolo Poscart, who directed the alterations to the castle, and the date 1492 are inscribed near the relief. The castle gets its name from Shakespeare’s famous play Othello, which is set in a harbour town in Cyprus.

In 1900, the castle’s ditch was drained of water to reduce the risk of malaria.

The castle began to be restored in 2014, and it reopened to the public on 3 July 2015.

There is a Tower located in the walls 14 and named:
The names of this tower:
1. Canbulat (Arsenal)
2. Sea Gate Bushing (Marc)
3. Othello (Castello)
4. Ringed loopholes (Sigorna)
5. The Karpas Bastion (Diamante)
6. The Martyr’s Bastion (Diar)
7. Arsenal (Martirione)
8. Palazzaro
9. Moraffa
10. Occhare
11. The Black Gate (Kalkan-Bavel)
12. Gold Bushing Santa Rapp
13. A Water Sign (Andunze)
14. Ringed Bastion (Canto Siringo)
FORT CHIKLY

YEAR OF CONSTRUCTION: 1548 AND 1550
ARCHITECT: LUES PEREZ VARGAS
PLACE: LAKE OF TUNIS
COUNTRY: TUNISIA
GEOGRAPHICAL COORDINATES: 36° 429 59.43', 10° 096 98.67'E
HEIGHT ON SEA LEVEL:
TITLE OF YOUR RESEARCH: "FORT SANTIAGO DE CHIKLY"

ABSTRACT:

Fortifications were made to protect people behind it, and guard pathways. The reason why this fort was built is because it was destroyed, restored, converted, declared and created the natural reserve of Chikly Island, and it exists with all its interesting and attractive history.

BOOK REFERENCES:


PLANS:

- Ground Floor
- Main Street
- Upper Floor
- Terrace Floor

CHRONOLOGY:

A.D. 1509 - THE SPANISH EMPIRE'S REVOLUTIONARY DECISIONS ASLED BY ENRIQUE II.
A.D. 1514 - THE SPANISH EMPIRE AND FORT CHIKLY ARE DECLARED.
A.D. 1581-1601 - CONSTRUCTION OF FORT CHIKLY.
A.D. 1604 - FORT CHIKLY FALLS TO THE OTTOMAN EMPIRE.
A.D. 1685 - TUNISIAN REVOLUTIONS ARE DECLARED.
A.D. 1703 - SPANISH INCursions OF THE KINGDOM OF TUNIS AND FALL OF THE SPANISH FORT.
The Castle of Kyrenia

Building name: Kyrenia Castle
Year of construction: 1540 – 1544 AD
Architect: Unacknowledged
Place: Kyrenia
Country: Cyprus
Geographical coordinates: 35°20′17.40″ N / 33°19′12.00″ E
Height on sea level: 12 meter

Chronology in fortifications

1492 – Construction of Castello Aragonese ended
1509 – Construction of Cesina Castle started
1514 – Construction of Neratzia Castle started
1519 – Construction of Château de Chambord started
1524 – Construction of Château d’If started
1527 – Construction of Alhambra castle started
1546 – Construction of Fort Chikly started
1548 – Construction of Fort Stella started
1552 – Construction of Fort Saint Elmo started
1552 – Construction of Fort Saint Michel started
1557 – Construction of Castello Brown started
1570 – Construction of Paphos Castle started
1577 – Construction of Fort Santa Cruz started
1581 – Construction of Verdala Castle started

The Venetians replaced the original drawbridge at the castle’s entrance with the protected gatehouse that still exists today.

In the XV century gunpowder came into use, cannons and artillery were developing quickly, so Italian engineers adopted a system of re-modelling medieval fortresses.

In Kyrenia the architects shaped the SW bastion with a polygonal plan, according to the new artillery systems.

The podestà Asciano Savorgnan and the military engineer Sebastian Verner both report the castle’s transformation.
FORT CHAMBRAY

ABSTRACT:
Fort Chambray is one of the fortifications of Malta which is located in west of Mgarr, the fort was originally meant to be a new fortified city like Valletta, but the project was not successful. I chose this title because I'm interested in Malta island and I want to know more about historical places which exists in that area.

BUILDING NAME: Fort Chambray
YEAR OF CONSTRUCTION: 1749-1760s
ARCHITECT: Order of Saint John.
PLACE: Gozo.
COUNTRY: Malta.
GEOGRAPHICAL COORDINATES: 35°01'32"N 14°17'01"E

REFERENCES:
CASTLE OF LA LUZ

GENERAL INFORMATION

Year of construction: 15th century (1494)
Geographical coordinates:
28° 8' 55.12" N, 15° 25' 29.24" W
Architect: Nieto Sobeljap
Place: Grand Canaria, Las Palmas
Country: Spain

It was built on the foundations of a wooden fort constructed by Juan Rejon, the captain of the conquering Castilian invasion force in 1478. Originally, it was located on a reef that meant the waves of the Atlantic lapped it at high tide but the development of the Puerto de la Luz has put some distance between castle and ocean.

Located on the southern coast of La Isleta, the Castillo de la Luz (Castle of Light) defended the natural harbour of Las Palmas de Gran Canaria for several centuries. Built in 1494 on top of the foundations of an existing fort from the time of the conquest by the Castilians, this solid square-shaped fortress, which was equipped with a platform for 11 cannons, nevertheless suffered severe damages during the invasion of Dutch pirates in 1599 when it was more or less burned to the ground.

CHRONOLOGY:

1469: Aragon and Castilya was one kingdom.
1485: Aragon Catherine was born.
1492: It destroyed last bastion of the Muslim Kingdom of Granada.
1494: CASTLE OF LA LUZ WAS FOUNDED.
1499: Kingdom of Naples made Granada agreement.
1501: Alexander VI of Estud General opened the school.
1503: Casa de Contratación state was established.
FORT TIGNE - c.1798

DESCRIPTION

Fort Tigne's construction was begun in 1793 and was a very small work by eighteenth-century standards but its design was probably the most revolutionary of all the fortifications built by the knights in Malta. It's built to protect the Marsamxett Harbour.

Designed by the Order's chief engineer, Antoine Étienne de Toussard, its most important feature was the lack of bastions and the counter-batteries inside the fort's walls. The new style of fortification known as the polygonal system was to dominate the art of military architecture through the following century. Fort Tigne was the last major work of fortification built by the Order in Malta. The fort originally consisted of three main elements: a circular tower, a polygonal battery with central blackhouse, and a ditch with counter-battery musketry galleries.

Over the centuries, Fort Tigne offered resistance to the forces of Napoleon when these took possession of the island in 1798; later still, the presence of British military barracks on the promontory attracted the attention of Axis bombers in World War Two, when Malta became "the most bombed place of earth."

When British troops left Malta in 1979, the fort was abandoned and fell into a state of disrepair. At some point of time it was also used as a destination project. But the fort was restored back to its original state in 2008. The area now contains many modern buildings and is popular among both locals and tourists.

CHRONOLOGY

1794: Conspiracy of the Slaves
1799: Construction of Fort Chambay has been started
1758: Fort Chambay is built
1773: Rising of the Priests
1759: French Revolution
1792: Construction of The Lunette d'Arcon (a similar type of fortification in France) has been started
1793: Construction of Fort Tigne has been started
1795: Construction of Fort Tigne has been completed
1798: The French under Napoleon Bonaparte invade and take Malta en route to Egypt. The Maltese population rises against their new masters and blockade them in Valetta
1800: Fort Tigne was officially taken over by the British military
1802: Peace of Amiens
1807: Beginning of the Frecberg mutiny at Fort Ricasoli
1814: Malta becomes a British Crown Colony
1814: The Grand Harbour becomes an important shipping waystation, eventually serving as the headquarters of the Mediterranean Fleet
1831: The diocese of Malta is separated from that of Palermo
Building name: Fort Mosta
Year of construction: between 1776 and 1890s
Architect: British Empire
Place: Fort Mosta
Country: Malta
Geographical coordinates: 35°52′21.52″N 14°25′34.1″E

Victoria lines are the linear group of fortifications passing across the middle of Malta. It's a precious monument for military architecture. It was designed in 19th century by British Military to block invading armies.

And Fort Mosta that I've chosen for my case study is located in the middle of Victoria Lines. Fort Mosta was designed as two main parts: Keep as pentagonal shape surrounded with a defence ditch and a battery. One of the most important element of Fort Mosta defense strategies is the ditch. The access to keep was provided by a rolling bridge. And from the keep there is an access to down of ditch. It also provides a communication between the keep and the battery. There are also underground tunnels from the keep leading to counterscarp. In some areas of the fort, foundation laid on a thick concrete slab. As construction materials, hybrid combination of masonry, earth and hewn rock used in Fort Mosta construction. Now this military building is being used as depot by Armed Forces of Malta.

**Chronology:**
- 1607: Castle of Panormos is built in Prezina, Greece
- 1623: Portoferra Castle is built in Prezina/France
- 1635: Carcassone is built in Aude, France
- 1653: Mussolano Fortress is built in Mussolano, Montenegro
- 1654: Lucca Castle is built in Volterra, Malta
- 1657: Bord Castle is built in Park, France
- 1669: Castello di Monforte is built in Treviso, Italy
- 1775: Victoria Lines built in middle of Malta
- 1776: Fort Mosta is built in Mosta Malta by British Military
- 1848: Medieval military architecture in England is published by George Thomas Clark
- 1988: Fort Rinella is built in Kalkara, Malta
- 2007: Military Architecture is published by Lieutenant General Visitel in Gzy
- 2012: Military Architecture in Medieval England is published by Alexander Hamilton Thompson
- 2015: Tower of Hvar is built in Hvar, Spain

**References:**

**Detail of keep of Fort Mosta, showing extensive steps of esrthan parapet with gateway, and small rechning mustillery gunery**

Carcassonne - Time Stages

1849: French Government decided that the city fortifications should be demolished, but the decision was strongly opposed by the local populace.

1856: The government later reversed its decision and allowed the restoration to begin and Eugene Viollet Le Duc was charged with restoration.

1857: Eugene Viollet Le Duc agrees to restore Carcassonne after being asked to by Louis Napoleon Bonaparte.

1863: Eugene Viollet Le Duc restores Cite Da Carcassonne by enhancing the fortification by gaining atop each of its many wall towers with a set of painted roofs that are typical of northern France.

1870: Eugene Viollet Le Duc dies and the restoration is continued by his apprentice Paul Boisselvault and later by the architect Nodet.

Carcassonne Site Description

While not strictly castles, fortified towns gained in importance and until they approached the strength and appearance of castles. Some towns grew up near monasteries or castles, at trade and transportation centres, required increasingly sophisticated defences.

With Carcassonne being an important military and commercial centre in northern France, the city contained double curtain walls, the outer walls have twenty towers and the inner walls have twenty five. Some of the towers are independent fortresses and even have their own wells. Later after being by Eugene Viollet Le Duc in the 19th century by adding conical tiled roofs, the citadel in the fortification is rectangular in plan, with rooms and towers arranged an open central courtyard with a deep moat cutting the citadel from the city.

Architect/Restorian: Eugene Viollet Le Duc

Eugene is employed by the emperor Louis Napoleon Bonaparte to Restore Carcassonne and begins in 1860 but unfortunately dies before it can fully finish, but is continued by his apprentice.

References:

Medieval Castles: The Medieval Fortress: Castles, Forts and Walled Cities of the middle ages
An essay on the military architecture of the middle ages
The past from above
The grove encyclopedia of medieval art and architecture.
**Famagusta City Walls**

**Brief:**
- **Building Name:** Famagusta City Walls
- **Year of Construction:** XII-XVI Cent
- **Architect:** The Lusignans & Venetians
- **Place:** Famagusta
- **Country:** Cyprus
- **Geographical Coordinates:** 35°6′54″N 33°56′33″E
- **Height on Sea Level:** 12 m

**Location**

**The Moratio Bastion**

**The St. Luca Bastion**

**The Marble Sea Gate**

**The Ravelin Bastion (Akkule or Rivettina)**

**The Othello Tower (The Citadel)**
**SIRMIONE CASTLE**

**ABSTRACT & DESCRIPTION**

The Scaliger Castle (Sirmione Castle) is a rare example of well-developed fortifications which were used by the Scaliger family. The building of this complex started in 1277 by Niccolò I Delle Scala. It presents the typical Gothic style with its characteristic walls, towers, and gates.

**CHRONOLOGY**

- 1166: Landmarks conquered
- 1193-1336: Castelvecchio museum built
- 1260: Known as a powerful local family Della Scala of Visions, he came under the administration of the province.
- 1346: Wrote as a member of a famous family who have been involved in art and has been invited Dante.
- 1277: Began to be widely used by the court of the Scaliger family; has been a harbor wall.
- 1330: Maximo San Pietro built.

**REFERENCES**

- The Project Gutenberg e-Book of The Story of Verona, by Alethea Wiel
- The Medieval Fortresses: Castles, Forts and Walled Cities of the Middle Ages pp. 276
- The Castles of Italy pp. 63, pp. 65, pp. 119
- Wikipedia
Bellver Castle (Catalan: Castell de Bellver) is a Gothic style castle on a hill 3 km to the west of the center of Palma on the Island of Majorca, Balearic Islands, Spain. It was built in the 14th century for King James II of Majorca, and is one of the few circular castles in Europe. Long used as a military prison throughout the 18th to mid-20th century, it is now under civilian control, being one of the main tourist attractions of the island, as well as the seat for the city's History Museum.
**EILEAN DONAN CASTLE**

**ABSTRACT**

One of Scotland’s most magnificent sights. Covered on three sides by sea and spectacular views. Now one of the most visited and important attractions in the highlands of Scotland. Eilean Donan Castle is a medieval castle on the small island of Eilean Donan in Loch Duich in the western Highlands of Scotland. “Donnan Island”, which means Eilean Donan Castle. The castle, received name is 617 years, he took to the saints who were killed by burning. The castle was built in 1220 on the orders of Alexander II of Scotland as a fortress of defense against the constant raids of the vikings, who at that time occupied the western islands (western islands) that were incorporated in the kingdom of Scotland with the battle of Langs, which took place in 1203. The castle and surrounding lands were granted to the Macrae clan, as a thank you for their service provided in the battle of Culloden. Then the castle was abandoned. For 200 years, the castle was never used. Afterwards, Colonel John MacRae-Gilstrap bought the castle in 1933. Colonel John, made the restoration of the castle. The castle was reopened after 20 years. The Eilean Donan Castle has reopened its doors to visitors in 1955. Today, you can explore nearly every part of the castle. The castle now has its own visitor center, which includes the Ticket Office, Coffee Shop, Gift Shop.

**PLANS**

- Development of Eilean Donan Castle
- 13th century
- 15th century
- 17th century
- 20th century

**ELEVATION**

**RESTORATION**

John MacRae was purchased in 1932 the castle was completely destroyed and there were only a few remains of the entire complex. Eilean castle to the mainland was built in the year of the restoration of the bridge that connects the two. The North-West was secured together at the edge of the sea.

**TODAY'S**

- Eilean Donan Castle in recent years.

**OLD PICTURES**

- Photographs of the castle throughout its history.
The Sea Castle Of Sidon

Year of construction: 13th century
Architect: Crusaders
Place: Sidon
Country: Lebanon
Geographical coordinates: 33.561N 35.371E
Height on sea level: -

Sidon; dating from the Umayyads
Mosque, narrow passages and a magical atmosphere with arches and waves

Kalayan, H.- 1979. The Sea Castle Of Sidon.- 278 pages

The Sidon Sea Castle.

2016 final review of ARC142
May 25, 2016
CASTLE ON THE MEDITERRANEAN
CASTEL NUOVO

Building Name = Castel Nuovo
Year of construction: 1282
1st Floor: works from 15th to 18th century
2nd Floor: works from 18th to 20th century
Architect: Pierre de Chaulnes, Pierre d'Angincourt
Place: Napolli
Country: Italy
Material: Sandstone

DESCRIPTION:
Castel Nuovo has been built in 1282; the architect of the castle was Pierre de Chaulnes who from France. This strategic position of the new castle gave it the characteristic not only of a royal residence but also of a fortress. In the war of succession between the Angevins and the Aragonese, the castle was destroyed. At the death of Alfonso of Aragon, called his Magnanimous the castle was rebuilt by Guglielmo Ragusa. In 1381, it was conquered by the Castel Nuovo or New Castle.

Chronology:
1282: University founded.
1266: Naples becomes the capital of the Kingdom of Sicily.
1387: Castel Nuovo built.
1381: Naples Civil War.
1504: Sforza Chapel built.

I selected this castle because...

In Italy, the restoration of a developed country. I think this is beautifully drawn restoration of the castle, the imposing towers of Castel Nuovo dominate the bay of Naples, which once served as a royal residence and medieval fortress. Strategic location, the castle is today the venue of cultural events and also hosts the Municipal Museum.
INTRODUCTION

Royal Citadel constructed in 1690, architect is Sir Bernard de Gomme. This castle located in Plymouth, England.

After a civil war between parliamentarians and the Crown royalists, there were also signs of another war from the Dutch side, so the Dutch born designer, Sir Bernard de Gomme was commissioned to design the structure. The design he came up with was a 5 Side bastion fort, but due to the topographical nature of the Hoe and the existing artillery, the design was significantly altered to the final structure which we have today called the Royal Citadel which houses 29 commando Royal Artillery (present day), before that it was known as Drakes Fort after the first improvement on the fort as a result from the first war.
FORT BOYARD

Fort Boyard is built in middle of the sea. Located between the Île-d'Aix and the Île d'Oleron on the west coast. One of the architectural feature the plan is oval-shaped. Construction officially started 1801 and completed 1857. Technical features: 68 metres long and 31 m wide. And the walls were built 20 m high.

Building Type: Fortress
Architect: Sébastien Le Prestre de Vauban

CHRONOLOGY
1789: French Revolution began
1792: First French Republic proclaimed
1793: Louis XVI was executed
1795: Louis XVII died
1798: French Revolution ended
1801: Construction started
1802: France and Britain signed the Treaty of Luneville
1803: Napoleonic Wars began
1804: Napoleon Bonaparte declared himself Emperor of the French.
1807: The Peninsular War began
1809: The project was suspended
1814: Sixth Coalition finally defeated Napoleon
1814: Louis XVIII signed the Treaty of Paris
1815: Battle of Issy
1815: Napoleon Bonaparte escaped his island prison of Elba and embarked for France.
1821: Napoleon Bonaparte died
1825: Louis XVIII has died and is succeeded by his reactionary brother, Charles X.
1837: Construction resumed
1852: Construction of the ground floor: tanks, powder magazines and food, cuisines.
1857: Construction completed
**MONTJUIC CASTLE**

- **Building name:** Montjuic Castle
- **Year of construction:** 17th century, 1640–1714
- **Architect:** Juan Martín Cermeño / Ph. Feliu
- **Place:** Barcelona
- **Country:** Spain
- **Geographical coordinates:** 41° 21' 40.6” N, 2° 8' 55.6” E
- **Height on sea level:** 700 m

**Title of your research:** Modern Age Fortifications of the Mediterranean coast: Montjuic Castle

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**ABOUT MONTJUIC CASTLE**

A castle on Montjuïc hill was first built in 1640 during the “War of the Reapers” between Catalonia and Spain’s Felipe IV. In the 16th century following Barcelona's fall in 1714 ending the War of the Spanish Succession (1701–14) the castle was rebuilt between 1751 and 1779. The new fortress built by the Bourbons was constructed in the form of a star-shaped pentagon with large moats, bastions, and buttresses. In the last 350 years Montjuic Castle has played a decisive role in the history of Barcelona becoming a symbol of Spanish nation after the Catalan defeat to Spain in 1714. Since then the Montjuïc canons have bombarded the city and its citizens on various occasions and Montjuïc has been used as a prison and torture centre repeatedly for three centuries. The castle is infamous in Cataloan history books because of its role in the civil war from 1860 to 1870 when both sides of the conflict imprisoned, tortured and shot political prisoners at Montjuïc, among them Lluís Companys, who was the former president of the Generalitat de Catalunya at the beginning of Spain's civil war. Companys was executed by the dictator Francisco Franco at Montjuïc Castle in 1940.

Montjuic castle was previously home to the Museu Comièl and La Esfera and also previously home to the Military Museum of Barcelona, but both museums closed after the castle was transferred to the city of Barcelona by the Spanish government in 2006. Since then the castle has been used exclusively for cultural activities in the Montjuïc Park Centre, and the Barcelona Peace Centre. The Barcelona Peace Centre is managed by three administrations, the Spanish and Catalan Governments and the Barcelona City Council. Among the most popular activities is the summer outdoor fresco movie screenings in the most called Saia Montjüic.

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**CHRONOLOGY**

- **1925:** The lighthouse of Montjuïc begins to work, located at Morro.
- **1926:** The pilot Josèp Manuel Durán is killed in a flight accident, one of the Plus Ultra heroes, the first plane that crossed the Atlantic nonstop. One year later a monument in his memory is erected on top of the mountain.
- **1930:** On July 13 the amusement park Mirabel is inaugurated.
- **1933:** An aerial tramway connects the port with the mountain from September 12 on.
- **1934:** Several big Roman sites appear at the Eixample Road.
- **1933:** The first motor-cycle race takes place.
- **1954:** The National Museum of Art of Catalonia moves to the National Palace from November 11 on.
- **1959:** Pere Bosch Gimpera directs the Archeological Museum in the former Palace of Graphical Arts. It opens the third of November.
- **1960:** On April 1 the Montjuïc Swimming Club is created.
- **1960:** Franco orders the castle to the city by decree on May 8.
- **1960:** Franco inaugurates three gardens on June 22 dedicated to Monsec Cinto, Costa i Ullera, and Joan Maragall.
- **1971:** In April, the first Fórmula 1 run takes place. It stops in 1975 as four people die in an accident.
- **1988:** The opera presents Carmen de Bizet. Peter Brook at the Municipal Workshops of the Flower Market (February 26).
- **1984:** The Flower Market is transformed into a theatre (January 13).
- **1990:** The new Botanic Garden is inaugurated (April 18).
- **2003:** A new Road of the Sea is opened above Morro (January 19).
- **2007:** The aerial tramway of Montjuïc is renewed (May 15).

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**REFERENCES**

FORT MANOEL

Building name:
Fort Manoel

Year of construction:
18th Century - between 1723 and 1755

Architect:
Antonio Manoel de Vilhena under the supervision of world famous engraver: Meriadeck

Place:
north west of Valletta

Country:
Manoel Island, Malta

Abstract
FORT MANOEL is a star shaped fort on Manoel Island, Malta. It was built in the 18th century ordered by Saint John, during the rule of Grand Master Antonio Manoel de Vilhena, named after him. The British military conquered the fort in 1800 and they used it until 1964. The fort was badly damaged in World War II, but it was restored and it is now in good condition.

Chronology

<table>
<thead>
<tr>
<th>YEAR</th>
<th>EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1667</td>
<td>Isopu Tower built</td>
</tr>
<tr>
<td>1670</td>
<td>Fort Ricasoli built (to 1693)</td>
</tr>
<tr>
<td>1710</td>
<td>First grant in favour of locals (including a woman) of a title of nobility to have been created by the Grand Masters. On 24 December 1710, Grand Master Perellos granted the title of Baron of Gomerino jointly to Paolo and Beatrice Testaferrata.</td>
</tr>
<tr>
<td>1715</td>
<td>Many coastal batteries and redoubts are built</td>
</tr>
<tr>
<td>1720</td>
<td>Perellos Tower built</td>
</tr>
<tr>
<td>1723</td>
<td>Fort Manoel built (to 1755)</td>
</tr>
<tr>
<td>1732</td>
<td>The Manoel Theatre (then known as the Teatro Pubblico) opens in Valetta with a performance of Scipione Maffei’s classic tragedy Maroéro.</td>
</tr>
<tr>
<td>1749</td>
<td>Conspiracy of the Slaves</td>
</tr>
<tr>
<td>1758</td>
<td>Fort Chambray built</td>
</tr>
<tr>
<td>1760</td>
<td>After the death of the Baron Paolo Testaferrata, the office of ‘Depositario’ within the Inquisition was continued by his widow Vincenza Mattei. With the exception of a short period, she remained in office until 1778.</td>
</tr>
<tr>
<td>1775</td>
<td>Rising of the Priests</td>
</tr>
<tr>
<td>1792</td>
<td>Fort Tigne built</td>
</tr>
<tr>
<td>1797</td>
<td>By a Papal brief dated 3 March 1797, Bishop Vincenzo Labini and all his successors in the diocese of Malta, were given the title of ‘Bishop of Malta and Archbishop of Rhodes’. This privilege was suppressed in 1928, and the title was changed to ‘Archbishop, Bishop of Malta’.</td>
</tr>
<tr>
<td>1798</td>
<td>Napoleon invades Malta. Mdina (Nobile) capitulates on 10 June. The act of capitulation of Mdina is signed on the one part by Vincenzo Baroja representing the French Republic and the Hacemb together with the jurs representing the people.</td>
</tr>
<tr>
<td>1799</td>
<td>Maltese uprising against the French following extensive pillaging of Maltese churches and cathedrals. Britain takes Malta under its protection, in the name of the kingdom of the Two Sicilies. The Union Jack flies over Valetta for the first time, alongside the Neapolitan flag.</td>
</tr>
<tr>
<td>1800</td>
<td>The French surrender. General Vaubois surrendered with Rear Admiral Villemur, Major General Pigot and Captain Martin, signed the articles of Capitulation. Although 20,000 Maltese lost their lives during the uprising, not one Maltese was present to sign the document. Malta and Gozo become a Protectorate.</td>
</tr>
<tr>
<td>1801</td>
<td>Tsar Paul I of Russia demands the return of Malta to the Knights. A Statue of the great German leader is established for peace amends</td>
</tr>
</tbody>
</table>
AlHambra Palace was built by Nasrid Dynasty (1232-1492). It was a palace and a fort at the same time. The palace is located in Granada, Spain. Alhambra is distinct among Medieval palaces for its sophisticated planning, gardens, fountains and its unique decorative programs. Alhambra is an arabic name, it means the red fort, and you can read it in arabic as “Qal’at Al-Hamra”. Alhambra is divided into 3 main palaces. These are the Comares Palace, the Palace of the Lions, and the Partal Palace. All of them were built in the 14th century.
CASTELLO DI GAETA

Place: Italy
Country: Lazio/Latin
Geographical coordinates:
Latitude: 41°12'50" N
Longitude: 13°34'14" E
Height on sea level: 9 m = 29 ft

At the beginning of the Middle Ages, after the Lombard invasion, Gaeta remained under the rule of the Byzantine Empire. In the following years, like Amalfi, Sorrento and Naples, it would seem to have established itself as a practically free port and to have carried on a developing business with the Levant.
TORRELOBATON CASTLE

Torrelobaton castle was built in the 14th century.

Torrelobaton Castle lies in a village by the same name in the province of Valladolid in Spain. Torrelobaton Castle is located in the northern part of the village on a small hill. It has a square plant with three circular towers and the great keep in its corners.

BOOKS REFERENCES:

(The Medieval Fortress: Castles, Forts and Walled Cities of the Middle Ages, J. E. Kaufmann, H. W. Kaufmann, Robert M. Jurga.)

(Castles in Spain, inauthor: "Oliver D. Washburn, Azteca, 1957")

(Castles in Spain, Fernando Chueca Goitia, Reinhart Wolf, Abbeville Press, 1 Kas 1983)

(The History of Charles the Vth, Emperor and King of Spain Made English, Prudencio de Sandoval, John Stevens (Captain, 1703)

CHRONOLOGY:

1356: The Golden Bull is set in the Holy Roman Empire.
1357: Pedro I was crowned king of Portugal.
1363: Pedro I of Castile, the Cruel, besieges the city of Valencia
1364: Beginning of the reign of Charles V the Wise.
1373: Se builds Daun Penh in Phnom Penh. Università
Qaitbay Castle is a fine example of military architecture from the Mameluke period in Egypt. It was built in the 15th century on the orders of Sultan Ashraf Qaitbay, one of the last Mameluke rulers of Egypt, with the aim of protecting the city against the growing threat of the Ottoman Empire.

Ibn Iyas, a chronicler of that era, tells us that the sultan visited the site in 1477. "He wished to see the emplacement of the ancient Pharos and ordered the construction of a tower upon the old foundations, and it is there that was built the mighty keep that still stands."

The fortress looks as follows: the square keep, with four circular turrets, is located in the north-eastern part of a vast courtyard. Around the perimeter, the site is protected by a polygonal double defensive wall, against which are built some 40 small chambers that served as barracks. To the north, facing the open sea, the walls are fortified by blockhouses that once housed cannons on two levels, underground and upon an open-air platform.

Year of construction: 14TH century
Place: Alexandria
Country: Egypt
Geographical coordinates: 31°21'50.44"N 29°53'08.30"E
Height on sea level: 0
Fort de l’Estissac

Building name: Fort de l’Estissac
Year of construction: 1635-1640
Architect: unknown
Place: Hyères (Port-Cros Island)
Country: France

Geographical coordinates: 43° 00' 41" N, 6° 23' 06" E
Height on sea level: 100 m

Description
The Fort is located at an island in France. Fort de l’Estissac has a tower and some buildings in its surrounding. The tower is built in the middle of the fort on a square plan. It is three levels high and has a groundfloor, a housing floor and a open roof. It is surrounded by a moat. It has triangle shapes which are connected with two small bridges. The material that were used in Fort de l’Estissac is stone, rubble; materials of coverage are hollow tile. The fort includes a tower and cannon, an enclosure, a couple of buildings.

1538
Forts Ste Agathe and Le Moulin were built on Porquerolles Island

1538
Hundred years after building the Porquerolles Island L’Eminoue, Fort Man and Fort de

1600
Marquisate des Isles and Marquis had responsibility to protect the Island from Pirates

1634
Construction of my selected Fort = ‘Fort de l’Estissac’

1700
British people plunder Port-Cros Island

1812
Napoleon built a Fort in Levont Island

1549
Pirate attacks to the Island

1579
The castle of Hyères played an important part in the guerres de religion

1620
Castle of Hyères get destroyed

1640
End of Construction from Fort de l’Estissac

1640
British attacked again the Island

1932
Restoration of the tower from Fort de l’Estissac
Fort Sant'Angelo, locally known as Castel Sant'Angelo, lies above the harbor city of Licata, in the Agrigento province on the island of Sicily in Italy.

Area: 13,000 m²
Built: 13th century–1691
Built by Order of Saint John
In use: 13th century–1979
Materials: Limestone
Battles/wars:
Battle of Malta
Attack of 1551
Great Siege of Malta
Siege of Malta (1798–1800)
Siege of Malta (World War II)
CASTLE OF KALAMATA

YEAR OF CONSTRUCTION: 1338
ARCHITECT: Frankish Architecture
PLACE: Kalamata, Peloponnese
COUNTRY: Greece
GEOPHYSICAL COORDINATES: 31°23’N - 22°7’E

The Castle of Kalamata was built in the early 13th century. A castle with a rich history on a rocky hill at the NW side of the city of Kalamata. An ancient acropolis existed on the hill before the Trojan War. Later a Byzantine fortress, but the ruins we observe today are the remains of the castle that was (re)built there in the beginning of the 13th century. The castle is closed to the public for safety reasons.

REFERENCES (LITERATURE)

ARCHITECTURE
- THE FOUNDATION OF THE ANCIENT ACROPOLIS
- THE EXTENSION OF THE CASTLE ON THE HILLSIDE
- THE DESTRUCTION OF THE CASTLE IN THE 17TH CENTURY
- THE RECONSTRUCTION OF THE CASTLE IN THE 18TH CENTURY
- THE EXTENSION OF THE CASTLE TO THE NORTH
- THE EXTENSION OF THE CASTLE TO THE SOUTH
- THE FURTHER EXPANSION OF THE CASTLE
- THE RESTORATION OF THE CASTLE IN THE 20TH CENTURY

The year in the documentary about the castle of Kalamata.
The Castle of Zarnata is located in the northwest frontier of Mania, between the settlements of Campos and Stavropirgio. It is built on a hill, in the middle of a fertile valley. The castle of Zarnata is believed to be built on the location of an ancient citadel. The discovery of polygonal walls among its foundations has led to this assumption. Some researchers identify the region with the ancient city of Gerlin, one of the 18 cities that used to compose the Koinon (or “League”) of Free Laconians. It is estimated to have been built in the 17th century. Others believe that the construction was made by the Franks, others attribute it to the Venetians and others to the Turks, with the latter being the dominant version as several sources indicate the Vizier Abdul-Koupouril as the founder of the Tower. It is said that at the Castle of Zarnata, Theodoros Kolokotronis gave fights, in an effort to support and help Panagiotis Koumoundourakis, Bey of Mani, who was deposed that provide hard evidence and had to face the attacks of the Turks and the locals of Mania as well.

The castle of Zarnata was surrounded by a polygonal wall that was 364 meters long and had a height of 6.7 m. The Castle included six towers, two of which round and the other four were square, while in the middle there was a large tower with six of the 54 cannons that the castle had in its whole. Two gates, one in the southeast and one in the northwest side, led inside the tower, which occupied 23 acres of land. Today, at the highest point of the hill, you can admire a tower with three floors and a height of about 15 m dominating the region and next to this is a residence with five floors, where the captains of the region used to live in. Visitors at the castle of Zarnata can also see parts of the medieval frescoes in many of the 15th century wall, some trips in the abandoned church of St. Nicholas and the Church of Zoodochos Pigi, which was erected in the middle of the castle around 1776.

**CHRONOLOGY**

Zarnata in the 1680s as engraved by Coronelli. There’s another coloured version above. The village below is Kambos though the view from the east is somewhat lacking in verisimilitude.

Zarnata obviously had many buildings within its compass. In 1670 the Turks found five hundred houses with tile and slate roofs. They expelled many Christians and destroyed their houses replacing them with Turkish schools, hamman (baths) and administrative offices for the garrison commander. Seven churches were converted into mosques. Evliya describes these as “gleaming... their minarets embellished with gold and ornaments”. Today there is little trace of these buildings, the cisterns which had been constructed, ‘so that there was no house without its cistern’, or of the minarets which once graced the skyline. In 1685, Morenii, at the head of a Venetian force invaded the Morea laying siege to Koroni on other side of the Gulf of Messenia. When this had fallen he crossed to Mani where, aided, but hardly abetted, by the Maniates (they spent most of the time squabbling with one another) he laid siege to Zarnata in early September 1685. Although a large Turkish relief force was nearby Morenii intercepted their messengers and persuaded the Turkish garrison that they had no help at hand. The commander Hassan Pasha surrendered on 11 September and was allowed to withdraw with his troops and sailed away to Elephants, island off the easternmost finger of the Peloponnese, Cape Malea. Leake states that at that time it had a garrison of 600 and bristled with 51 cannon. When he was there in 1805 the place was reputedly in ruins.

http://eng.travelguide.gr/item.php?view=54709
http://www.kastoria.camosis.gy/xastoria/zarnata
http://www.textworth.com/gallery/Europe/Greece/Pelopennesus/i/Messinia/Staw
Lascaris Battery

Description:

After British Empire took the island, they used and built fortifications by order of St John. During Second World War, Lascaris War Rooms, now under the Upper Barrakka Gardens and Lascaris Battery. These underground tunnels located near the Upper Barrakka Gardens and Saluting Battery were used in ‘Viv Repons’ of Britain’s Malta (Valletta). The Lascaris Battery (battery) was built below the Saluting Battery with irregular trapezoidal shape. The structure has rounded corners. A parade ground was located inside the new bastion and later, in 1868, two-storey enfilades were converted to barracks. In 1893, they brought new stores, and capacity of powder storage increased to 1,500 kg. The construction of battery was completed, and it could not withstand any modern artillery.

On the exterior of this bastion, they replaced very thin and small balcony with steel railings from the little square house below and above of the bastions. They were for air ventilations. Water ways, they made steps to the roof. This bastion is connected to the earlier St. Peter & Paul Bastion.

Chronology:

1574 - Malta becomes a British Crown Colony.
1576 - The Grand Harbour becomes an important lifting station.
1580 - The harbour of Malta is separated from that of Palermo.
1586 - Second petition for a separate Roman Catholic diocese for Gozo is presented to Rome by Father Pino Matti.
1595 - British built Fort Victoria, St. Clement's Retreat in 1665.
1595 - The Crimean War; Malta serves as a hospital base for wounded combatants, and General Claude, the nickname Nurse of the Mediterranean.
1595 - The Crimean War; Malta serves as a hospital base for wounded combatants, and General Claude, the nickname Nurse of the Mediterranean.
1600 - The British Office in London approves the establishment of a separate Roman Catholic oriental diocese for Malta.
1600 - The British Office in London approves the establishment of a separate Roman Catholic oriental diocese for Malta.
1602 - Opening of the Suez Canal. This greatly enhanced the importance of the Grand Harbour to British merchant marine and naval shipping.
1607 - E. Hackney presents the construction of a railway from Valetta to Malta.
1611 - Commission of Lines.
1622 - St. Paul’s battery, Fort St. Lucian.
1675 - Fort San Marco, Fort Pembroke.
1678 - 21 titles of noble were successfully claimed by various individuals before a Royal Commission.
1680 - In education, Anglicization of Maltese students becomes a matter of policy.
1681 - St. Paul’s battery and Zonza battery.
1683 - The Malta railway service is inaugurated, with service from Valletta.
1690 - The Malta railway service is inaugurated, with service from Valletta.
1698 - The Malta railway service is inaugurated, with service from Valletta.
1771 - Malta Railway Company Ltd. is declared bankrupt, and the Malta Railway is abandoned.
1809 - The new Malta Railway reopens, under government management.
1899 - Forts Bingemma, Fort Madalena and Fort Mina completed.
1961 - The Malta Railway lines extended to Mqabba Barracks.

References:
The fortress of Mondavio represents one of the most important and interesting evidence of military design by Francesco di Giorgio Martini in the Marches, Italy. It was constructed between 1482 - 1492.

References
Margat Castle

Margat Castle is a fortification that is located in Syria. It was built in the 10th century using Basalt. The castle is located on the mountain which is in a city called Baniyas, that is on the Mediterranean Sea. Margat Castle has a very large area, and its location gave it a great importance against enemies. This castle was fortified by Muslims in 1062. It is one of the most important castles in Syria which has a great history.
**Porto Palermo Castle**

**Year of construction:** in early 19th Century  
**Architect:** final form created by Ali Pasha of Tepelena  
**Place:** Himarë, Albania  
**Country:** Albania  
**Geographical coordinates:** 40.062317°N 19.790475°E

Porto Palermo Castle (Albanian: Kalaja e Porto Palermos) is a castle near Himarë in southern Albania. It is situated in the bay of Porto Palermo, a few kilometers south of Himarë along the Albanian Riviera. Huffington Post ranked Porto Palermo first among 15 Undiscovered European Destinations for 2014. The area together with Llamani beach will be proclaimed a protected area holding the status of Protected Landscape by the Albanian Government.

**References:**


**General Information:**

Year of Construction: 1552
Location: Valletta, Malta
Function: Military Fortification
Built By: Order of St. John

**Plan of Fort St. Elmo**

**Chronology:**

- 1530: The Order of St. John begins to rule Malta.
- 1551: Ottomans try to invade Malta.
- 1552: The construction of Fort St. Elmo begins.
- 1565: The great Siege of Malta begins.
- 1566: Fort saint Elmo was reconstructed and rebuilt within city walls.

**Photograph of St. Elmo**
THE CASTLE OF KRITINIA

KASTELLORIZO
HOSPITALLER CASTLE
RUINS

CHRONOLOGY
1427: The castle above Kritinia, named Castello, was built by George Doin to protect the inhabitants of the village from the attacks of the Ottomans.
1461-1470: Castello still visible at the entrance
1480s: As Kritinia, the fortress is built atop of a rocky outcrop and was unsuccessfully brought by the Ottomans in 1505-1512. The castle is still preserved with the coat of arms of the Sanctorus of the Knights of St. John's, Dilekison.
1522: The Venetian Doge Francesco Morosini tried to repel the Turkish army entering at Panormo, but the Venetian army was rejected.

REFERENCES
1. The Codecanese and the East Aegean
2. Greek islands:
3. Aristotle:
4. Rhodes:
5. MARCO POLO Travel Guide Rhodes,
METOCHI OF AGIA ANASTASIA

LOCATION
South of Epanomi, in Thessaloniki area, in the middle of the distance to the village Mesimeri.

REGION
Central Macedonia, Thessaloniki.

ALTITUDE
25 m.

TIME OF CONSTRUCTION
1530

ORIGIN
Post-Byzantine.

The Metochi of Agia Anastasia Monastery founded in 1530, the month of October, as shown by the stone inscription that still exists over the main door. Metochi, metochi in Greek means to hold a part of the shared and many places in Greece called Metochi or Metochi because they used to belong to the sovereignty of a cloister. Three kilometers south of Epanomi are the Kritziana, one of the four major "metochia" villages of the Monastery of St. Anastasia. The village is first mentioned in a document of the Monastery of Agia Lavra in 1110. Over the years the village Kritziana vanished and today only this current building is left to remind the monastic domination of the fields. The property is built like a castle to defend from the pirates and the constructing materials were stones from older buildings from the area. You can see also marbles from ancient temples in the walls. The building, parts of which survive in good condition, consisting of the central tower, church, cell, furnace, kitchen, barn and two defensive towers. Unfortunately, an effort to build a new church in 1965, resulted in destruction of the foundations of the old church and damaged the enclosure and the tower. Later in 1975, the archaeological department did extensive research to fix the remaining buildings and last intervened in 1987. Since then, there's another pending reconstruction...
ST. HILARION CASTLE

- Architect: BYZANTINES
- Place: KYRENIA
- Country: NORTH CYPRUS
- Geographical coordinates: 35.3123°N, 33.2808E
- Height on sea level: 700 m

CHRONOLOGY

- 890 – 875: The first Norse settlers arrive on Iceland.
- 859: Muslims establish the University of Al-Karaouine as a madrasa in Fez, Morocco.
- 862: The Bagratuni Dynasty of Medieval Armenia begins with Abshir I.
- 863 – 879: Period of schism between eastern and western churches.
- 870: Prague Castle founded.
- 873 – 889: Reign of Alfred the Great, First King of The English.

6th century: Hilarion Castle.

1007: Vikings, led by Leif Eriksson, establish small settlements in and around Vinland in North America.

1113: The library and university Dar Al-Hekma is founded in Egypt under the Fatimids.

1204: The Second Cyprian-Creusen War; the Cyprian king was forced to flee the capital temporarily but unable to establish a foothold and fearing a counterattack, the Cyprian forces withdrew.

1046: Duncan L of Scotland slain in battle. Macbeth succeeds him.

1055: the Seljuk Turks capture Baghdad, taking the Buyid Emir Al-Mahk al-Rahim prisoner.

REFERENCES

1. DOANN HOUGHTON-ALICO (2014) VOICE OF A VOYAGE: REDISCOVERING THE WORLD DURING A TEN YEAR CIRCUM NAVIGATION, VOICE OF A VOYAGE, SOUTH PACIFIC, SUMSTONE PRESS
2. DAVID NICOLLE ADAM HOOK (2013) CRUSADER CASTLES IN CYPRUS GREECE AND THE AEGEAN, OSPREY PUBLISHING
Tour de la Parata

Building name: tour de la parata.
Year of construction: 1550-1551.
Architect: Giacomo Lombardo.
Place: commune of Ajaccio.
Country: French.
Geographical coordinates: 41°32'43"N 8°36'30"E.
Height on sea level: 180 ft.

Abstract:
I chose the tower because it is a very smart fortification used in the 1500 centuries by the Republic of Genoa. It's a great example of the fortification because it sits on a high coastline over seeing any danger that comes along. Its quiet simple as its only a watch tower and has enough space for defense and also has vaulted rooms.

References:
Abstract:
The countries on the Mediterranean coastline have a similar style when it comes to architecture, materials and fortifications such as castles, batteries, city walls, etc.
For years and centuries, the Mediterranean countries were at a state of wars and Invasions, for that they started building forts to fight back and defend themselves, and after many years they'd turn into museums.
I chose Ferretti Battery because of its history, architecture and the transformation that happened in 300 years, from being a place of hate and war such as a battery or a fort, to a beautiful restaurant that people can come together peacefully and enjoy having good times.

Ferretti Battery

Building name: Ferretti Battery (St. George's Battery)
Architect: Jacques de Camus d'Argory, Bernard de Fonten
Place: Qa'elna, Birżebbuġa
Year of construction: 1715 - 1716 (18th cent.)

Plan

Section & Elevation

1665 Fort Ricasoli was built in Malta.
1680 - 1671 Palma Castle is built in Palma, Spain.
1715 - 1716 Ferretti Battery was built in Malta.
1553 Sant Ferrioli Castle is built in Grema, Spain.
1763 French ship, Depe was launched to serve in Maltese Navy.
1670 - 1698 Fort Ricasoli is built in Kalkara, Malta.
1691 - 1694 Fort Lovros is built in Chapuy, France.
1777 Colossal Palace was built in Germany.
1530 The book La censure de la guerre ou raison de manieres par tous ceux qui entreprendent la profession des Armes, by Nicolas Di Robald.
Traditional Building in Riyadh, Saudi Arabia (Masmik Castle)

The Masmik Castle is a 14th-century mud brick fort, with four watchtowers and thick walls surrounded by moats. It was built during the reign of King Abdulaziz bin Saud, the founder of the Kingdom of Saudi Arabia. The castle played a significant role in the kingdom's history, and it is located in the center of Riyadh, in the old quarter. The building is a perfect example of traditional architecture, with its unique design and layout. It is worth visiting for its historical significance and architectural beauty.
**OLD NAVARINO CASTLE**

**Abstract:**
The castle was built in the late 13th century by Michael of Saint Denis, the last of the anti-Latin Princes of Achaea, one of the Latin States ruling Greece following the Fourth Crusade. By the mid-13th century it belonged to the Genoese, who used it as a base in their conflicts with the Venetians and other Venetian colonies in Messenia. In the 16th century, the castle was occupied by Maria de Bourbon during her attempt to claim the Principality following the death of her husband, Robert of Taranto. By 1881, the castle is found in the hands of the Navarino Company.

The Venetians attempted to purchase the castle several times, worried about the threat it posed to their trading interests; they occupied it in 1681 to prevent the Greeks from using it. In 1682, the castle was handed over to the Prince of Achaia, Constantine Koxomenos. In 1715, the Venetians sold it to the Prince of Achaea, Constantine Koxomenos. In 1755, the castle was sold to the Prince of Taranto, but the second war of the Prince of Taranto, which is a naval battle, occurred in 1717.

**Chronology:**
- In 1486, the Turks took the fortress of Navarino.
- In 1577, the castle was reconstructed and they changed the name of the castle. New name was Navarino-Palai.
- Between the years 1688-1715, Venetians tried to take back the castle but they didn’t manage it.
- In 17th century, the castle was damaged.
- In 1777 the Ottoman Fleet was defeated so the Greeks have owned the castle.
- Battle of Navarino, the Ottoman and Egyptian fleets moving together British, Spanish and Russian navies, which is a naval battle in history on 20 October 1827.
- This battle of Navarino is in the history of the Ottoman Empire in the 19th century.

**References:**
The history of Ottoman Empire has been written on page 150.
GRANDINA KAMERLENGO
FORTRESS KAMERLENGO

Building name: Fortress Kamerlengo (Gradina Kamerlengo)
Place: Trogir
Country: Croatia
Architect: Anonymous

Year of construction: Mid 15th century
Geographical coordinates: 43° 30' 55" N, 16° 14' 51" E
Height: on sea level, 0 meters

When we are talking about the architecture in Mediterranean part of the world there are lots of buildings we can call as fortress, keep and castle etc. My research started with the question “Which country should I pick?” After a couple research in the history of Mediterranean world I figured out Turkey (the country I live in) has a strong relation with Croatia in the late 15th century. They’ve built lots of fortification units to prevent their country from invasions especially from Turkish invasions. Here I will mention about a great and well known fortress called “Grandina Kamerlengo” Fortress Kamerlengo.
The structure was built in Trogir according to the design of the new Venetian authorities in early 15th century as an isolated fort on the outskirts of the fortified town. The local toponymy of this small land edge islands had a great significant effect on the name of the castle remained in the general terminology of military architecture.
Château du Taureau Castle

This build Sébastien Le Prestre de Vauban architect. The castle of Taurus is located in the town of Roscoff at the entrance to the Bay of Biscay in Brittany. It is close to Carantec. Modern age retaliations of the Mediterranean coast's functional architecture. Built between the design & construction of an 18th century bastioned fort. The design & construction of a 15th century bastioned fort. It is an important location by the port. Be in the middle of the sea is different and special! It is interested in seeing the castle to be visited by people interested from beauty and history.

Geographical coordinates: 49°51'11"N 2°21'39"E
Country: FRANCE

REFERENCES:
1. Le Taureau, edifice de la baie de Morlaix, Château du Taureau-France, p. 8
2. Recouperis, Gérard, La Geste maritime, 1693

4. "Sur ce sujet, voir les articles de Louis Chretien"
VENETIAN KOULES FORTRESS

Abstract:
The Venetian Castle of Heraklion is called Koules, which alliterates "kroules" (a tower) in Turkish. It's a gigantic fortification with two stories that stood in its present form from the fourteenth century. The castle was developed by the Venetians in the thirteenth century, when they defeated the Turks. The fortress was built specially to protect the safety of the Heraklion harbor and the military defenses. It also played a role during the period of the Genoese and as a garrison. A series of major earthquakes totally flattened the castle in 1906 and it was restored by the Germans. The stronghold was again restored in 1939-1940 and has the distinctive appearance it has today. Among the various fortresses, the castle was again designed as a magazine in 1878, when the fortifications were fortified against the Ottoman Empire. The citadel had been attacked in the stronghold and has been evacuated ever since.

Description:
The exterior walls are about 9 meters thick; while the interior walls are up to 3 meters thick at some points. The sea and the foundations from early on, until 1600 were carried out at periods of time. The castle is very secure place that has many weak points, because it was built in a temporary period when strengthening architecture was still at an experimental stage. Physically speaking, Koules is formed of two sections; the southwestern, rectangular section, a little higher than the northwestern, semi-elliptical section, a little lower. There were three entrances to the Fortress, on the west, north and south west sides; the main gate was on the west, different signs with the word "Koules" on them were carved in relief in the outer walls. The best are the three marble reliefs showing the winged lion of Venice that symbolized the power of the Venetian state, the coat of arms and the winged lion. The outer area of the castle was then walled and filled after today, clearly by some addition to the fort.

The fort is a two-story building with 36 rooms.

Artifacts:
The Phaistos disc is a disc made by clay that is fired made in Crete.

Plan:

Elevations:

sections and details