

## **Pre-renaissance Manor Houses in the Basque Country (Spain): Analysis of the Loyola Tower Palace**

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### **Abstract**

At the end of the fifteenth century, there was a shift from a defensive Tower House residential model to a type of palatial-style residential model. The Loyola Tower Palace, located in the Basque Country (Spain), is an example of this evolution. This paper aims to analyze the architectural elements and construction system of a Pre-renaissance Manor House. The work was divided into three sections: fieldwork, documentary research and the historical-constructive analysis. Six periods were detected: the remains of the original Fortified House, the Tower Palace, the mid-sixteenth century reform, the works undertaken by Jesuits, the interventions of the nineteenth century, and the more recent refurbishment. Finally, the building was also compared with other Basque Manor Houses.

**Keywords:** Manor Houses, Tower Palaces, Historical-constructive analysis, Basque Country

### **Introduction**

From the first mid-fourteenth-century defensive Tower Houses to the Palaces of the beginning of the sixteenth century, Manor Houses were the homes and operation centers for the Basque rural nobility. From mid-fourteenth century on, due to the Late Middle Ages

economic crisis, the financial income of the Basque rural nobility dropped alarmingly, endangering the survival of most of the lineages (Dacosta 1999; Díaz de Durana 1986; Orella 2013). Many families had to expand their territory to maintain their income level, causing a series of rivalries and confrontations between neighbors. Within a few decades, these fights evolved into a full-scale confrontation between two large factions: the Oñaz faction and the Gamboa faction. This war spread throughout the entire Basque Country, leading to the so-called War of Bands (Arocena 1981; Dacosta 2003; Díaz de Durana 1998, 2004; Fernández de Pinedo 1975).

Hence, due to this continuing climate of violence, the Basque rural nobility had to resort to the adoption of a defensive type Manor House model, which led to the first Tower Houses (González Cembellín 2004; Luengas-Carreño et al. 2016; Portilla 1978). From an architectural point of view, similar buildings can be found in other parts of northern Spain (Aramburu-Zabala 2001; Avello 1991; Cadiñanos 1987; Caro Baroja 1982; Cobos and Castro 1998; Cooper 1991; Ramallo and Alonso 1993) and Europe (Barthélemy 1988; Contamine 1988; Cruden 1960; Emery 2005; Morris and Papadopoulos 2005; O’Keeffe 2013; Oram 2015; Sherlock 2006, 2011).

In the Basque Country, the Tower Houses had two main functions: as a defensive bastion for the clan and as the habitual residence for the household of the Elder Relative or the head of the lineage. Over the decades, the Tower Houses also became the main symbol of the power of rural lineages (González Cembellín 2004; González Gato 2003; Luengas-Carreño 2019:202-203; Portilla 1978:231-232), representing the superiority of the clan over its enemies and, especially, over the peasantry and royal villages. However, unlike other places in Spain, where feudal Castles and Towers had a more symbolic function than a real military function (Cooper 1991), in the Basque Country the Tower Houses played a crucial role in controlling and defending the territory during the War of Bands (Luengas-Carreño

2019:118-120). Chronicles (Aguirre 1986; Marín Sánchez 1999; Vidaurrázaga 1975; Villacorta 2015) and other late-medieval documents (Luengas-Carreño 2019:138-142) show that the great thickness, height, and defensive elements of the Basque Tower Houses enabled the defense of the sites until reinforcements arrived —e.g., according to the chronicle *Bienandanzas e fortunas* (Villacorta 2015:788), in 1420 the “fortified house” of Loyola was able to resist the attack of a “lombard” because it had “strong walls”—.

The worst events of the War of Bands occurred in mid-fifteenth century, when the confrontation reached several royal villages. According to the medieval documents, during this period more than a hundred Tower Houses were attacked, burned or destroyed (Luengas-Carreño 2019:145-150). Faced with such a scale-up of violence, the Castilian monarchs had to intervene in the conflict. Enrique IV fostered the creation of provincial Brotherhoods, a kind of alliance of several towns and royal villages, which established local armed militias to pacify the region. These Brotherhoods were especially important in the province of Gipuzkoa, where they destroyed most of the Tower Houses of the main lineages, including the "fortified house" of Loyola.

Likewise, during this period, Enrique IV issued new anti-factionist Royal Orders, forbidding the construction of new defensive Tower Houses (Orella 1983, docs. 17, 19, 20, 22, 23, and 34). The royal justices —the king’s trusted men in the region— and other local officials were responsible for verifying the compliance with these new laws. According to several lawsuits, many Manor Houses erected at that time were checked to determine whether they had “defensive elements” such as arrowslits, battlements, machicolations, and hoardings (Luengas-Carreño 2019:138-142). The height and thickness of the walls of the new Manor Houses was also limited, in order to make them "flat houses".

Thanks to the effort of the Brotherhoods and royal justices, from mid-fifteenth century on, the disputes began to decrease. At that time, a brief period of architectonic

experimentation began in the Basque Country, which, based on preceding construction systems and shapes, sought to respond to the needs of the new ruling social model (González Cembellín and Santana 1998; Luengas-Carreño et al. 2014, 2017). Thus, the first Pre-renaissance Manor Houses appeared. Although they tried to emulate the defensive Tower Houses in terms of their shape and symbolism, these were constructions that lacked the latter's military elements.

A good example of this type of non-defensive mid-fifteenth-century Manor House is the Loyola Tower Palace, a construction that is located between the towns of Azkoitia and Azpeitia, in the Basque Country (Spain). The building is famous because Saint Ignacio de Loyola, founder of the Society of Jesus, was born there, and it has become an important place of religious cult over the last centuries (Eguillor et al. 1991; López de Aberasturi 1997). Currently, this house is surrounded by an enormous sanctuary in marked Baroque style (Fig. 1), whose original layout was planned by the Italian architect Carlo Fontana (Astiazarain 1988).



Fig. 1. The Loyola Tower Palace is located inside a courtyard of the Jesuit sanctuary. Left: Aerial view (Source: Gipuzkoa Spatial Data Infrastructure). Center: Entrance portal (Photo: Daniel Luengas-Carreño). Right: View from the sanctuary (Photo: Daniel Luengas-Carreño)

Despite their heritage value, many Pre-renaissance Manor Houses are in danger of disappearing nowadays. Most of the current studies focus on the analysis of facades and exterior components, leaving aside aspects such as the construction system, structural

elements, and the interior distribution of the Manor Houses. Hence, due to a general lack of knowledge about these aspects and the absence of comprehensive protection, many of the current architectural interventions are causing the alteration or complete destruction of components of heritage value. A good example of this is the Loyola Tower Palace, which has undergone numerous refurbishments throughout its history. This paper aims to study the architectural elements and construction system of a Pre-renaissance Manor House, in order that the results could be used as a guide for future strategies for the preservation and rehabilitation of this endangered heritage.

## **Materials and methods**

The research work has been divided into three complementary sections: the field work, the documentary research, and the analysis of the historical-constructive evolution.

Most of the historical documents have been obtained from the following archives: Archive of the Dukes of Granada de Ega (ADGE), Historical Archive of Loyola (AHL), General Archive of Simancas (AGS), Archive of the Royal Chancellery of Valladolid (ARCV), Municipal Archive of Azpeitia (AMA), Provincial Historical Archive of Gipuzkoa (AHPG), and General Archive of Gipuzkoa (AGG).

The Harris (2014) method was used to perform a stratigraphic reading of the walls to determine the main construction phases of the building. This method permits differentiating, sorting, and dating the constructive/destructive phases that a building has undergone until its current state. The methodology comprises three phases: observation of the data —strata, edges, surfaces, materials—; data documentation, including historical documentation obtained; and data interpretation, creating different stratigraphic sequences and carrying out a diagram of space/time ratios of coetaneity and anteriority/posteriority. After obtaining the

space/time ratio diagram, the stratigraphic units were grouped into several major construction periods, which are indicated in the drawings with different colors.

Through these studies, it was possible to determine the original construction system and architectural elements of the Loyola Tower Palace. Finally, the characteristics of the original building were compared with those of other Pre-renaissance Manor Houses of the Basque Country.

Six main construction periods have been detected: the archaeological remains from a previous construction, the Tower Palace, the mid-sixteenth century reform, the works undertaken by the Jesuits in the seventeenth and eighteenth centuries, the interventions of the nineteenth century, and the more recent consolidation and remodeling work.

### **Phase 1: The original Fortified House**

The first mention of the Loyola ancestral home dates to 1347, in a document about some acquisitions of land made by Juan Perez de Oñaz and Ines de Loyola (ADGE, May 20, 1347; Marín Paredes 1998:151), who owned the “house of Loyola”. Both in this document and in others dating back to 1350 and 1354, the purchase by the couple of a considerable number of properties is clearly mentioned, thus creating what would appear to be a large built complex (ADGE, May 20, 1350; ADGE, June 3, 1354; Marín Paredes 1998:152-153). However, this construction seemingly underwent a considerable reform at the end of the fourteenth century, when the Lord of the house was Beltran Ibañez de Loyola, who according to his will of 1405 transformed the building into a “fortified house” (Henaó 1894:289-290).

The Loyola family was one of the most powerful lineages of the Late Middle Ages, playing an outstanding role in the dynamics of the War of Bands. As observed in the medieval chronicle *Bienandanzas e fortunas* (Marín Sánchez 1999; Villacorta 2015), this family defended the interests of the Oñaz band in endless battles, which their “fortified

house” of Loyola was regularly involved in. According to this chronicle, this original construction was finally destroyed around 1456, during a punitive action of the troops of the provincial Brotherhood. During some archaeological works undertaken on the property at the end of the twentieth century (López de Aberasturi 1997), some remains of this building were located, hidden inside the premises of today’s Manor House (Fig. 2, Phase 1). This Fortified House had a rectangular ground plan and it was built with 0.7 m thick limestone masonry walls. Near the current entrance, the threshold of the previous construction was found, which had a ramp leading to the interior. A ramp was also found on the outside of the building, which went down parallel to the main façade.

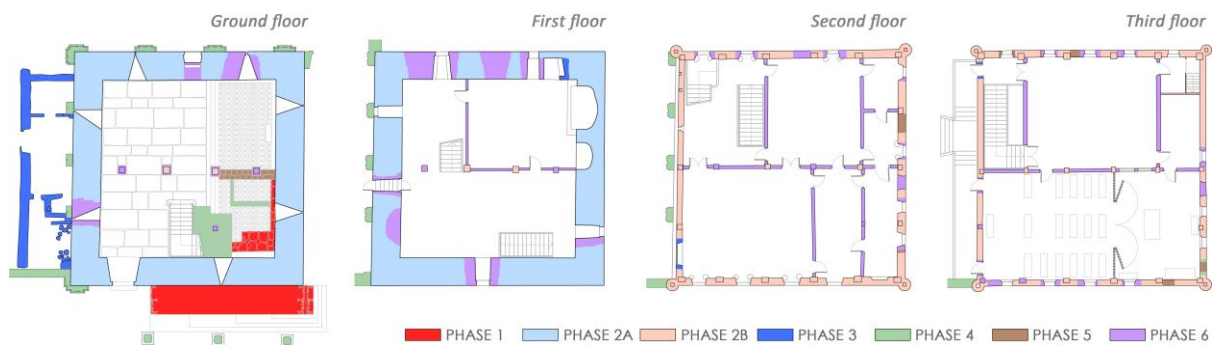


Fig. 2. Construction phases of the Loyola Tower Palace, Floors

## Phase 2: Construction of the Loyola Manor House

According to the documentary study, the Loyola Manor House was re-built shortly after 1460, when the Lord of Loyola returned from a banishment imposed by Enrique IV (AGG, JDIM, 1/6/9). Although no documentation has been found related to this work, it is known that in 1464 it was already inhabited again (Dalmases 1977:65-79). The chrono-typological study of the openings and ornamental details also coincide with that era. However, there are signs that point to the Loyola Tower Palace being constructed in different sub-phases, within a unitary project, which was modified as need arose (Fig. 3).

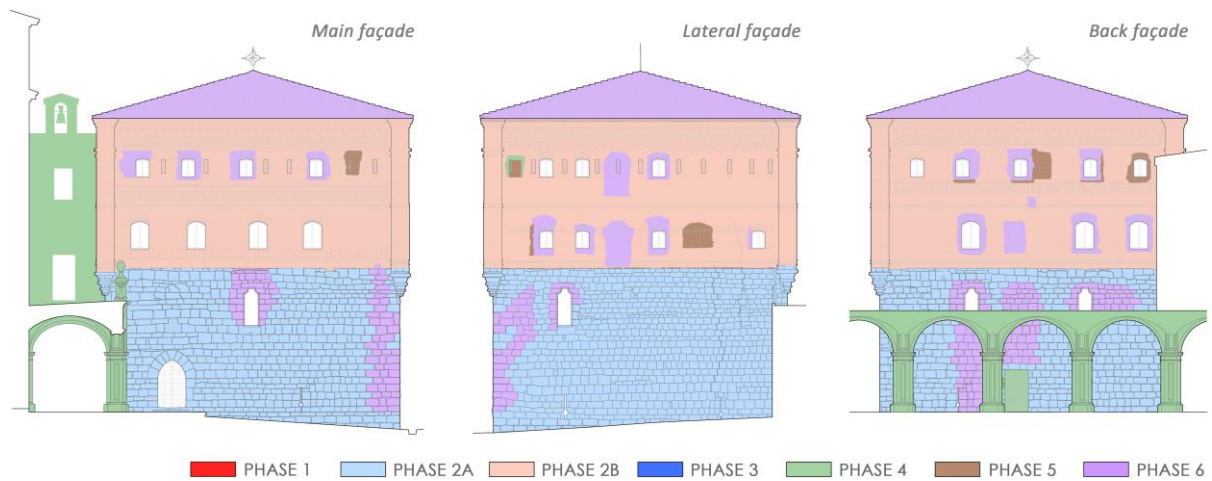


Fig. 3. Construction phases of the Loyola Tower Palace, Façades

In 1457, Enrique IV forbade the construction of Tower Houses in the province of Gipuzkoa. This order was repeated in 1460, when it was specified that new noble homes should be “flat houses”, constructions of little height “with no towers or fortresses” (Orella 1983, doc. 34). To judge by the details observed in the stone walls, everything goes to show that what they began to construct in Loyola at that time was a building of these characteristics, in other words, a house with two stories and an attic (Fig. 3, Phase 2A). In fact, the lower half of the façades is quite similar to other nearby Manor Houses, such as Anchieta and Balda (Fig. 4), both constructed during this period. The stone walls of the three buildings are similar in width and height.



Fig. 4. Left: Anchieta Tower Palace in Azpeitia. Right: Balda Tower Palace in Azkoitia. Photos: Daniel Luengas-Carreño



However, as the work advanced, the Loyola family must have seen the possibility of building another two floors (Fig. 3, Phase 2B), either because they managed to obtain a Royal Order or because this family influenced the royal justices. It has been commonly believed that the upper brick walls were erected during a later construction phase. However, both the historical documentation and the historical-constructive analysis point to the erection of both the lower stone walls and the upper brick ones during the same construction phase.

According to historical documentation, the Loyola Manor House was inhabited without interruption at least from 1464 until the end of the sixteenth century. There is no mention of any reform, either, until the beginning of the sixteenth century. Likewise, in agreement with the stratigraphic reading, there is no evidence to show that the two upper floors were the result of a subsequent reform. The wooden structure is well attached to the stone walls, even in the turrets, where there is an interior post which, starting from inside the stone part, goes up, inside the brick masonry, to the roof. Likewise, the brick masonry, carried out with two intertwined layers, is also perfectly joined to the wooden structure (Fig. 5). Although there are some discontinuities between the stone walls and the brick masonry, everything goes to show that these are due more to a lack of coordination between the different trades than to a possible subsequent reform. It is possible to find similar construction joints in other nearby Manor Houses, such as Legazpia in Zumarraga and Floreaga in Azkoitia (Fig. 6).

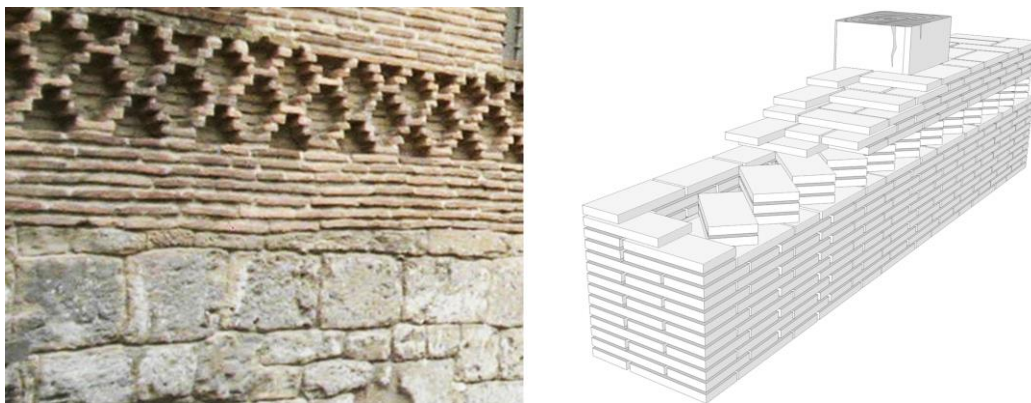


Fig. 5. Left: Seating of the brick masonry on the stone walls (Photo: Daniel Luengas-Carreño). Right: Sawtooth brickwork and joint of the interior and exterior layers of brick

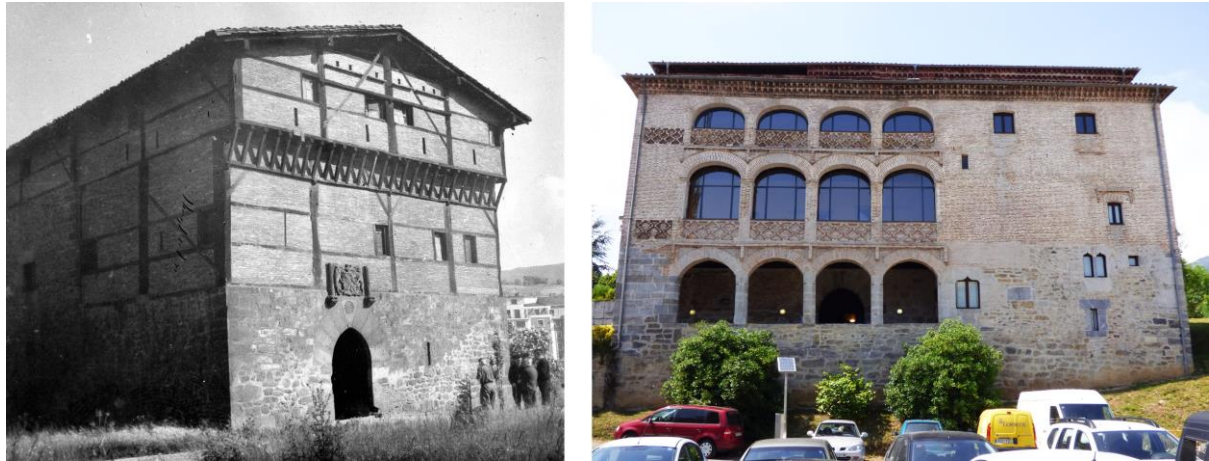


Fig. 6. Left: Legazpia Tower Palace in Zumarraga (AGG, OA06854). Right: Floreaga Tower Palace in Azkoitia (Photo: Daniel Luengas-Carreño)

The change of material used in the upper floors was probably determined by the anti-Tower House laws of this period, limiting the use of stone to just the lower floors. An example of this type of restriction can be found in the By-Laws of the nearby town of Mondragón of 1489 (Achón et al. 1988:105-109), when it was forbidden to raise stone façades of more than 19 cubits high —around 8.05 m—, which is approximately the height of the stone walls of Loyola.

### **Phase 3: The mid-sixteenth century reform**

The first known reforms of the property were carried out at the beginning of the sixteenth century, when an oratory was built on the second floor. In the middle of that century, another intervention was carried out on the house, although this time practically all the floors were transformed. On the second floor, a new kitchen was built, which, until then, had been on the first floor. Likewise, “French” type fireplaces were built on the upper floors, sectioning some beams and joists during their construction. Furthermore, in order to “modernize” the outer aspect of the property, a corridor was built on the southeast façade, so some of the existing openings had to be increased in size. To judge by a mid-seventeenth century image (Fig. 7), this corridor comprised four floors.

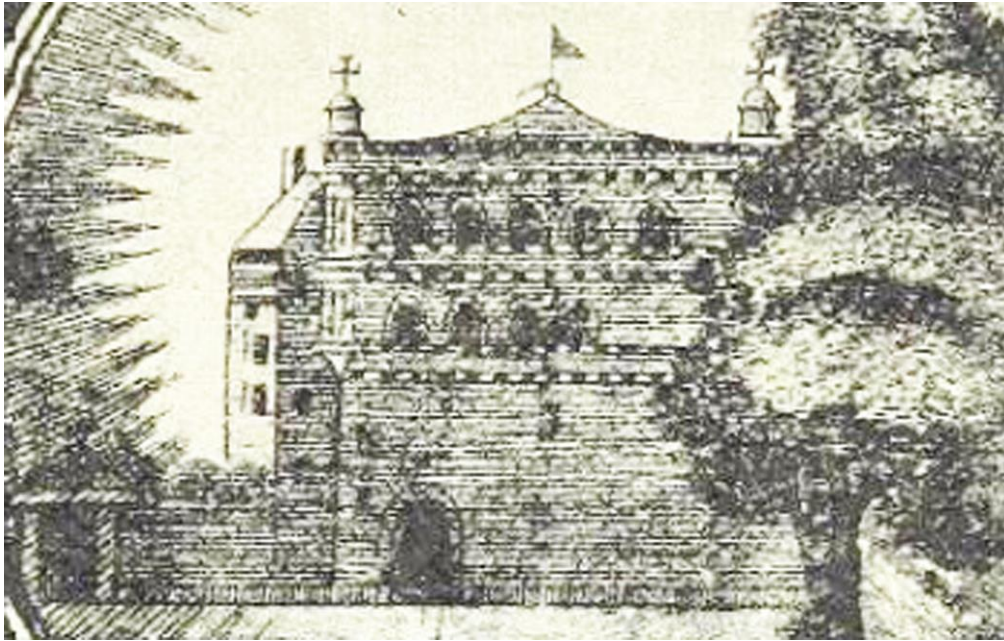


Fig. 7. Oldest engraving of the building, from mid-seventeenth century (Pérez 1891)

#### **Phase 4: The works undertaken by the Jesuits**

In 1534, one of the Lord of Loyola's children, Ignacio de Loyola, founded the Society of Jesus. Due to the religious work undertaken, Ignacio was canonized in 1609, an event that marked a before and after in the history of the building. According to an inventory of 1615 (AHPG, 2/0197, B:235r-237r), in this period a large chapel and a vestry were constructed on the top floor. From then on, the building progressively lost its residential function, and began to increasingly acquire a religious use.

At the end of the seventeenth century, the Loyola Tower Palace passed into the hands of the Society of Jesus, to be used as a place of worship. In 1682, the house and the entire adjacent plot of land were donated to this order to found a sanctuary in the location, provided that they would not demolish any walls of the Tower Palace (Eguillor et al. 1991, doc. 4). However, considerable reforms were carried out inside the building over these years: a part of the roof structure was re-constructed, changing from a hipped roof to a three-slope roof; another church and vestry were built on the ground floor; and the upper floors were reformed to house offices and bedrooms for the clerics (López de Aberasturi 1997).

In 1688, work started on the new sanctuary, under the leadership of José de Laincera (Astiazarain 1988). Going against previous stipulations, during this work, both the corridor and the outer layer of the southeast façade of the Tower Palace were demolished. At the start of the eighteenth century, an important part of the work on the sanctuary was finished and the Jesuits moved into the new building, abandoning the previous dwelling. It was then decided to reform the rooms that the clergy had occupied into places of worship, constructing new chapels in the Tower Palace.

The first known drawings of the Tower Palace are precisely from this period (Fig. 8). They were carried out by the Bolandos Fathers and published in the *Acta Sanctorum* in 1721. Both the interior distribution and the structural elements appear very clearly in the image. The interior frame of the building was comprised of four main posts, on which the beams rest. Several diagonal strut braces can be seen on the roof, making the structure more rigid. Some of the abovementioned rooms can also be observed, such as the ground floor and third floor chapels.

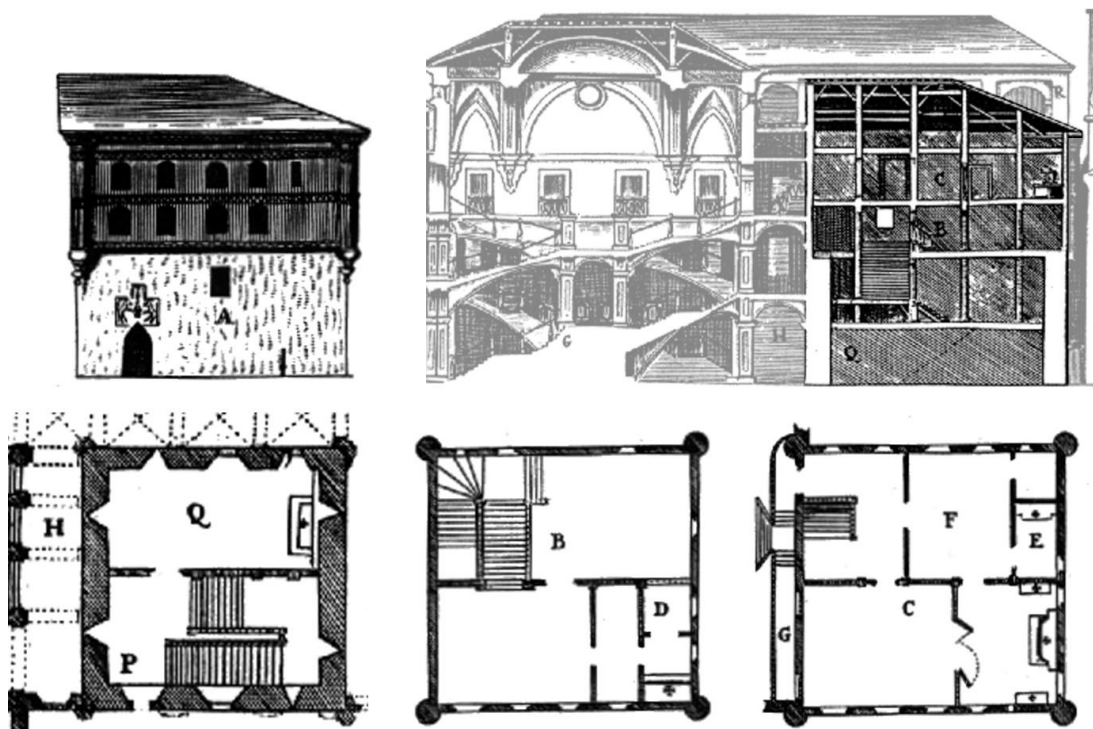


Fig. 8. 1721 Bolandos drawings (*Acta Sanctorum*, Jul. VII)

Elements from this period that have reached our days are the pilasters attached to the southeast and southwest façades of the Tower Palace, carried out during the construction of the new sanctuary, together with several walls found on the surface of the ground floor, belonging to the staircase of that era (Figs. 2-3, Phase 4).

### **Phase 5: The reform of the late nineteenth and early twentieth centuries**

In 1767, the King Carlos III expelled the Jesuits from Spain and the entire Loyola construction complex fell into the hands of the Council of Azpeitia. After having been abandoned for more than one hundred years, the Society of Jesus returned to Loyola in 1873. On their return from exile, the Jesuits found a rather deteriorated Tower Palace, so they had to undertake some interventions. During this period, the roof cornice was repaired and several pillars on the ground floor were replaced, as they had been affected by decay. The drawings by Rafael Pérez, which were published in 1891 (Fig. 9), correspond to this period. If we compare them with those of 1721, it can be observed that both the openings and the inner distribution had scarcely undergone changes in 170 years. More information is provided by the section, where some missing elements are quite clearly drawn, such as the roof structure, which rested on a center post.

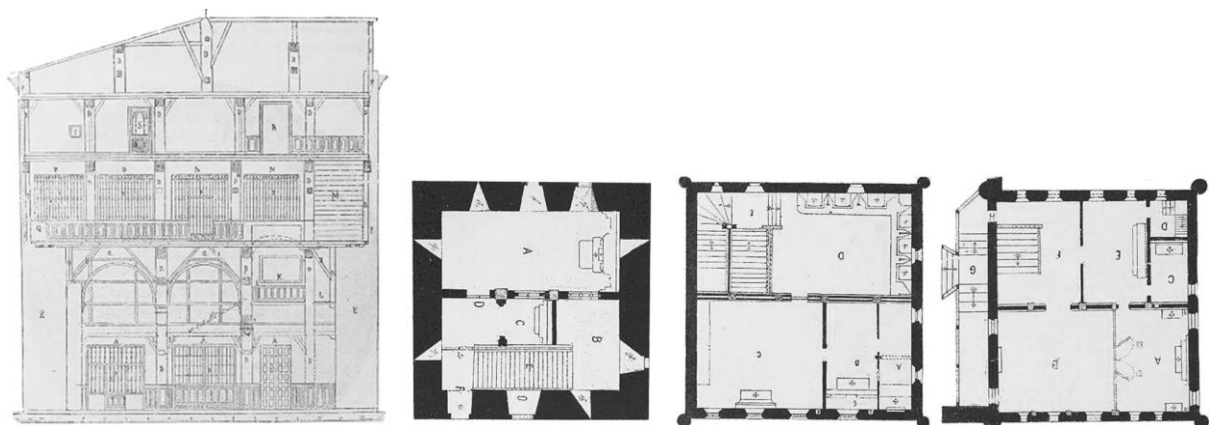


Fig. 9. 1891 Drawings: Ground, second and third floors and section (Pérez 1891)

However, the most in-depth reform of the property was carried out between 1904 and 1925, when the Tower Palace was transformed into a “chapel container” (López de Aberasturi 1997). These reforms included the construction of a new staircase, which altered the entire interior distribution. Several posts were eliminated or moved to achieve more diaphanous spaces, replacing wooden beams with metal elements. Moreover, new openings were made on the rear façade to light up the staircase and large glass windows were installed. The windows on the upper floors also underwent considerable transformation —some windows were walled up and others were enlarged—.

### **Phase 6: The last consolidation and remodeling work**

In 1976, the entire roof structure was changed due to structural problems of the building. Accordingly, all the wooden bearing elements of the roof were replaced with metal trusses, which directly rested on the perimeter walls, in order to offload the structural elements from the central part. This new roof was hipped, and thus the building recovered its original aspect.

However, this intervention did not suffice to avoid the progressive ruin suffered by the construction, as the successive elimination of structural elements placed the general stability of the building at risk. Consequently, in 1989, the architect Antón López de Aberasturi was asked to consolidate the house. Due to the bad state of conservation of the inner frame, he decided to remove almost all the wooden parts, to submerge them in an anti-termite treatment pool (Fig. 10). The only parts that were not removed from the building were some large beams, as well as the floor and walls of the room that allowed access to the attic, which still preserves its original shape today.



Fig. 10. Gutting of the interior of the Tower Palace. Photos: Antón López de Aberasturi

This work also enabled the Tower Palace to be adapted for museum use, taking advantage of the intervention to carry out a historical reconstruction of the building. Thus, the staircase and the inner rooms were remodeled, eliminating several elements that did not exist in the original construction. In fact, if we observe the drawings of the stratigraphic analysis (Figs. 2-3, Phase 6), we can verify that many of the modifications that the building presents today correspond to this period. A systematic reconstruction of the windows and construction elements was undertaken during these works. Likewise, based on the structural remains found, the wooden framework of the central part was rebuilt, and the strut braces were once again fitted on the posts, to reduce the sag of the horizontal elements. Regarding the exterior, the wall constructed against the northern corner in the eighteenth century was eliminated, exposing the original access ramp.

### **The construction system and original architectonic elements**

The historical-constructive study has helped to determine the original construction system of the Loyola Tower Palace, which had been enormously altered in successive reforms. As mentioned above, the lower half of the property was built in large format limestone masonry, lightly worked. The use of ashlar was reserved for the openings and corners, as well as for the

base of the circular sentry-boxes. The two upper floors were raised using two layers of solid bricks, forming geometrical shapes such as latticework or sawtooth brickwork.

The Tower Palace was built in line with Late Middle Ages measurement units (Fig. 11). The most commonly used measurement unit was the royal cubit (rc), which was the equivalent to 0.564 m in Gipuzkoa. The Tower Palace has a ground floor that measures 29x29 rc (16.18x16.18 m) and an approximate height of 29 rc (16.18 m), from the floor of the door to the upper part of the cornice. The entire building acquires a cubic shape. The interior heights were also dimensioned using the royal cubit, with the ground floors measuring 7 rc (3.91 m) each one, the main floor 8 rc (4.46 m), and the upper chamber 6 rc (3.35 m).

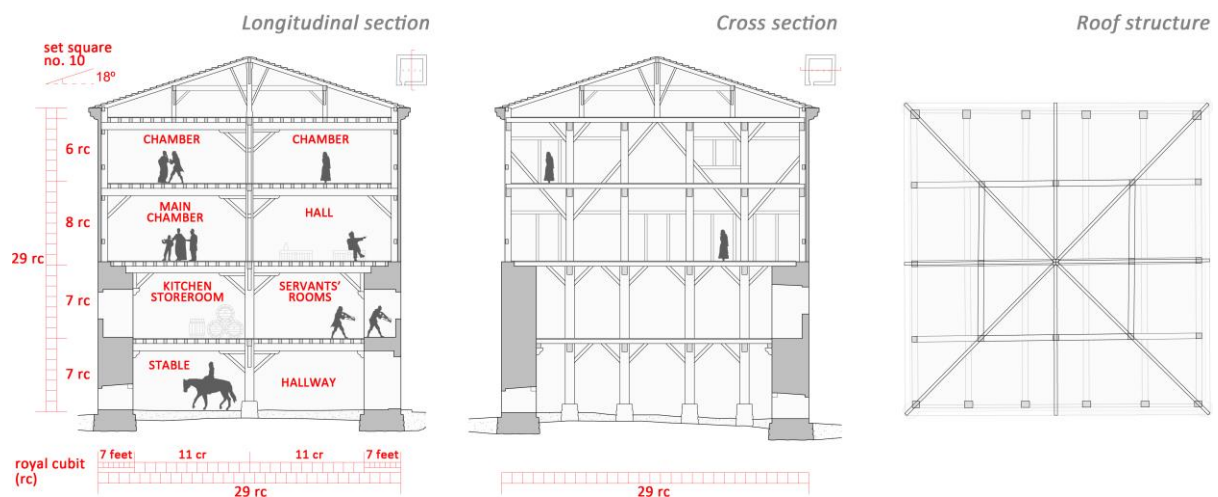


Fig. 11. Hypothetical reconstruction of the building, sections and roof structure

The stone walls of the first two floors measure 7 late-medieval feet (1.95 m) thick. On the upper part of the walls there is an interior 4 feet (1.12 m) setback, exactly at the point where the ceramic masonry is located. The brick walls have a slight setback half way up, going from 2 feet on the second floor to 1.5 feet on the top floor. Regarding the roof, according to the 1721 and 1821 drawings, the original slope had an incline of 18°, so it was built following a no. 10 set square.

The original access to the building is still preserved, with its nine-vousoir pointed arch. This door led to the main entranceway, from where the inner staircase swept up to the



upper floor on the northern corner. In addition to the access, the ground floor also had six monolithic parapet keyhole embrasures located half way up (Fig. 12, left). On the upper floors, the windows were finished off with a segmental arch with two lateral polygonal seats (Fig. 12, center).



Fig. 12. Left: Inner space of the embrasure. Center: Window with original seats on the main floor. Right: Joints with strut braces in two directions. Photos: Daniel Luengas-Carreño

The Loyola Tower Palace originally had an interior oak frame. This was organized by means of a complex structural system of hyperstatic joints, which braced the bearing elements in two directions (Fig. 12, right).

On the ground floor, four stone pedestals acted as the base for the main pillars. On top of these and supported by horizontal strips were four larger beams, whose ends rested on double quarter torus corbels. The wooden formwork rested on these corbels, comprised of horizontal joists, where the floor boards were nailed. Both the beams and the posts that ran on the axis of the posts were fastened to the vertical elements with strut braces (Fig. 12, right), using mortise and tenon joints. This system stiffened the joints in both directions and reduced the span of the horizontal elements. The structure of the first floor had a similar layout to that of the ground floor, with the posts resting directly on the lower joints. On the upper floors, in contrast, the posts were secured with a W-shaped wooden framework (Fig. 13, left), which divided each floor into two halves. Unlike the strut braces, these diagonal joists were

continuous elements that were secured to the main elements using half-lap joints. Further, the two main diagonals converged in mid-dividing wall strut brace, to bear the loads of the central roof post.

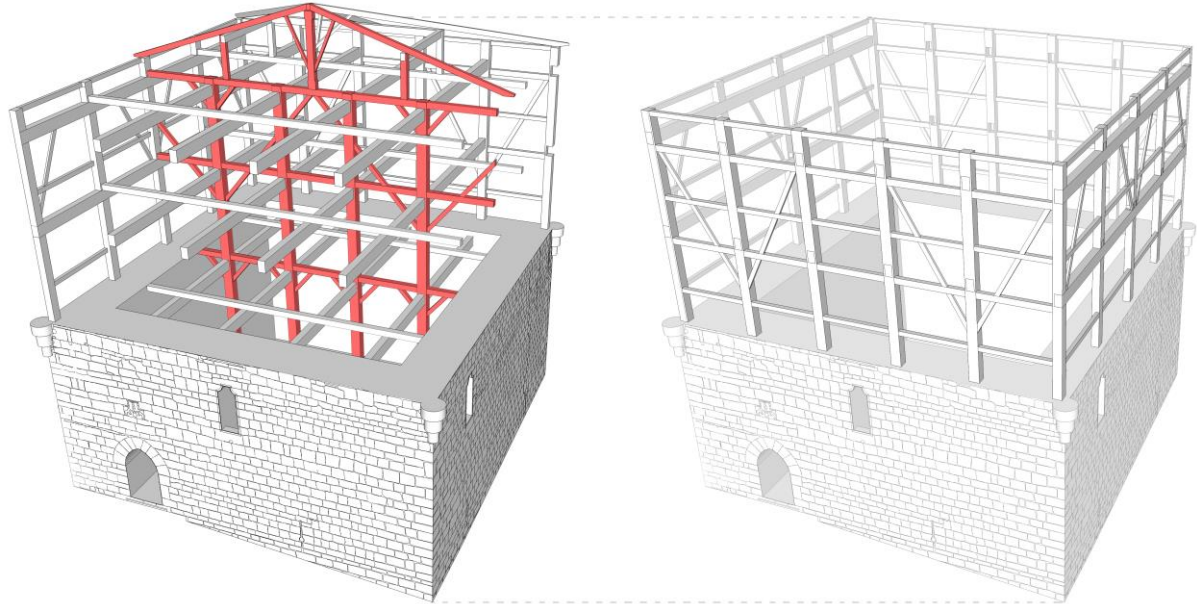


Fig. 13. Hypothetical reconstruction of the structure. Interior and exterior framework

Regarding the formwork of the enclosures (Fig. 13, right), it must be mentioned that there were considerable differences between the system used on the main and rear façades, and that used on the lateral façades. On the first two, the posts were made with continuous pieces measuring more than 8.3 m, which covered the entire façade. These pillars were fastened together with smaller-sized horizontal cross-bars and beams, which ran at the height of the window parapets. Further, these façades also had V-shaped diagonals, which secured all the previous elements using half lap joints. On the lateral façades, in contrast, a simpler structural system was built. In this case, the continuous elements were the beams of each floor, which divided the posts into three sections. Like the former façades, the vertical elements were secured with cross-bars, as well as with diagonals on the third floor.

As mentioned above, the original Loyola roof was replaced with a new one in 1976. However, thanks to the historical drawings and to the marks preserved in the pre-existing

elements, we can get quite a clear idea of what the structure was like. On the central part there was a “tree” or central post, from where both the hip rafters and the front beams started. Due to the large span they had to cover, these eight beams also rested on some perimeter beams in the central part, which in turn rested on several wooden dwarf pillars. According to the graphic documentation, both the hip rafters and the front beams were secured to the central posts with strut braces in all directions.

### Comparison with other Manor Houses of the Basque Country

Altogether 2050 Late-Medieval Manor Houses are documented and inventoried in the Basque Country: 675 in the province of Gipuzkoa, 581 in the province of Bizkaia, and 794 in the province of Alava (Luengas-Carreño 2019:447-532). At least 497 buildings (24.2%) were defensive Manor Houses, while 1215 buildings (59.3%) were non-defensive Manor House (Fig. 14). The remaining locations (338 buildings) could not be classified —highly transformed or demolished—.

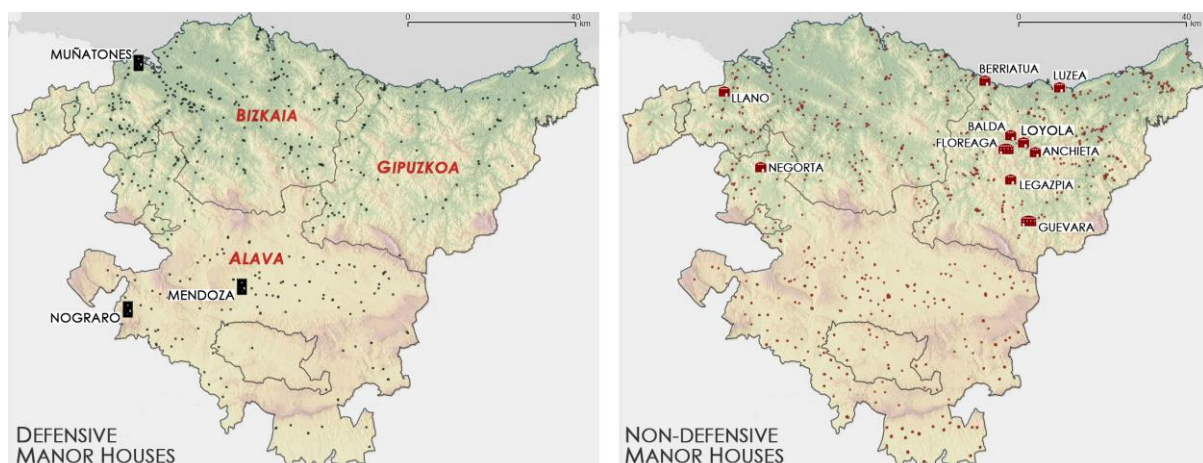


Fig. 14. Map of the Basque Country with the Manor Houses mentioned in the text

Most of the documented defensive Manor Houses correspond to the Tower House typology. Almost all of the buildings have undergone significant modifications. The best-preserved Tower Houses are located in the provinces of Bizkaia and Alava, and they date

from the second half of the fifteenth century. However, there are also older buildings such as the Nograro Tower House (Fig. 15, left), which was built at the end of the fourteenth century (Luengas-Carreño et al. 2016). Basque Tower Houses normally had four stories: a ground floor for storage, a multifunctional hall on the first floor, the residential chambers on the second floor, and the top floor, which contained defensive elements such as machicolations, battlements, embrasures, and hoardings.

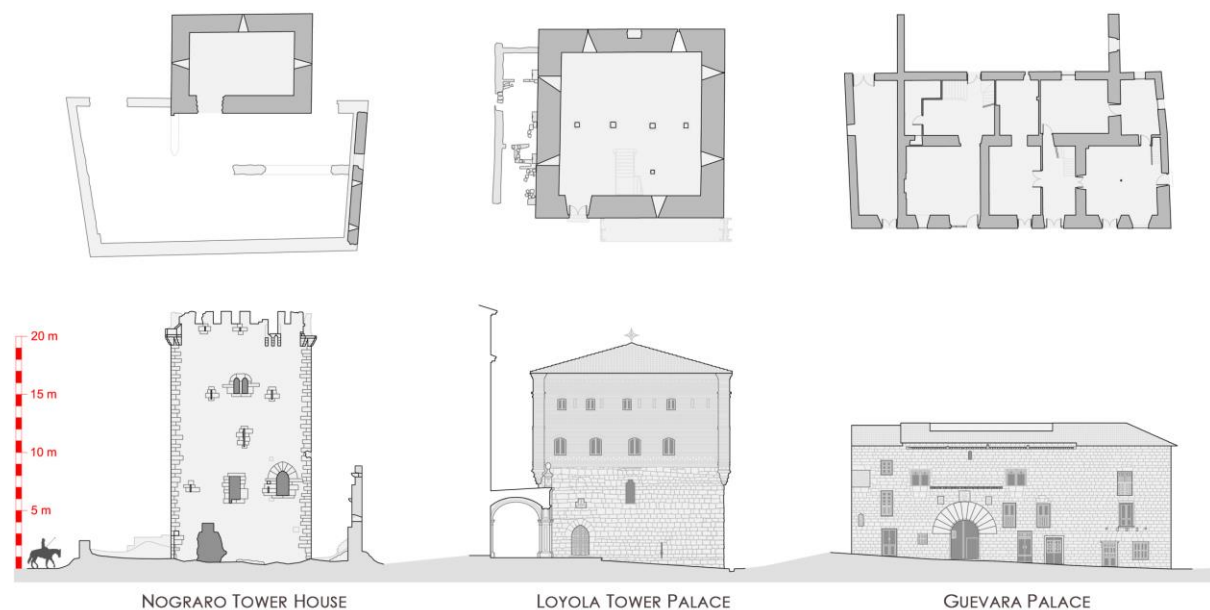


Fig. 15. Drawings of the Nograro Tower House, Loyola Tower Palace and Guevara Palace

Most of the Tower Houses were built at the bottoms of valleys, near commercial routes and rivers, from where they controlled the geostrategic points of the territory, such as bridges, fords, and natural choke points. Some of the most powerful families built large defensive complexes with perimeter walls, turrets and moats. Two representative buildings are the Tower Houses of Muñatones in Muskiz and Mendoza in Vitoria, which were restored in the last century (Fig. 16).



Fig. 16. Tower Houses with perimeter walls. Left: Muñatones Tower House in Muskiz. Right: Mendoza Tower House in Vitoria. Photos: Daniel Luengas-Carreño

Due to the anti-Tower House laws and the progressive pacification of the region, new types of non-defensive Manor Houses emerged from the mid-fifteenth century. One of the new non-defensive Manor Houses that appeared in this period, first in Gipuzkoa and later also in Alava and Bizkaia, were the Tower Palaces. In the Basque Country, the first Tower Palaces tried to emulate the forms and defensive elements of Tower Houses, with the intention of demonstrating a social status superior to that of the other members of the community. However, unlike Tower Houses, Tower Palaces had very few military elements, except for some dissuasive elements such as windows with the shape of arrowslits or decorative corner turrets.

Altogether, 255 Tower Palaces are documented in the Basque Country (Luengas-Carreño 2019:447-532). Almost half of them were built within royal villages. In the rural areas, most of the Tower Palaces were erected close to rivers and productive buildings, such as ironworks, mills and dams. In contrast to Tower Houses, Tower Palaces generally had only two or three floors. The ground floor was usually used as a warehouse and stable. The upper floors contained the residential areas, the more public spaces in the front part and the private rooms in the back, far from the staircase. The Loyola Tower Palace also followed this type of internal distribution.

Unlike Tower Houses, in the Loyola Tower Palace the vertical communication between floors was by means of wooden internal stairs, which started from an ample access vestibule, located on the ground floor. On the first floor were the service rooms of the Tower Palace. In the west corner was the primitive kitchen, which originally could have been a “central fireplace”. In addition, there is evidence of at least two other rooms on this floor, which served as rooms for the servants and their families. Above the first floor was the noble floor of the Tower Palace. The second floor was divided into two halves by a wooden framework filled with bricks. The main rooms of the Lords were in the southwest part, just above the fireplace. In the northeast part was placed the main hall, a spacious multifunctional room. The third floor was also divided into two halves. According to the documents consulted, it had a small hall and several private chambers, where the children and other close relatives slept.

In comparison with Tower Houses, the Tower Palaces had larger floor areas, although smaller than those of the Large Palaces of the early sixteenth century (Fig. 15, right). In this respect, Loyola is one of the largest Tower Palaces located in the Basque Country. As mentioned above, the lower limestone walls of the building have many similarities with other Tower Palaces in the area, such as Balda and Anchieta (Fig. 4), which originally also had a square floor area. Although rectangular in shape, other nearby Tower Palaces are Floreaga and Legazpia (Fig. 6), whose upper floors were also built with solid bricks. In the case of Legazpia Tower Palace (Fig. 6, left), there are similarities in the external wooden frames and their diagonals and horizontal braces.



Fig. 17. Rural Tower Palaces. Left: Llano Tower Palace in Sopuerta. Right: Negorta Tower Palace in Godexola.  
Photos: Daniel Luengas-Carreño

In Bizkaia and Alava, most of the Tower Palaces date later, from the end of the fifteenth century or early sixteenth century. In these Tower Palaces decorative elements around windows and doors were quite common —stone balls, nails, cordworks, moldings and other geometric forms—. In the rural areas, some of the best-preserved buildings are the Tower palaces of Llano in Sopuerta and Negorta in Godexola (Fig. 17). In the urban areas, two representative Tower Palaces are Berriatua in Mutriku and Luzea in Zarautz (Fig. 18), which are among the highest Manor Houses of this period.

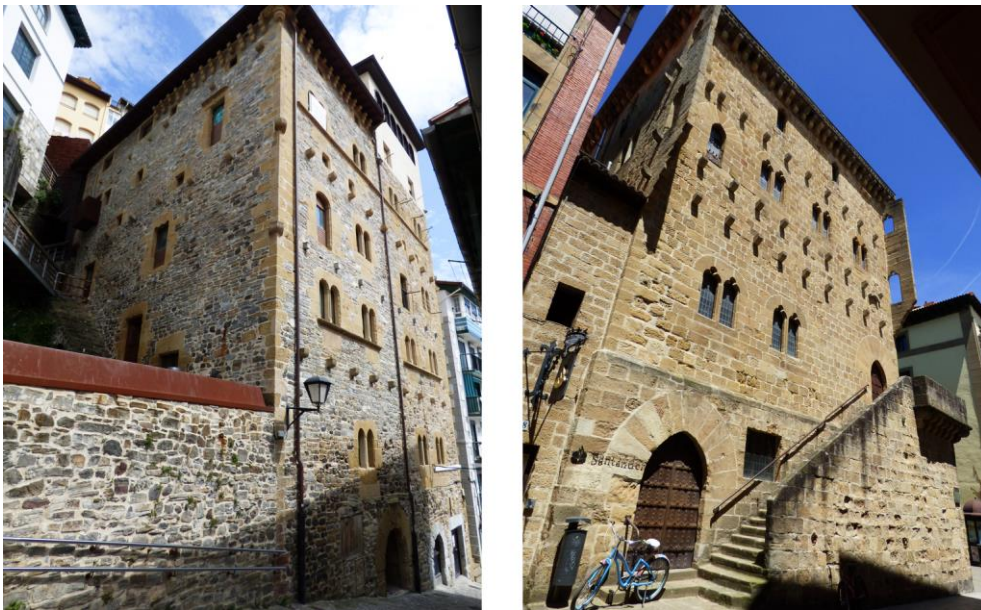


Fig. 18. Urban Tower Palaces. Left: Berriatua Tower Palace in Mutriku. Right: Luzea Tower Palace in Zarautz.  
Photos: Daniel Luengas-Carreño

## **Conclusions**

The Loyola Tower Palace is a clear exponent of the evolution experienced, both typologically and constructively, by the Manor Houses in the Basque Country during the second half of the fifteenth century. As occurs with all the other Tower Palaces, the Loyola Tower Palace was designed as a residence, where the palatial elements had priority over the defensive elements. However, bearing in mind the time when it was built —echoes of the War of Bands could still be heard—, the prevalence of some military elements is not surprising. In this sense, noteworthy is the considerable thickness of the stone walls of this construction, possibly built to be minimally prepared to face a new outbreak of the conflict and a possible attack from the artillery. The other “military” elements, such as the corner turrets and the embrasures on the ground floor, had a more representative function than a truly defensive function, as they lacked utility from the poliorcetic viewpoint.

The construction system seen in this Tower Palace also presents several innovations regarding its forerunner, the defensive Tower House. The complexity of the wooden framework of Loyola is not seen in military constructions, with its two-directional joints and wooden formwork that secure and brace the volumes. Likewise, the difficulty that arose from the interaction between the different trades in the last decades of the Late Middle Ages is also evident, which sometimes resulted in inappropriate construction solutions.

## **Acknowledgements**

This paper was supported by a research training grant from the Research Vicerrectorate of the University of the Basque Country UPV/EHU. The authors wish to thank Antón López de Aberasturi, professor at the School of Architecture of the UPV/EHU and architect responsible for the latest work carried out on the Tower Palace for his help and documentation.



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