RECLAIMING AN ARCHITECTURAL HERITAGE
Rehabilitation of a neglected fortress

Inès Degryse
RECLAIMING AN ARCHITECTURAL HERITAGE
Rehabilitation of a neglected fortress
ABSTRACT

In this thesis, I am going to explore and defend the vast field of renovation through the rehabilitation of a 600-year-old abandoned fortress located on the highest peak of a Sicilian island.

The work of the architect goes far beyond designing buildings, it is his responsibility to create and offer qualitative living spaces. Renovation and rehabilitation challenge the architect with existing built structures to be adapted and rethought to meet today’s needs and expectations.

In the first place, I am going to support and defend the importance to protect our architectural heritage by the mean of renovation or restoration. The introduction will expose the most common reasons why to build with existing or remaining architecture, but also the limits and restrictions of rehabilitation.

The following sections are organized, based on my personal design process, guiding the reader through the project, trying to share the emotions in the same order I experienced them: going through fascination, curiosity, interrogation, confusion, understanding and maybe determination.

In those chapters, I will first present the area of the project, the historical background of the place, the surroundings and the two buildings standing on the site. The new functions allotted to this ancient fortress are guided by a competition program, however, those will be adjusted according to a strong intention to preserve this exceptional heritage.

After introducing the general concept and organization of the project, I am going to highlight some technical questions and issues that occurred during the design process. Different common solutions for the whole intervention will be presented, such as structural reinforcements, new window frames, or floors and walls materiality. All those choices are always driven by this desire to protect the actual and unique character of the ruins.

Finally, the last part will present several zooms into the fortress through floor plans, sections or three-dimensional views to present the final design and defend my decisions. I will share and expose my convictions, trying to propose a relevant rehabilitation for this forsaken, but remarkably valuable remnant of this island’s rich historical background.
# INTRODUCTION

THE PURPOSES AND BENEFITS OF REHABILITATION FOR OUR HERITAGE  

# SITE AND PROGRAM

A NEGLECTED FORTRESS IN FAVIGNANA, SICILY

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
</thead>
</table>
| 2.1     | SITE AND CONTEXT  
The "butterfly of the Mediterranean sea" and its fortress |
| 2.2     | PROGRAM  
A competition brief as a starting point |
| 2.3     | IMAGE GALLERY  
The remarkable ruins of the “corte Santa Caterina” |
| 2.4     | INSIDE THE FORTRESS  
A fascinating complexity |

# DESIGN

PROPOSED REHABILITATION FOR THE “Corte Santa Caterina”

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
</thead>
</table>
| 2.1     | FORTRESS ORGANIZATION  
A modern layer to rehabilitate the fortress |
| 3.2     | TECHNICAL DECISIONS  
Common solutions for the whole fortress |
| 2.2     | FINAL DESIGN  
Floor plans, sections and final decisions |

# CONCLUSION

AN ENDLESS JOURNEY
INTRODUCTION

THE PURPOSES AND BENEFITS OF REHABILITATION FOR OUR HERITAGE
INTRODUCTION

THE PURPOSES AND BENEFITS OF REHABILITATION FOR OUR HERITAGE

The renovation field is vast by its multiple motivations and ways of approaching a remaining built structure, going from the restoration of a hundreds-year-aged castle to the refreshment of a 60-year-old house.

Restoration, renovation and rehabilitation are often interacting together and can be motivated by architectural and historical concerns, by sentimental attachment from the locals, for aesthetic reasons or even nowadays influenced by social trends. The nuances between those terminologies are slight but nevertheless important.

Definitions: Qualifying the vocabulary nuances

Restoration
[...] the process of returning a building to its appearance and condition at a specific period in time. [...] 

Renovation
[...] the process of making something look and function like new. [...] 

Rehabilitation
[...] the process which seeks to preserve the historical portions or features of a building while making the building compatible with a new use. [...] 

Conservation
[...] the process of arresting decay or decline so that the original workmanship and materials survive as they are now found. [...] 

1 Mark I. Johansen, renovation, rehabilitation, conservation: What does it all mean? Historical design consulting LLC, AIA.
Examples: Qualitative rehabilitation projects

1 THE PARADISE LOST IN TIME
Interbreeding Field, Taipei City, Taiwan, 2010.

2 SUMMER HOUSE
Buchner Brüder Architects, Switzerland, 2014.

"Preservation is simply having the good sense to hold on to things that are well designed, that link us with our past in a meaningful way, and that have plenty of good use left in them."

- RICHARD MOE -

Probably the most common argument to renovate a building is its historical importance. In that case, it is either restored, recovering its original state, or made accessible again for the public, becoming a historical landmark or a museum. However, when it comes to returning a building to its former condition, restoration can be questionable, as it has to be done accurately and respectfully. Even though the awareness concerning historical buildings increased in communities, in certain cases, even though they represent a relevant fragment of the past history of a place, highly fascinating aged buildings are left to decomposition. Economical matters can often justify it, the rehabilitation purpose can then be to readapt or change the function of an abandoned building to turn it into a profitable service. Rethinking the function of a left over building can also save younger constructions, for instance railway stations or factories, which are endowed by an irnimitable atmosphere and are usually highly integrated in the local structure. Strategically located, new functions are often allotted to those, such as cultural or shared community spaces, which can generally revitalise an entire neighbourhood, without omitting the time and economic savings.

The rehabilitation of a factory in a large abandoned area in Taiwan, "The Paradise Lost in Time", strongly illustrates how ruins can seduce by their particular atmosphere and how rehabilitation can sometimes simply consist of inhabiting a structure again, using it as a shelter for a new function. In this project, a contactless wooden structure navigates between the ruins, which are invaded by vegetation and light, leaving the time operates on the vestiges.

On another scale, rehabilitation can bring back to life forgotten constructions, for instance highlighting and using the charm and melancholic character of ruins to create a new liveable environment where old and modern architecture are delightfully associated. Sometimes, the most insignificant piece of a remaining construction, being ancient or simply abandoned, can enrich a modern construction by its exclusive character. For instance, like in this minimalist intervention on a 200-year-old stone house in Switzerland, where the entire outside structure stood intact. For the "Summer House", the architects interfered with the granite walls with subtlety and elegance. A new concrete structure covers the walls inside, and is only apparent around some of the window frames on the outside. This project demonstrates the importance of the construction details and how a qualitative intervention can bring back to life a modest forgotten house in the mountains.

The benefit of renovation is undeniable but does not lessen the importance and value of contemporary architecture. Instead, they coexist and interact to propose eclectic combinations of old and modern architecture. After identifying the significant constructed elements, analysing their importance, no matter if the interest is historical, aesthetic or sentimental, the challenge is to integrate modern and functional components and propose a unified dichotomy between the old and the new.
Illustrating again the importance of detailing in renovation, a probably more famous reference is the “Kolumba Museum” designed by Peter Zumthor, where the relation between the remnants and the new walls is frank, but respects the site’s history. The contrast between the vestiges and the brick walls makes the intervention respectful as the limit between the past and modern constructions is clearly drawn.

The readapted function and the estimated historical value of the buildings will guide the degree of intervention, and it is the architect’s role to define those with the greatest care. The architect is indeed highly responsible for the proposed interventions, as they will influence the heritage we draw for the future generations. It is then essential to interact thoughtfully with the existing structure to avoid altering the message it is currently carrying. In that sense, extremely historically valuable monuments will be restored to last over time when old abandoned fabrics will more likely stand as structure for modern elements.

Contracting with Zumthor’s approach of an historical site, the “Fort di Fortezza” was rehabilitated with a minimal impact into a place for cultural exchange. In fact, the younger remaining built structure of this fortification allowed the smallest new constructions. Some elements were restored and subtle and ingenious steel structures added to the place to improve the safety and access, which offered an ideal location to welcome the European Biennale of Contemporary Art in 2008.

In this work, the emphasis will be put on the importance and purposes of renovation to preserve our architectural heritage, trying to demonstrate how changing the original function of a building can help to save and revitalise an abandoned site. The proposed rehabilitation aspires to find the accurate balance between the existing form and the level of intervention, trying to properly identify important elements to be saved and propose a relevant and functional modern organization for this incredibly valuable place.

“Old ideas can sometimes use new buildings. New ideas must use old buildings.”

- JANE JACOBS
2
SITE AND PROGRAM
A NEGLECTED FORTRESS IN FAVIGNANA, SICILY

2.1 SITE AND CONTEXT
The “butterfly of the Mediterranean” sea and its fortress

2.2 PROGRAM
A competition brief as a starting point

2.3 IMAGE GALLERY
The remarkable ruins of the Forte Santa Caterina

2.4 INSIDE THE FORTRESS
A fascinating complexity
SITE AND CONTEXT

The “butterfly of the Mediterranean Sea” and its fortress
The building studied for this renovation project is an old fortress standing on the highest peak of a small island called Favignana, located a few kilometers away from the west coast of Sicily.

Due to its shape, the island is also known as the “butterfly of the Mediterranean Sea”. With its 19 square kilometers and 32 kilometers of coast, Favignana is the largest and most touristy island of the Aegadian archipelago. It is accessible by boat from the town of Trapani, the closest harbour in Sicily. Over 4000 dwellers are living on the island, with a density of 116 inhabitants per square kilometers.

The name of the island finds its origins in the Latin word “avizoria”, which designates a warm wind coming from the West. The climate is mild, the minimum temperature is 5°C and March appears to be the coldest month. The temperatures can reach 45°C during the summer months and the island has a low precipitation rate. Even though the ground is rather arid, the fauna and flora is rich, with many species of flowers and orchids, and a large amount of fishes and gulls.

The most attractive places in Favignana are the ancient Tuff mines, the beaches and their crystalline water, Favignana town and its pedestrian streets, and the “Riviera Santa Caterina”.

Favignana is also known for its traditional fishing techniques, which highly influenced the local culinary traditions.

An historically rich context:
From the Romans to the Florio dynasty

The first traces of life on the island go back to the prehistoric times, signs of paintings have been found in caves naturally forged by the sea. During the Punic Wars, several battles took place on the coast of Favignana, which has been conquered for the first time by the Romans. The most famous cove of the island, Cala Rossa, meaning the “Red Cove”, received his name after an important battle confronting the Romans and the Carthaginians in 241 B.C. They were the first to use the island as an important source for Tuff stone and dug quarries all over the land. The Tuff is a relatively soft volcanic rock often used in construction since ancient times, especially in Italy by the Romans.

Later, the presence of this mountain ridge dividing the island, and its highest peak of 310 meter-high made Favignana a strategic point to watch the possible invaders reaching the coast. During the Saracen occupation, 9th century, a watchtower was built on the viewpoint, being the first construction of the island. It is built out of Tuff bricks coming from Favignana’s quarries and is considered as the first construction phase of the fortress. After the conquest of Sicily by the Normans during the 12th century, the king Roger II fortified the tower and turned it into a fortress. In 1498, Andrea Risso, lord of Favignana, expanded it to be protected against the pirate attacks. The fort was again subject to modifications in 1616 and 1655, while Sicily was part of the Crown of Aragon. Its function of protection changed in 1795 when the Bourbon kings, which reigned in Sicily for more than one century used the fort as a prison for the republican revolutionaries. This activity stopped in 1860, when the King Victor Emmanuel II sent Garibaldi to conquer the South of Italy and reunify the country. The prisoners were released and the prison cells destroyed.
The extraction of Tuff stone has been the major economic activity of the island until the beginning of the 20th century and was the main source of incomes for the inhabitants. Favignana’s stone was used to decorate the facades of baroque churches around Sicily and build several palaces in Palermo. The Tuff extraction conferred Favignana with astonishing places and greatly impacted on the topographical aspect of the island. Nowadays, the Tuff mines symbolise the communion between human and nature, they turned island into flourishing underground gardens and on the coast enriched some of the most beautiful beaches of the world.

From the end of the 19th to the end of the 20th century, Favignana experienced an important economic development thanks to the Florio family, an important entrepreneurial dynasty active in Sicily at this time. Ignazio Florio bought the Augustinian archipelago in 1874 and established in Favignana the largest tuna fishing factory of the Mediterranean Sea. In fact, the ‘massimare’, an ancestral fishing technique dating back to the prehistoric times, is an essential part of the island’s identity. Since that time, in early Spring, thousands of tunas migrating to Africa invade the seashore. This activity represented from the beginning a crucial economic income for the island and turned into an almost sacred ritual.

The Florio’s industry expanded and Favignana encountered a prosperous time. Indeed, they were the first to experiment the conservation of tuna with oil and use the white-iron cans. Ignazio Florio also implemented the construction of two important buildings, the ‘commune’ and the ‘sta Florio’, actively contributing to the architectural heritage of the town.

The Florio’s business closed in 1960 even though about 500 people were still employed. The factory kept on working with different owners for about 20 years, however, the island suffered from a period of depopulation. Due to a lack of fishes, which are now caught before reaching Favignana’s coast, the last ‘mazzara’ took place in 2007. In the early years of the 21st century, the ‘commune’ was completely restored by the regional government of Sicily and turned into a museum in 2010.

Nowadays, Favignana’s main economic activities are the tourism and hotelier sectors. In fact, the stunning caves and sea caves made Favignana a popular holiday destination for the swimming and snorkelling enthusiasts.

The Forte Santa Caterina: An astonishing architectural heritage

The fortress is only accessible by foot; it is about one hour walking from the centre of the town on a steep path to reach this breath-taking panoramic view. Despite the fact that the buildings have been closed to the public due to security concerns, the view on the entire archipelago worth the effort. The actual condition of what was once a prison is closely related to the historical facts described before and emerges from all those layers of history cumulated to offer this precious heritage.

Unfortunately, the Saracens’ and Normans’ influence on this vestige is not precisely defined due to a lack of archaeological traces. In contrast, the impact of the Aragonis’ presence is supported by the existence of two different engravings, which, despite the general deterioration of the place indicate that the castle went through several modifications in 1616 and 1655.
The overall shape of the building is rectangular with four approximately symmetric protrusions in the corners. Natural light enters the place through irregular windows and patios, varying in shape and size. Inside the fortress, each room appears as a surprise, their dimensions and ceilings are always different and they are not predictable when looking at the outside appearance of the fortress. This gives the impression that spaces were progressively excavated one at the time, responding to the needs, and maybe sometimes dictated by intuition and spontaneity. Progressing inside the castle is like moving through a maze, as every step is followed by new emotions and feelings.

The ground floor was partially underground and probably confined political prisoners since the 17th century. The first floor was potentially assigned to the garrison and the second floor; a set of small vaulted rooms arranged around a central patio hosted the soldiers and officers. A small room was also turned into a chapel dedicated to Santa Caterina, probably giving its name to the fort.

During the Bourbon’s reign, a large number of conspiracies occurred against the monarchs perceived as tyrants. As a consequence, they established a highly repressive system and imprisoned thousands of rebels and many of them were detained in the Favignana’s fortress. When their reign ended, the offender and now freed population plundered the place and knocked down the chapel.

After the Second World War, the castle was requisitioned by the navy, which by the end of the 50s’ hired someone to manage it. The place has now been abandoned for several years and is clearly damaged by the time. Even though the buildings were not maintained during the last years, probably for economical reasons, the Forte Santa Caterina remains one of the most ineluctable places when visiting the island of Favignana.
2.2

A competition brief as a starting point

The program of this renovation project was inspired by the Art Prison competition opened to students, young architects or designers, between January and April 2018. In response to the municipality’s will to rehabilitate the “Forte Santa Catarina”, the competition was offering the chance to designers to turn the site into an important contemporary art platform. This program was judged too invasive and has been adjusted to meet a strong desire to respect this extremely rich architectural heritage, trying to simultaneously respond to the municipality’s demand and preserve the existing unique and exclusive character of those ruins.

Art Prison

Competition brief

[...]

...new volumes - autonomous or adjacent/elevated to the existing facilities - will be admitted as long as they:
- do not compromise or damage the existing facilities;
- do not exceed 4 meters in height (the same limit applies to possible elevated volumes of the existing architectures);
- do not exceed 3,000 m2 of covered surface altogether; [...]

PROGRAM:

ART IN NATURE: [...]: the long walkway accessing the Fortress will have to be designed as an “open air gallery”. It will have to be a 1.5-km route where to enjoy installations, works of art and emotions to prepare to the arrival at the Fortress. [...]

ART SCAPES HOTEL: [...]: the facility will have to offer a great opportunity to those people willing to spend the night surrounded by the artistic and natural wonders of the isle. Designers will have to create a series of “rooms” for a simple but extremely refined stay in one of the most beautiful landscapes. [...]

They will have to be equipped with essential services and possible wellness services. [...]

ART LUXURY HOTEL: not only simplicity but also luxury and elegance. [...]: the Fortress will have to guarantee a limited number of 3.5 suteres equipped with every comfort in order to meet the standards of the wealthiest and most demanding visitors. [...]

ART ATELIER: [...]: the Fortress will have to include 2-3 atelier apartments where artists can find the optimal inspiration/laboratory conditions for their artistic production. [...]

CULTURE CENTER: [...]: the Fortress will have to be equipped with numerous flexible spaces. [...]: some possible uses of the community of the island will need are exhibitions, conferences, performances, meetings, workshops and laboratories.

“QOD: [...]: the Fortress will have to host a high-quality restaurant. In this place, star chef will reinterpret local tradition: they will ensure an enchanting experience for visitors, which will make the visit to this extraordinary art platform unforgettable.
I like ruins because what remains is not the total design, but the clarity of thought, the naked structure, the spirit of the thing.

" TADAO ANDO "

The expected surface for this given program was considerably reduced to suit the existing structure and preserve these impressive and valuable vestiges so the upcoming generations will have the chance to discover this unique site. The aim was then to adapt the project to the current spaces rather than impose modern constructions to this historical place. Each asked service will find its corresponding function in the new program, but might be rescaled or rehamed to respond to the existing available spaces.

However, the socio-economical context on the island involves that the rehabilitated fortress should be profitable for the community. Therefore, new volumes will be proposed to extend the possible services offered by the new program, in a way that the additional constructions will have a minimum impact on the outward character of the site.

The new functions allotted to the buildings were not defined from the beginning, but were adjusted simultaneously with the design evolution. The intention was to find an ideal purpose for each place, analysing the quality of each segment of the available form and make it work as part of a whole.

In that sense, the smaller and more isolated rooms will give the public the opportunity to spend a night in this privileged and memorable environment. They will be converted into a diversified range of rooms trying to respond to anyone’s needs, including “Retreat rooms” for those who might wish to stay longer in a sharing and inspirational climate.

The roof terraces will be furnished with new discreet and light structures to provide the visitors with food or drinks while admiring the view.

And finally, the “Art Journey” will propose a route around and through the fort, visiting the place along exhibition spaces, on the way to the top view.

1 IN THE FORTRESS:
- The Art journey
- 4 Retreat rooms and their common spaces
- 4 Luxurious suites
- The rooftop bar and its terrace
- The Panoramic restaurant, hosting up to 60 people

2 IN THE SECOND BUILDING: THE HOTEL
- 8 rooms
- A dining room and small kitchen
- The swimming pool and terrace
The remarkable ruins of the Forte Santa Caterina
"Where there is ruin, there is hope for a treasure."

- Rumi -
Each window is like a picture, a fragment of the landscape, a fragment of history.
Each room has a unique atmosphere, dictated by the variety of vaults changing in shape, height and orientation. Each space becomes a surprise.

1 GROUND FLOOR
First room after entering through the ground floor.

2 GROUND FLOOR
Long and narrow room ending with a view on the surrounding nature.

3 GROUND FLOOR
Unique asymmetric ceiling and stairs leading to the first floor.
1 SECOND PATIO
It provides the central distributing space with natural light.

2 SECOND FLOOR
View on the main central patio from the upper floor.

3 MAIN PATIO
The open-air patio from the entrance of the first floor.

4 MAIN PATIO
It brings natural light inside the fortress, through a multitude of different openings.
1 FIRST FLOOR
Corridor linking the second patio with four smaller rooms.

2 FIRST FLOOR
Adjacent room to the corridor.

3 FIRST FLOOR
Large room directly connected to the second patio, with a higher ceiling.
1 FIRST FLOOR
Long and high corridor coming from the main patio.

2 FIRST FLOOR
Probably the chapel dedicated to James Leuenna.
1 NORTHERN SIDE OF THE ROOF
View of Levanzo Island

2 SOUTHERN SIDE OF THE ROOF
Remnants of a watch tower

3 NORTHERN BUILT PART OF THE ROOF
Missing bricks and unstable elements

4 SOUTHERN BUILT PART OF THE ROOF
Access to additional spaces
1. ROOF
Room accessible through the roof terrace, openings on three facades and view on Fajãzinha town.

2. ROOF
Highest interior space of the Fortress with a panoramic view.
1 PANORAMA

View from another hill facing the site.
2.4

INSIDE THE FORTRESS

A fascinating complexity

I had a dream…

Arriving by boat in Favignana, I see a peak and this huge, abandoned Fortress waiting for me.

---

One hour walk in the nature, up to the top… I am exhausted, but here I am.

Nothing is there, no trace of life, only remnants of the past…

---

I spent hours, trying to find my way, going from one surprise to another.

I spent many stairs to climb, so many rooms to discover, so many small windows opened with their breath taking views on the wild nature and the Sea.

Arriving at the top, this is one of the most stunning place I had seen in my life.

I can’t describe the feeling in front of such a beauty.

And I woke up, with an incredible feeling.

The journey stayed as a dream, my tour staff told me, as it was unfortunately surrounded to visit the site.

However, I spent days, observing hundreds of pictures, looking to any wall, window, door, ceiling and stairs. Living from the ground floor to the top, from one side to a other.

Trying to figure out how this inextricable construction works.

---

As the outlines are already shaped and kept unchanged, the project evolution did not follow the classical way of evolving in an architectural design. In fact, the strong desire to preserve the current volumes required a constant questioning and rethinking in order to propose and overall functional organization.

The initial stage was to familiarize with the place and its complex planning, and more particularly to understand the circulation inside and around the buildings. In fact, the main building is accessible by two entrances at two distinct levels which, added to the second building access, requires to clarify the routes on the site. Regarding the inside organization, we could compare the smaller construction, except from the really high ceilings, with the modern way of building similar floors on top of each other. This is why the focus of the following analytic part will be put on the fortress itself.
Sketching moment: first contact with the Fortress - "Confusion"
The first idea was to classify the spaces according to different characteristics, such as their shape or their role in the fortress. The first observation to come out was the fact that a major part of the interior surface is dedicated to circulation (highlighted on the floor plans), and that only interior spaces are actual rooms. The challenge would then be to find a use for those crossing points, where some times different routes meet. From those, two or more by the quality of light and light in fact, the two patios (coloured in green) were strategically located to bring natural light and distribute the fort. What will be called the main patio, located on the second floor and crossed by two circulation axes, south of the heart of the building. The first axis goes longitudinally through the entire floor and leads to the front patio. And the second one links the entrance of the first floor with the staircase, leading to the upper floor.

In comparison, the second patio gets more privacy, as it is placed at the end of the longitudinal circulation. It is currently covered by a damaged transparent roof and distributed four spacial rooms (1A). On the other side of the main patio, a long corridor leads to a range of smaller rooms (1B), all of them catch natural light, but some do not have a direct view on the outside.

Another confusing point is the presence of a second entrance accessing the ground floor. The rooms of this level have lower vaulted ceilings and receive less natural light (2). The second floor, reachable from the main patio, is composed of smaller rooms with lower ceilings (2B). They have fewer connections with the outside, the main light source being the patio. However, one outstanding space does exist with the other room’s scheme (2A). In fact, this space is distributed between two visual connections with one side of the roof terrace, which is presently not accessible.

Finally, the accessible side of the roof leads to rain facet districts (2). A first floor facade one and a second standing one more level up on a narrower terrace and offering a panorama view with an opening on each of its facades. A front balcony viewpoint is reachable from an open-air staircase attached to the side of the first construction.

The long and sometimes tedious phase of the design process was certainly a starting point, but some of the previous statements were not clear from the beginning and required some adjustments while already working on the rehabilitations ideas. As said before, the following drawings are preliminary results of an initially more qualitative proposal, where each represented function found its matching space.
3 DESIGN

PROPOSED REHABILITATION FOR THE "Forte Santa Caterina"

2.1 FORTRESS ORGANIZATION
A modern layer to rehabilitate the fortress

3.2 TECHNICAL CHOICES
Common solutions for the whole fortress

2.2 FINAL DESIGN
Floor plans, sections and final decisions
The following design will present a respectful and thoughtful rehabilitation project that seeks to offer the fortress back to Favignano’s community by reclaiming an architectural heritage and trying to stimulate the fragile economic sector of the area. It also aspires to protect and preserve the atmosphere that those ruins currently procure to the visitors. This project proposal will offer travellers the opportunity to visit a unique and stunning site, mixing culture, art and culinary experiences. Or for the luckiest, to stay overnight and enjoy an exclusive moment surrounded by authentic vestiges and a pristine nature.

The exposed decisions were dictated by a deep desire to keep the unique spatial character of each volume unchanged. Indeed, the fortress offers a journey nourished by constantly changing feelings and surprises. The challenge was then to remodel and modernize the place, holding on to those emotions, trying to properly understand each space and turn their particularities into strengths.

At some points, it was also important to try to not alter with this slightly bleak atmosphere with ostentatious interventions in order to stay in harmony with the local pattern.

To make the general understanding as easy and clear as possible, an original layout will guide the reader through the project, hoping to surprise him with an interactive and original reading.

In the following pages, the proposed new organization to rehabilitate the fortress will be presented with axometric and schematic views. Starting with the main interventions on the site and on the exterior outlook of the buildings, pursuing inside the fortress from the top to the ground floors.

After developing technical solutions applied to the entire design, the different new functions will be developed and exposed with detailed plans, sections and three-dimensional views.
3.1 FORTRESS ORGANIZATION

A modern layer to rehabilitate the fortress

Before starting to allot functions to the interior spaces, for security matters and to make this monument last over time, it was essential to define each element that worth being preserved. The task was then to identify the deteriorated parts that need to be restored, reinforced, reconstructed or completely removed. One general rule will be to respect the ruins and assume the new interventions, contrasting with the old. Therefore, the excessively deteriorated parts will either keep their vestige character, and the dangerous elements will be removed or reinforced with new structures.

The first wise decision would be to respectively restore the facades, their stability is not threatened, but some of the bricks might fall because of the weathered joints. Even though the tuff exploitation disappeared in Favignana, this would not compromise an eventual restoration as some quarries are still in use elsewhere in Italy. The second building is also restored, and recovers its original appearance. Indeed, windows were sealed, probably to avoid vandalism, those are reopened and the cubic construction hiding the facade is removed (1).

The most deteriorated elements that might be endangered are located on the roof. Two of them, one on each side of the roof, are in a state of ruin (1 and 2). It is possible to presume that they used to stand as actual rooms, maybe as watching points, but since this stays only speculation, guessing what stood three years ago will rely on each visitor’s imagination.

For those, the detached or dangerous bricks are removed, and the steady parts are restored like the facades, in order to save this melancholic or nostalgic feeling provoked by the ruins.

The next intervention concerns a pillar that used to support the higher terrace of the roof, but one piece of it and the safety wall fell down, letting this pillar standing alone. As it is not stable enough to hold a rebuild floor, it is removed. However, the terrace and low wall (3) are repaired to ensure the safety of the visitors. On the same roof side, the coverage of the second patio is too deteriorated to be repaired (4) so it becomes an open-air central space.

And finally, two openings are created in the highest roofs of the Fortress (5 and 6). They are currently falling apart and some provisional structures were placed to support them. Thus, the broken portions become skylight sources, and the remaining parts are reinforced.

As a final step before entering the Fortress, the paths and circulation on the site required to be clarified. Therefore, the enclosing brick wall is reconstructed where some pieces of it fully disappeared over time. While reaching the bottom of the Fortress two possible ways are offered to the public. This double circulation proposes one route directly leading the customers to the hotel area, and a second one going around the castle for the one-day visitor who wishes to discover the top view. On the way of the visitors, a long set of stairs parallel to the facade is built to reach the entrance. The two distinct paths finally meet again in the nature, where a naturally designed track begins and offers a walk on the hill.
3.2 TECHNICAL DECISIONS

Common solutions for the whole fortress

The second task before refurbishing and reorganizing the interior spaces was to identify the necessary restoration works inside the fortress.

The walls and ceilings are restored and coated identically to their past condition, more roughly for the exterior spaces, after recovering their former state, the challenge will be to minimize the amount of additional interventions on them. Only the private spaces, such as the suites or rooms, become proper interior spaces, allowing the air to circulate freely inside the fortress. The thickness of the walls makes additional insulation worthless, and the isolated circulation distributing those spaces makes the noise disturbance absent.

In the rooms that require heating, air-conditioning or humidity extractors, the smallest possible new masonries are built to hide those technics in a false ceiling over the toilets and showers. Those are the only places where the vaults might be partially hidden. Otherwise, all the other technical necessities, such as electricity wires or drainage system, are placed under the new flooring, as the current floors are extremely damaged and need to be replaced.

The idea for the floors materiality is to diversify it to delimitate the spaces, using light beige natural stone tiles for the circulation and public spaces to recreate the existing atmosphere, and grey concrete in the private spaces. To soften the intersection between the darker floor and the beige coating, skirting boards are painted in grey where traces of old ones are visible.

To minimize the impact on the facades, the windows open to the inside and are hanged at the edges of the interior limit of the walls, which is convenient and will sometimes offer small outdoor niches with astonishing views on the unspoilt surrounding nature. The same way, to have the slightest repercussion on the circulation spaces’ perception, the doors will be aligned to the inner limit of the rooms.

Finally, the most challenging reflexion was to find ways to bring artificial lighting inside the fortress without affecting the walls and vaults. The two easier to options to implement are the spotlights hidden in the floor, mainly for circulation spaces, which induce a unique atmosphere, and the integrated lights when false ceilings are usable. When there is space for high wooden cupboards, those are stopped before meeting with the existing ceiling and spotlights oriented to the vaults are hidden in the wood structure.

For more punctual lighting, for instance above the mirrors in the bathrooms or over the beds, new metallic or wooden structures are designed to disseminate the electric wires or integrate plugs and switches. And finally, when additional artificial light is still needed and none of the previous techniques suits, freestanding lamps can be placed.

The previous ideas will be applied to the project, trying to provide it with an overall harmonious unity, sometimes slightly reminding the prison character.

1 MATERIALITY
Before and after pictures showing the finishes for the circulation spaces.

2 ARTIFICIAL LIGHTING
Images showing the different lighting options.
This final chapter is arranged to gather the similar functions working together. The first part will present the services offered to the one-day visitor, starting with the Art journey to end on the rooftop with the bar and restaurant and their stunning views.

Secondly, the hotel area of the project will be developed, from the outstanding suites and rooms inside the fortress to the second building housing an exclusive bed and breakfast hotel.

It might be important to remind that the spaces remodelling was guided by the wish to keep the actual volumes unchanged, adapting the interior planning to the existing walls (illustrated on transparent sheets in the following section).

ONE-DAY VISIT
1. ART JOURNEY 96
2. RUFTOFT BAR 97
3. PANORAMIC RESTAURANT 98
4. LONGITUDINAL SECTION AA* 98

NIGHT EXPERIENCE
4. LUXURIOUS SUITES 100
5. RETREAT ROOMS 102
6. COMMON SPACES 110
7. LONGITUDINAL SECTION BB* 116
8. HOTEL 116
ONE-DAY VISITS
1. ART JOURNEY
2. ROOFTOP BAR
3. PANORAMIC RESTAURANT

NIGHT EXPERIENCE
4. LUXURIOUS SUITES
5. RETREAT ROOMS
6. COMMON SPACES
7. HOTEL

SITE PLAN 1:200
ART JOURNEY

After a tour around the fortress, which reminds the visitor how small we are next to this massive monument, the journey goes on to the upper floors along more human scaled exhibition spaces. Those could house small temporary exhibitions, expose the history of the place or become multipurpose spaces to host events or meetings.

The ground floor of the Fortress is entirely dedicated to the public, the darker rooms are ideal to expose art pieces and two windows provide views on the opposite facades.

The new flooring partially covers the rough revealed existing floor to guide the visitor and preserve the rustic atmosphere of the rooms. Those are highlighted with ground spotlights oriented to the vaults and showing the way of the journey.

New thin metallic structures are punctually anchored in the beams of the western long and narrow room, so pictures or paintings can be hanged distant from the curved walls.

AREA  Total exhibition space : 129 m²
On the first floor, the Art journey continues, passing two rooms before reaching the main patio, which alone constitutes an architectural piece of art. The double staircase, leaving the patio, either leads to the bathrooms and cloakrooms, or to the second floor part of the journey.

AREAS
- Exhibition space: 25.1 m²
- Central patio: 18.1 m²
The second floor proposes two exhibition rooms, the first one rich by its shape and relation with the central patio, and the second one enriched by two views on the town.

The last space of this indoor visit benefits from a double height, which allowed to build a new staircase in order to attain the actually unreadable side of the roof. In the end of the journey, the visitors can enjoy the most intense performance offered by nature, a sunset on the Aegean archipelago.

AREAS
Exhibition space: 51.3 m²
Storage: 10.1 m²
Bathrooms
+ Cloakroom: 14.3 m²
The northern side of the roof appears to be a perfect viewpoint to watch the breath-taking view or the sunset, which seemed perfect as an end for the Art journey.

Strategically located before getting to the terrace, the rooftop bar stands on an existing higher portion of the roof, which inspired its shape and offers a large and maybe vertiginous view. It proposes basic services so the visitors can refresh themselves after the exhausting walk to the top, before moving on to the terrace.

As the new structure stands higher than the rest of the floor, windows going from the ground to the ceiling can be used for each facade. In order to respect the building and allow a reversible structure, the only contacts between the new and old volumes are the floor and the connection with the staircase. The modern metallic structure is punctually anchored in the current flooring.

On the terrace, a long bench and a few other seats are protected by the overhanging roof and offer a resting place. The existing difference between the bar and terrace levels creates a back for this long sofa.

The ruins of what probably used to be an additional room of the roof, is transformed into a planted zone to bring a piece of nature to the top. The visitor can freely walk around and enter the confined watching rooms standing at the edges of the corners. In addition, the wall surrounding the roof being relatively high, an observation point with a water entry place is designed so people can sit or stand higher than this wall.

**AREAS**
- Bar: 48.4 m²
- Terrace: 169.7 m²
The second side of the roof, higher than the previous one, offered a wider and more convenient surface to build a restaurant. The restaurant has no inside connection with the lower floor but includes the room present on this level, and can welcome up to twenty clients.

The same structural pattern as the bar is used, using metallic pillars and thin metallic window frames. An overhanging roof protects the interior and the terraces from the sun on the southern facade.

The restaurant is divided into different areas, the intention being to propose a maximum of different atmospheres and flexibility. With its spectacular view on the sea and surrounding nature, it becomes an ideal place for any memorable dinner or event.

While setting, because of its height, the surrounding will use hiding the view. New floors are then used to elevate the view level to isolate the restaurant and define the spaces according to their function. The first new flooring level begins before the entrance and will be the level for the circulation and service.

The outdoor dining area and the bar terrace are one step higher. Due to the identical altitude and climate, the restaurant might sometimes be exposed to the wind or an additional protected roofed space. In order to bring more natural light to the terrace and the circulation spaces, a spandrel is made in the floor.

The actual construction houses the bathrooms, which also benefit from a qualitative space and a view towards the sea. A new flexible dining area, which can be privatized and provides a warmer atmosphere during the winter times.

The large dimensions of the circulation spaces are certainly justified to serve the service, but the idea was also to allow for different types of use, both at the same time and at different times.

The area also justified the bar position that is centrally located and welcome the visitor.

**ABOVE**

1. Kitchen - 30.1 m²
2. Bar - 7 m²
3. Bathrooms - 8.5 m²
4. Outdoor dining area - 43 m² / max. 42 people
5. Outdoor dining area - 43.9 m² / max. 38 people
6. Bar terrace - 20.6 m²

**THIRD FLOOR PLAN 1:100**
The luxurious suites have been designed to fulfill the most demanding guests’ expectations; those large rooms were ideal to house this function. Even though a general concept is applied to all of them and creates a unity, the luxury of those four rooms remains in their unique and exclusive character. They are organized around the second open-air patio, which makes them the most private and isolated rooms of the fortress. As for the entire design, the overall appearance and the modest materials might bring a softly bleak atmosphere, which is eased by the use of warmer materials like wood or fabrics, or sometimes with vegetation.

Despite their different shapes and dimensions, the idea was to provide them with all the same services, such as a resting place, a comfortable bathroom and a sleeping area. The beds are always placed the closest possible to the windows and the couch closer to the entrance to create a welcoming first impression. The small amount of natural light sources led to planning opened bathrooms.

For the bathrooms, concrete masonries are created to hide the water pipes and receive the washbasins, which are sometimes dropped on the concrete or directly shaped in it. Metallic squared grids stopping before reaching the vaults, allow the light through the rooms and make use of structure to hold the mirrors and disseminate the wire of the small lights.

Systematically, to bring a warmer atmosphere to the sleeping area and for technical purposes, the bed headboard is made of wood, it serves as a bedside table and supports reading lamps.

Those four spaces could be classified according to their similarities. The two first suites are wider with a higher ceiling and have a high window creating outdoor niches to get closer to the view. And the two other ones are more longitudinally shaped and benefit from the natural light coming from the patio.

**AREAS**

1. Suite I: 36 m²
2. Suite II: 43.4 m²
3. Suite III: 37.4 m²
4. Suite IV: 37 m²
5. Service: 4 m²
Circulation: 18.8 m²
SUITE I
The particularity of this room is its wide shower, which takes place in an existing adjacent squared space. The large window offers a sort of balcony.

SUITE II
The largest suite benefits from two windows, a low one on the bedroom side and a large one with an outdoor private space. The bathroom and wardrobes structure and divide this wide-open space.
SUITE III
In this room, a window brings light from the patio into the relaxing area, which can be covered with a shutter for more intimacy. Even though it is narrower, the organization of the spaces is comparable to the previous suite.

SUITE IV
The last suite follows a slightly different scheme, proposing three more distinct areas, and enjoying a bathroom overlooking the surrounding landscape.
The retreat rooms are created for artists, or other people seeking for a peaceful and remote place, looking for inspiration or a quiet atmosphere to work. Those rooms are more or less equipped according to their shape and size, but are all furnished to offer a comfortable stay in the fortress. The guests can enjoy the fortress’ facilities, and different common spaces are linked to this function, so they can live autonomously in an exchange and sharing climate.

The long corridor coming from the main patio, privatized with a small gate, leads to an office for the employees, the four rooms, a common kitchen and a working room on the upper floor. The furnishment of those rooms responds to the same general ideas than the suites, but they are more distinct from each other.

The complex reflexion for those was to customize their organization within a global unity. For instance, to reach the views of the highest windows, some floors are elevated and a mezzanine is created.

AREAS
1. Room I: 17.3 m²
2. Room II: 17.8 + 7.5 m²
3. Room III: 17.8 m²
4. Room IV: 31.3 m²
5. Welcome desk: 17.8 m²
6. Bathrooms + cloakroom: 11.3 m²
7. Patio: 18.1 m²
8. Office: 11 m²
9. Shared kitchen: 13.5 m²
Circulation: 33.2 m²
Technical space: 13.5 m²
ROOM I
Despite its tight dimensions, this room offers the required utilities, and benefit from an astonishing view on Favignana's town.

ROOM II
The double height of this room allowed constructing a mezzanine to reach one of the two windows. This second floor only covers half of the surface so natural light enters the entire volume, and a spacious bathroom is established under the new structure.

ROOM III
The third room is also confined and is the only one not furnished with a desk, but its unique shape generated an exclusive and uncommon arrangement.

ROOM IV
The largest room found its organization responding to the existing partitions and a higher window in the first part. The long and narrow bathroom permitted to create a large shower overlooking the landscape. The higher working area benefits from direct natural light.
As previously stated in the Art journey section, the second floor is accessible from three distinct sets of stairs that divide this level in three parts.

A first single room is connected to the lower floor by the staircase located at the end of the rooms’ corridor. It proposes a small shared work area, which is ideally isolated from any possible disturbance or high temperatures during the summer.

In the main patio, two staircases lead to two opposite spaces surrounding this open-air light source. The first side is dedicated to the Art journey and the other side is composed of narrow rooms restricted to the hotel customers’ use. The fortress planning obligates the users to go down to the patio and up again to access the other shared spaces available on the roof.

AREAS
1. Working room: 13.4 m²
2. Relaxing rooms: 29.2 m²
3. Bathrooms
   - Cloakroom: 14.3 m²
The way to the last rooms on the roof passes by the restaurant floor and then uses an open-air set of stairs.

The so-called “Inspiration room”, this stunning squared room greatly opened on its four facades, becomes a partially covered garden. The aim is to offer an outdoor quite and isolated place with views on the landscape, which shields the customers from sun or wind.

On the same level, a darker viewless room seems to lack spatial quality to fulfill a function. To turn it into a qualitative space, the new opening in the roof works as an indirect light source and ventilates the room. It becomes now ideal to organize a projection, a meeting, a workshop or to be a peaceful working place.

Finally, the highest space of the entire fortress is turned into an impressive panoramic terrace, where to relax, enjoying the splendid 360-degree-view under the warm Sicilian sun.

AREAS

4. Inspiration room : 28 m²
5. Meeting room : 21.8 m²
6. Panoramic terrace : 21.2 m²
The last part of this project to be developed is the hotel, rehabilitating the second building on the site. It proposes height pleasant rooms to spend a night in the exclusive environment.

As the building went through several transformations over the years, load-bearing walls are preserved and new partitions are designed.

A new entrance is created in the western façade of the construction and is highlighted by the existing structure attached to it, on which the vegetation grows to form a natural shading coverage.

The service offers the chance to enjoy a breakfast buffet in the lobby, on the terrace or in the rooms, where the second floor rooms benefit from a terrace to share the breakfast time watching the sun rise.

All the rooms are highly luminous thanks to a minimum of two windows per room. As the elevations are high, the bathroom’s partitions do not reach them, in order to offer the same impression induced by high vaults, and to bring light into the bathrooms that do not benefit from an opening to the outside. An additional floor is created to house the two last rooms and their terraces. A light structure and the overhanging roof allow widely opened facades and soften the visual impact.

The semi-interposed outdoor spaces are partitioned and have level differences to provide them from external passage. A semi-opened corridor extends from the gateway to the first level, leading to the surrounding wall to respect the landscape and bring the customers closer to the nature.

AREAS
1. Welcome desk: 6.9 m²
2. Dining area: 18.6 m²
3. Service room: 10.7 m²
4. Storage of 104 m²
5. Garage: 141 m²
6. 2 stores of 24.1 m²
7. Services: 30 m²
Swimming pool: 6 x 11 m
More than convincing with a design, the ambition of this work was to share experienced feelings and emotions, hoping that the reader recognised the richness of this extraordinary site. It has been indeed a huge chance to encounter this competition, offering the chance to discover this probably sparsely known place. Even at a project level, any architect should once meet the opportunity to work in such an environment.

Unfortunately, a lack of relevant historical written traces regarding the fortress remains slightly frustrating. Surely, the relevance and quality of the rehabilitation could have been improved with more available documentation, may be helping to find deeper connections between the former and new functions. This justifies the greatest care and consideration that guided all the decisions and the complete respect for the actual situation. The proposed non invasive rehabilitation of the –arte Santa Latenna aspiring to stimulate the economic sector of the island in order to save and maintain what presently remains.

It is of course undeniable that the subject could be developed further, for instance by studying the technical, economical or sustainable questions. But the final proposed design does not pretend to be the absolute answer to the highly questionable and sensitive act of intervening on such an impressive abandoned monument, where many additional factors would have to be taken into consideration.

Would the socio-economical context of the island imply that the fortress would remain abandoned and keep decaying, loosing every day another segment of its identity? Does the place really require changing its function to attract visitors, or could it simply become an historical landmark? Would this place find a new sense if we could give it back to the community? Would the rehabilitation offer a reason to climb up and enjoy an experience for the senses, once in a lifetime?

So many questions that request meeting the locals to understand the community’s needs and wishes, studying the tourism and economic dynamics of a remote and hardly accessible island, learning about the region and mentalities.

Working on a rehabilitation project challenges the way of conceiving the space and forces to reorganise the usual process of architectural conception, evolving in a yet constructed site where the existing structure should be maintained and the historical background deeply matters. Indeed, the design process required constant questioning, rethinking and reconsidering. Is the intervention respectful enough? Is the balance between the ancient and the modern accurate? Do the ruins seduce the public or do they nowadays require more contemporary interventions to convince?

Certainly an endless journey...

I have been travelling in my project, benefitting from a journey that went far beyond my expectations. I tried, as much as I could, with my emotions and what I learned as a student in Architecture, to reclaim and honour this heritage, with determination, offering to each space, a reason to exist, and certainly for this place, an opportunity to reborn for generations to come.
I would like to express my very great appreciation to...

TUT - University of Technology of Tampere, Finland
for their incredible sense of welcoming foreign students.

Ilmari Lahdelma, Thesis Supervisor
for trusting me with the topic choice.

Young Architect Competitions team
for the opportunity they offered to discover the stunning place of Favourna and for all their beautiful images.

François, Loïc, Sébastien
for the professional advices in printing matters.

My family and friends
for their support.
BIBLIOGRAPHY

Websites


Images

INTRODUCTION p.12 Image 1 a-b

INTRODUCTION p.12 Image 2 a-b-c

INTRODUCTION p.14 Image 3 a-b
“Where there is ruin, there is hope for a treasure.”

- RUMI -