Typological study of the late medieval galician towers: Application to the restoration of the tower «Torre de Vilanova dos Infantes»

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The intervention in values of cultural interest is a very delicate matter due to several reasons, as the following ones:

- they are elements of great value of reference for the community where any action awakes an extraordinary social sensitivity;
- the superposition of multiple actions realized on them throughout the history-actions that have completely ignored the values of the original construction distorting or, at least, changing them significantly, thus making the comprehension of the object inmensely difficult;
- the time distance and the methods that served to erect them, a distance that has not only affected the constructive techniques but also the way of thinking: at present the actions are based upon a conception which is derived from the scientific method and the analysis of the problem by parts, whereas the historic buildings have been constructed within an integral mentality and not precisely a scientific one.

At present the intervention is conceived with the following criteria: differentiation—clear differentiation of the limits between the intervention and the original building should be made; reversibility of the action—its possible elimination at any moment. The authors not only want to maintain the patrimony but also to

contribute to new pieces for the creation of new cultural heritage.

It seems logical that the project maker should look for all possible support to eliminate the major number of uncertainties in his intervention, beyond the mere fulfillment of legal requirements. Within this philosophy the support of the historical analysis is as much a legal necessity as it is an instrument that will achieve great value.

Unfortunately the historical-artistic memories compelled by the standard are usually reduced, probably besause of the lack of understanding between the historian and the architect, to an endless list of dates of outstanding local historic events having some kind of connection with the building but without any relevant information about the structure itself. The importance of chronological information and historical evolution is not denied yet the necessity of completing this information by a different one is emphasized: it means that the information to be obtained should have both vertical sense, i.e. time evolution, and horizontal sense, i.e. the events that take place in a coetaneous form, and above all dealing not so much with the happenings as with the building itself. So the information which is proposed as a relevant one is surely the historical and chronological updating, treating equally (or more) the history of building masonries, the events that have taken place and also the historic-typological study which means how the edification type of the building is resolved in the time zone and geographical proximity.

In short, a double line of investigation of the history of the construction is realized: first as a building and second as a complex of edifications with their typology. The first enables to comprehend the building, the second points out its peculiarities and gives guides for the proposed interventions.

The previous reflections came up during the development of Centro Comarcal de Celanova project as a consequence of the first prize obtained at the competition which had been summoned for that purpose. The above mentioned construction had to be established as an ensemble of the tower and the two houses near the medieval tower of Vilanova.

The difficulty of the process is manifested by the fact that in Galicia, which is considered to be a land of castles (more than 800 of them are classified), there isn't any typological study on the castles referring to the mentioned time. That is why a minimum classification is made.

The environment of the study is restricted to those defensive buildings among which one tower —Torre del Homenaje, is the main motive of the edification. It is not a matter of great castles but a single tower isolated or defended by walls always being within the criterion of fortification where the concept of defensive levels is clearly defined, among which the tower (la Torre) is the last refuge. Towers that are independent or pseudoindependent elements, perfectly recognizable as objects in the edifications whose mission is no longer to defend a town but a personage who shelters in the Tower.

These defensive concepts can not isolate the appearance of arquebuses and the first fire arms, the fast development of which will during a century provoke the radical transformation of the defensive systems and the dissappearance of the type under study.

The relative homogeneity that is perceived in the solutions of that time is linked with both the quality of the type and the fact that those buildings frequently changed within the complex world of Reconquest, succeeding fights, dislikes and confrontations between the noblemen and the church of the early medieval Spain.

THE HISTORY OF VILANOVA AND ITS TOWER

Vilanova is a little town of medieval layout situated very near to the little town of Celanova, Ourense,

Spain. The tower of Vilanova dos Infantes is a medieval tower that formed a part of second line of fortifications of ancient frontiers with Portugal, named «raia-seca». At present it is classified as heritage of cultural interest (BIC —Bien de Interes Cultural).

The surroundings of Vilanova show traces of preroman human occupation since the time of celtic (castreña) culture: Castromao, 2 km. from Vilanova, was a «castro» of Coelerinos occupied since cc. YI-V B.C. until c. II A.D. Some authors emphasize the influence of this epoch and even speak about the «castreño» arrangement of the present hamlet in Vilanova.

The roman influence is manifested in an ancient roman roadway that reaches the town from the east. In the town itself an ashlar stone of a house of Plaza Mayor is conserved —roman Ara Votiva dedicated to the gods Lares Gumelaecos. Its probable origin in the zone confirms a profound romanization of the place.

There is no information about the place from the late roman time until the time of repopulation (La Repoblación) after the expulsion of the muslims.

The X century is the most important historical period marked by the appearance of D. Gutier Menéndez, the father of S. Rosendo, who in 936 establishes the benedictine monastery of S. Rosendo of Celanova in whose masonry the dictates of the regulation of the religious order «Ora et labora» are noticed. In this monastery in 944 S. Rosendo will retire for a period of time for a temporary rest from his hard work.

Vilanova dos Infantes used to be a reliable residence for S. Rosendo's mother and sister —D^a Ilduara and D^a Adosinda respectively; and also for other women of the royal family who belonged to its twin Santa Maria de Villar monastery founded in Vilanova by the year 940 by D^a Ilduara and later annexed by Celanova monastery.

The transcendence of this zone in the Middle Ages leads to the idea that Alfonso X el Sabio was educated in the nearby castle of Maceda afterwards establishing his court in Allariz at about 10 km. from Vilanova.

Despite the closeness of Celanova monastery, Vilanova was independent of the ecclesiastic nobility and belonged to various lords who were ruling in the name of the king. The count D Gutier Menéndez and Dallduara ordered to build the Vilanova castle

(Silveiro Cañada ed. 1974, vol 30, voz Vilanova das Infantas). In 1369 Enrique II El Bastardo captures the castle of Vilanova from Fernando de Castro, the count of Trastámara Lemos and Sarria and who was made count by the king Pedro I de Castilla (Vazquez [1972] 1990), to give it D. Juan Rodriguez de Biedma as a reward for his services in the struggle for the throne of Castilla against Pedro I, among the so called Mercedes Enriqueñas (Eguileta, 1994, 514).

The Monterrei family inherits the fortification from the Biedma family. The Castro family —the counts of Lemos, dissatisfied with this transfer conducted a lawsuit against the Monterrei family, but the sentence turned out advantageous for the latter.

The tower was destroyed in 1467 when it belonged to the count Monterrei (Castillo, 1972, word «Villanueva de los Infantes»), as a consequence of the Irmandiños rebellion against the galician nobility. The destruction was complete according to the obtained reference. It was reconstructed between 1481 and the middle of XYII century as there is evidence that the tower was again used by the year 1645 during the war between Spain and Portugal which led to the second and final independence of Portugal. De Prado (1986) points out that the tower was reformed in the XYII century by new defensive concessions which degraded when the tower was abandoned.

Fariña Busto (Silveiro Cañada ed. 1974, vol. XVIII, voz Fortalezas) classifies it in the gothic phase; while Basilio Cegarra (Begarra, 1995) places it between the cc. XY-XYI. In our opinion the tower belongs to the late medieval typology. We have taken into consideration the similarities with the fortifications of the epoch, which are obtained from the corresponding typological analysis: constructive features -stonecutter's marks, pointed arches in voids with big voussoirs— the principal balcony. Typologically they differ from the fortifications of the previous epochs in the predominance of the tower, and which could perhaps be linked with the new necessities and techniques that brought about the first fire arms. The arquebus appears somewhere between cc. XIY-XV, but when these have not yet provoked the revolution of the fortifications that would originate later.

Moreover, already in the penultimate decade of the XVI century in Spain appear theoretical proposals of fortifications with bastions that even before the end of

the century are planned for concrete points, for example the port defense of A Coruña (4). It doesn't seem logical that already having systems of major defensive efficiency a reconstruction of the old use would be put up, taking into account the fact that it is a boardering and conflictive zone and that the north of Portugal is strengthened by constructions of a new stamp. As a constructive period appears in Celanova around 1550, i.e. the construction of Claustro de las Processiones, that shows the economical power of the time, the reconstruction in our opinion takes place between 1481 and 1550.

Subsequently, since the Desamortización de Mendizábal, the tower has been used as Town Hall (Casa Consistorial), which is proved by the date 1825 which is engraved on the entrance doorhead. This usage will remain until january 1927 when the town hall of Vilanova is taken over by the town hall of Celanova. And after its abandonement it is used as Court (Juzgado) until 1992–1993 when it is restored to be used by Municipal Music Band.

As for the hamlet of the town of Vilanova, it follows the barbican line. There are two main types of houses. The first, of better design an concerted rubblework, corresponds to the old heraldry houses: the arms of Limias, Cambas, Feixoós, Enríquez . . . are among there stones. The second type is used for the construction of more popular houses. They consist of two floors with the second one sometimes overhanging, surrounded by wooden balconies of precise design and generally with a direct access from the street by the exterior big flagstone stairs, while the ground floor is or has been used as a stable.

THE HISTORY OF THE TOWER BUILDING

By now the existing ensemble has been formed by two towers, one inside the other. The interior structure parallel to the walls of the visible tower is by origin prior to the «irmandiña» destruction (Eguileta, 1994, 521). It extends up to a level which is inferior to the present level of access. It forms a part of the primitive tower destroyed by the mentioned rebellion, linked without any doubt with the walls of the ancient castle of Vilanova, which had to be an exterior tower bastion, as it is demonstrated by alignment of its walls with the rests of the rampart lines as well as the greater thickness of one of its four walls, the

alignment with the ramparts, and the visible exterior traces of the joint of the tower masonry with some transversal element.

The tower which is visible nowdays is of a later period, as it is shown by the independence of the exterior walls from the walls of the interior structure mentioned before. The lack of a bond between the present tower walls and the rests of the transversal walls as well as the difference of the composition of their masonries, i.e. concerted rubblework contrary to the exterior squared ashlar masonry, and also concrete constructive questions, i.e. the stonecutter's marks and pointed arches in voids with big voussoirs similar to that of the principal balcony, supposes its realization in the late medieval time, probably between 1481 and 1550.

The tower undergoes a great transformation in the first quarter of the XIX century to adapt it to its new use as Town Hall. Among the realized modifications (Eguileta, 1994, 529) are: the addition of the staircase which at present serves as an entrance; the substitution of the loopholes by large rectangular windows; and the entrance door aperture at the north eastern side (the year 1825 is engraved on the doorhead). The addition of the staircase would conceal the traces of the junction of the rampart from this side, as it is precisely of the height where the staircase reaches its maximum elevation at which the linkage should be realized. These transformations have irreversibly changed the image of the tower.

Finally, in the period of 1992–1993 the tower was conditioned for its use by the Municipal Music Band eliminating the hip roof crowning it, by fixing a number of horizontal levels, placing a staircase and an empty vertical space that crosses all the floors of the tower.

The preceding lines are the result of the support of the historical investigation of building comprehensiveness but it turns out to be too little for the desired purposes. To accomplish it and to understand the constructive and design peculiarities of the tower of Vilanova, the study of different examples of the surrounding medieval towers is brought up.

Initially the study was centred on those examples that resulted to be closer to the author who systematized them in a second phase. Thus, at first, the towers of Monforte de Lemos and Castroverde, both being the possessions of the Castro family—the counts of Lemos, were visited and analyzed being the second ones in likeness with that of Vilanova. The

reconstruction period of the Vilalba tower, about 1480, and its connection with the Castro family (it belonged to D. Fernando Ruiz de Castro) resulted in its inclusion among the studied ones.

Later the investigation was systematized, covering the principal medieval fortifications of Galicia, putting an emphasis on those which are in the interior part of Galicia, linked with the four powerful families: Biedma, Monterrei, Lemos and Andrade. A specially detailed study was done on the fortifications corresponding to the terrestrial frontier with Portugal and belonging to the province of Ourense: the «raiaseca», i.e. fortifications of Sande, Vilanova, Milmanda, A Porqueira, Monerrei, and on the second line -Sandiás, Celme and Pena. The election of the mentioned families is justified knowing that the first three ones had for a definite period of time the possession of the fortifications we are dealing with, while the family of Andrade is responsible for a significant number of defensive buildings in the north of the community, and the possession of many of them passed from the family of Andrade to the family of Lemos in such a way that an interaction among the solutions referring to the fortifications is quite probable between the two families.

The study was centred on the models of single towers. Meanwhile other important galician fortifications as the Castillos de Pambre y Sobroso deserved a more superficial attention centred on: the finial systems, i.e. coblestone (continuous peen) over brackets (stone corbels); the reinforcements on the basis of fortification turrets in Sobroso and embattled finials over the corbels in Pambre.

The analysis of the Monforte de Lemos tower, lightly restored in 1975, permitted to analyze the system of embattled finial at the overhang over the stone corbels, to understand the constructive meaning of the continuous stone corbels of the last floor prepared to receive a wooden dormant that supported the wooden horizontal plane (forjado), and also to understand the unitary purpose of the space of each floor for common use. So it can be seen how the changed disposition of horizontal plane (forjado) direction makes the stairs modify their position on the different floors. In this tower the entrance is of middle height but an incorrect decision of attaching a stone staircase to it eliminates any perception of it as an entrance.

However the dimensions of the tower of Lemos give it such a splendour that the Vilanova tower doesn't have and also a number of constructive features that differ them as for instance the presence of a flat arch as a roof support or the configuration of a three dimensional battlement perhaps connected with the appearance of the arquebus.

Therefore the study interest was focused on the tower of Castroverde which by now has not yet been an object of restoration. It rises solely in the centre of a small defensive perimeter, undoubtedly of the previous epoch, as it has certain formal likeness with the solutions of the Castle of Castro Caldelas (also of Lemos family) as well as with the reinforcement system with fortification turrets. The tower is very similar to that of Vilanova both in form and dimensions. The entrance is realized by means of an opening of middle height configured by a doorhead that lies on overhanging corbels over the bay. Fortunately the absence of restoration permitted to appreciate the interior empty space of the tower after climbing about 3,5 m which, as a solution of purely defensive character, now separetes the access from the ground level. In this case the corbels for supporting the dormants which would bear the horizontal planes (forjados) of the intermediate floors are discontinuous. Besides, the solution of battlement is much simpler than that of Monforte with merlons of much less thickness, i.e. the plane predominates, and although it is arranged on the basis of brackets, it presents a continuous separation between the tower and the battlement perimeters, while in Monforte only empty voids are produced between the merlons.

These same characteristics (separation between perimeters and merlons of relatively little thickness with a predominance of the plane sensation over the three dimensional one) exist in the Tower of Vilalba which is also single and has an entrance of middle height. The modifications introduced in the conversion of the tower in Parador have permitted to extract much minor doctrines. Moreover the octogonal form of its tower leads to the disposition of two ribbed arches for the bundle. The finial is in this way embattled.

Location:
 —isolated (Doncos),
 —independent in an ensemble (Monforte, Castroverde),
 —linked with an ensemble (Pontedeume, Nogueirosa),
 —integrated in an ensemble (Monterrei, Pambre);
 —Access to:
 —ground floor-secondary access

Later the finials of the fortress of Monterrei, a family to whom belonged the tower of Vilanova during the reconstruction, were studied. Overhanging finials of machicolation type, placed over the brackets and situated at a very little distance of their border, were found. The study of the Tower of Pontedeume that belonged to the Andrade family has given one more example of a machicolation finial bent on its perimeter. This discovery made us consider the machicolation finial as a widespread type since the examples are situated in the north and in the south of Galicia.

The visit to the Andrade family Castle in Cabañas, also known as the Castle de Nogueirosa, showed the application of many of the studied solutions. The castle belongs to a mixed typology with a dominant tower that from a distance gives the impression of an isolated tower. When getting closer the facades that delimit the castle are better seen at a closer perspective. The entrance to the tower is situated at a level a little higher than the one that unites the ramparts with it. The shape of the entrance void is similar to that of Vilanova. Moreover it presents a machicolation finial over brackets with the peen located a little backwards from the brackets. In the interior the tower has got a vault as a covering reinforced, in this case, by ribbed arches, while it isn't presented in Monforte. The horizontal planes (forjados) are plywooded over the continuous stone corbells to receive the wooden dormants.

After having realized these first studies the characteristics were systematized to compare them with those of many other fortifications and summarized in the following compendium.

DESCRIPTION OF THE TYPE

The study and the comparison of different fortifications have tried to formulate the building type by summing up the following characteristics:

(Doncos, Celas, Pontedeume
—top floor:
—from the ground (Monforte,
Castroverde),
—from another building:
—ramparts (Nogueirosa,
Narahio, Doiras),
—palace (Pontedeume):

Floor:	—rectangular (the great majority),	—Character:	—Defensive (the majority), —Palace type;
	—other:—octogonal (Vilalba),—circular (Sarria);	—Crown finials:	—Embattled: —by placement:
—Vertical section:	—straight (Monforte, Vilalba), —stepped-with Berms (Pontedeume);		—overhanging over the brackets (Vilalba),—levelled (Castro de Ouro, Doncos, Doiras, Miraz,
—Number of superior floors/access:	—three (the majority),		Narla), —by the form:
	—other (A Porqueira, 4);	Miraz),	—pointed (Narla Vimianzo,
—The use of the ground floor/access:	pool (Monforte),	majority),	-rectangular (the
	—prison (Pontedeume, O Bolo), —former building (Vilanova),		—by the type: —three dimensional
	—secret exit, tunnel (Narahio),—excavated basements Doncos);		(Monforte, Narla, Doiras), —plane (Andrade,
Masonries:	—ashlar of granite (Narahio,Monforte, Parga, Friol Narla,	Castroverde);	—Machicolation:
	Pambre), —rubblework:	Caldelas),	—levelled (Xunqueira, Castro
	—granite with ashlar reinforcements		—overhanging over the brackets (Monterrei),
	(Nogueirosa),		-With reinforcements: -fortification turrets
	—slate with granite ashlar (Vilalba, Doncos, Viana do Bolo),		(Monterrei, Castro Caldelas),
	—rubblework: —granite (Miraz, Valdeorras),		—bent machicolation (Pontedeume),
	—slate (Burón, Doncos, Doiras, Navia de Suarna);		—circular machicolation (Pontedeume Vilamarin),
—Horizontal planes			—With loopholes (Vilalba, Castro Caldelas),
(forjados):	—All wooden (the majority), supports over:		—Without loopholes (the majority);
	—stone corbels: —continuous (Vilanova), —unitary (Castroverde), —embedded beams,	—Voids:	Large windows:rectangular,arched,
	—Vaulted:		—geminated,—Loopholes (saeteras),
	—roof (Torre de Andrade, Caldaloba),		—Loopholes (aspilleras);
	—basement (O Bolo),—roof and basement (Monforte);	Water discharge:	—Gorgoile, —On a level;
—Stairs:	—In the space of the floor,	—Peculiar elements:	—Coat of arms (Pontedeume, Narla),
	 —Integrated in the walls partially or completely (Nogueirosa, superior level in Monforte); 		—Sculptures (Vilalba),—Toilets (Castroverde, Penas),—Chimneys (Monforte, Vilalba,
	in Montoliej,		Nogueirosa, Penas).

With the help of this classification we briefly describe the towers which are situated near the tower under restoration beliving that their phisical characteristics would be more similar to the tower of Vilanova than to the others situated at a greater geographical distance.

Sande:

Isolated on a rock. Granite ashlar. Rectangular floor and straight cross section. In ruins but not destroyed by «irmandiños».

Sandiás:

Isolated on a rock. Granite ashlar. Rectangular floor and straight cross section. Three floors and a basement. Horizontal wooden planes (forjados) over isolated corbels. Superior brackets in corners and central part of each face. Only loopholes. Destroyed by «irmandiños», at present exists half of the tower.

Xinzo:

Rock. In the interior of a precinct with attaching constructions. Rectangular floor and straight cross section, of ashlar granite and a very enclosed appearance —only loopholes, with vaulted flats and a basement thought for a pool. Lack of superior finial, but overhanging brackets over the perimeter are conserved.

Celme:

Rubblework of granite. Rests of overhanging brackets.

Milmanda:

Castle in which there are no ruins of the Torre de Homenaie.

A Porqueira: Isolated, of rectangular floor and of straight cross section. Granite ashlar with rectangular voids, very narrow but bigger than the loopholes. Access at a certain height. Four floors above the access including it. Perimetric brackets over which rests of machicolation are observed. According to the historians it has maintained its original structure.

Monterrei:

Was adapting its systems with the evolution of war techniques, because

of which its image is changed too much in respect with what it was in the Middle Ages. Integrated fortress, two outstanding medieval towers: the Torre de las Damas and the Torre de Homenaje, both of them of square floor, straight cross section, granite ashlar with few large windows. The Torre de las Damas has got rests of attached edifications. It is finished with overhanging even machicolation over brackets. The Torre de Homenaje is isolated, with an entrance at a certain height reachable by a staircase lifted manually from the ramparts. Finished by overhanging machicolation over the brackets, reinforced by fortification turrets in the corners and in the centre of the faces.

Having realized this characterization of the type, that we can call a horizontal study in the time, other possible alterations and peculiarities of the tower of Vilanova may be supposed as a consequence of it:

- modification of the roof level: according to the comparative studies it would lie upon a wooden dormant supported by a stone continuous corbels of the last floor, with the destruction of the finial system of the tower;
- modification of the access system with the newly added door: the typological study led us to the hypothesis of the system of access to the tower from the perimetric façades like in Monterrei or Nogueirosa. The presence of stone corbels that surround the zone of the arched balcony of the same height, as the rampart could have, together with what seems to be the trace of an ancient staircase between these levels and what the lichen shows make us suspect that a system of access from the façades of the perimetric ramparts existed. However the scarcity of certain data and the great importance of the suffered alterations make us banish any temptation of reconstruction;
- the staircase introduced during the 1992–1993 restoration does not seem to correspond to the historical situation of these buildings, since the horizontal planes (forjados) were plywooding

- their arrangement on different floors with the purpose of providing major rigidity to the ensemble and uniformizing the load that different walls were transmitting to the laying of foundations;
- the horizontal levels defined during the same restoration bring up doubts about the successfulness of its situation since there are traces in the masonries of other levels;
- referring to the same restoration, there are other disputable interventions: the opening of the vertical space that covers all the floors of the tower which is totally strange for this type of edification, the introduction of elements of vertical partitioning that does not permit a common space for each floor of the tower as well as the arrangement of a false ceiling that cuts the interior flarings of the voids.

However the adopted philosopy —not to deny the course of the history, and the little importance of the intervention lead us to propose tiny actions that will reduce the observed defects.

DESCRIPTION AND JUSTIFICATION OF INTERVENTION

Acting in the historical area is always a problematic matter. The following aspects are summed up to the difficulties of any construction project itself: the undeniable presence of the history condensed in the stones of the place imposing some especially strict rules, the dysfunctions produced by the history for contemporary use when the formalization process owes to past circumstances that legates its phisical configuration, the necessity not to renounce the condition of contemporaneity that any piece of Architecture demands. One should not forget either the social sensitivity that an intervention awakes.

The intervention has been undertaken since the theory of the strata: each historical moment, as it would refer to geological times, superposes its action on the city and the building depositing itself over the precedents without interfering with them and at the same time being a visible element in the whole ensemble. In this sense the intervention deposits over the town as it were a carpet and like modern furniture in the buildings. The reversibility of the action is a prerequisite feature of the intervention in the patrimony.

The adequation of the introduced usages and the characteristics of the edification that supports them is imposed: the basic definition of the types of the action object —load structural walls, horizontal planes (forjados) and voids, which are carefully maintained and restored. Thus the spaces are defined and interpreted as containers in which the different usages are deposited carefully.

It has seemed to be appropriate to establish a correspondence between the tripartite character of the program and three differentiated fields of the preexistences —superior floor, ground floor and tower (Figure 1) in such a way that each part of the program is developed in one of them. The new necessary partitons are arranged as if furniture is being treated, avoiding the contact between the additions and the existing walls, every moment evaluating the contrast of materials techniques and thicknesses, contrast that leads to the limits using dry construction techniques.

When dealing with three independent elements, their relation to the consecutive presentation of their accesses is committed: the ancient houses with an access from the square support the more traditional use —the restoration; the access to the Centro Comarcal— the modern usage, is realized by an added element which is a reinterpretation of the «patines del pueblo». The presentation of the accesses to the tower culminates as an emblematic element. The three historical buildings have conserved their old accesses as much as possible adjusting themselves to permit the functioning of the three big parts that form the program —cafeteria, expositon and offices, facilitating its autonomous use.

The segregation between the top and ground floors of the building takes into account analyzed building typology, with the ground and top floors of very different meanings and uses. The modification is expressed in a roof that integrates the two houses in only one three dimentional space, facilitating its unity. For that reason the elevation of the cornise height of the two houses is to be accepted to define a unique line that will be resolved by an entrance of a filtered light: a shade in the elevation. The intervention pretends to use materials that in the local construction experience have been proved to be valid: the tile on the roofs, the local tradition of construction in wood, stone, glass and of course the magnificent use of the metalic façades within the frame of the

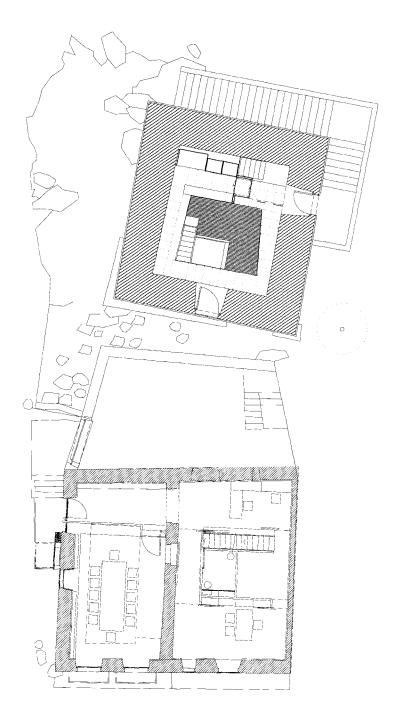


Figure 1 Centro Comarcal «Terras de Celanova». Intervention floor. Executed proposal. Freire, Vazquez and Macias —the architects

popular tradition that can be enjoyed when walking in the town.

The urbanization is conceived as a carpet extended over the place. A flagstone pavement reminds the layout of the rampart of the town. The whole urbanization is created from this element and the definition of the historical environments: local pebbles among the strips of granite flagstones show that formerly it was a yard of arms with the rocky outcrops integrating into the pavement; a paving of granite pieces of 6×6 covers the old access to the tower which tangetially passes defining independent, adjacent spaces: the storehouse space, the space of access to the Centre, the bastion space. In this space succession we try to facilitate the organization of open-air sculpture expositions. For this purpose some embedded ilumination points are installed by inserting them in the pavement or in other elements permitting a minimum illumination, two more double points are added that will illuminate the volume of the tower diagonally configuring it also as a nocturnal reference.

INTERVENTION PROPOSALS BASED ON THE TYPOLOGICAL ANALYSES OF THE LATE MEDIEVAL TOWERS

The actions in the tower are planned in the light of the historical memory and the realized typological investigations. Initially it is assumed that the historical flux is a fact, without denying the different transformations that history has introduced in the building, adapting this to the new requirements, that are now demanded, meanwhile the defects that complicate the comprehension of the building and make the other characteristics that could remain unnoticed by the visitor, are corrected. From this point of view, the interventions that have been realiazed in the last century are assumed to be unsuccessful but our intention is not a historical retrospective. Our purpose is surely to recuperate signes of the lost identity, as for example the belonging of the tower to a fortified ensemble revealing the castle rampart layout on the urbanization pavement, the ruins of the tower destroyed by the «irmandiños», the layout of which is seen on the pavement of the access floor. Another purpose is to recuperate fortress data reintroducing the crowning elements and the perimetric walk together with the merlons, or the functioning of the old access.

That is why one of the first adopted decisions was to reconstruct the roof. Given the fact of the closeness between Vilanova and the fortification of Monterrei, also the fact of Vilanova belonging to this family at the time of the possible reconstruction and the date corresponding to it, the finial crown adopted in the project is of the machicolation type. For the clear differentiation of the original from the not original one, it was decided to build it of wooden elements. Besides, considering the stability of the stone corbels uncertain, it was decided to use an auxiliary metalic structure to guarantee the structural security. In this way the reversibility is entirely assured, the top can be easily eliminated, a produced popular response taken as a prerequisite condition, as well as the reference to the origines of the wooden fortifications, at the time when the continuous finial floating over the bracket is obtained.

In none of the analyzed towers a setback that appears in Vilanova is observed. Its uniqueness together with: the study of the bibliography, the importance of the interior tower, amputated wall scars that are observed on the west façade, (a scar that possibly exists though hidden on the west side, because of the addition of the staircase in the 19th century) the stone corbels of middle height in its perimeter focused the study interest upon the towers linked with defensive precincts conformed a mixed image between the Castle and the single tower.

From this kind of studies came up a suspicion (for us a conviction) that, given the fact that the tower belonged to a fortified ensemble as the archeological investigations show, the entrance to the tower was realized by ascending from the rampart to a superior level that was reached by means of exterior perimetric stairs, supported by stone corbels that are still visible, similar to the access of D. Sancho de Monterrei. The fact that the present entrance to the tower was built in XIX century (according to the archeological excavations data) corroborates this suppositions. However, the present attitude not to negate the different transformations that the buildings have undergone throughout the history, like the lack of more data and the complete disappearance of the façades of the ramparts which would support the access, have led to discarding a decisive action upon

the subject, limiting the intervention, lightly marking this possibility together with balcony protection design blocked up at the front and swooping at the sides where the rampart walk would pass.

The studies done during the realization of the project and the course of the work permitted to ascertain the Vilanova ramparts and to match the layout supposed by Eguileta(1994) and to nominate two towers of the town defensive system, one of which was found in the interior of the rehabilitated houses, Figure 2. The project includes the layout of the ramparts by placing a pavement where a wall is supposed to have been. Besides the disposition of a row of relocated willows of the square, pretends to delimit the space proportioning a scale similar to that of the arms yard, the perception of which is strengthened by partially placing a pebble pavement.

The same didactic spirit with which the exterior intervention faces up is maintained in the interior. Thus the recuperation of the ruins of the ancient tower is undertaken. Its interior is made accessible by means of one-flight staircase of the type detected in the studies. While its plan of the ground floor differs by a granite paving, teak wood is used for the rest of the floor.

The previous intervention impeded the perception of a unique space for each of the tower floor by placing an acid treated glass screen that closed a number of halls on each floor; by attaching installations to the tower walls and damaging them by the connection tubes sistem and hiding the configuration of the voids by false ceilings which impeded to see its constructive resolution. It was decided to eliminate all these interventions by placing the installation on the floor and on the ceilings, substituting the false ceilings and dismounting the glass screens to amplify the unitary character of the floor. The position of the two horisontal planes (forjados) placed in the previous intervention has been preserved, as well as the layout of the staircase, and as we are not sure about its correspondence to the original one and we have not got enough data for a reliable action to give it an image more appropriate to the original building, a facing of dark wood has been used.

In the superior level under the covering, two continuous stone corbels can be observed, the mission of which is the previously mentioned one, i.e. to support a horizontal plane (forjado), possibly that of

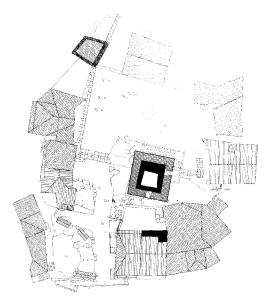


Figure 2
Fortifications ground in the proximity of the Tower of Vilanova

the covering. Its position, which is not connected with it, indicates an itervention of probably the past century that has drastically modified the levels of the tower. One of the corbels is interrupted by a vertical void which, judging by its fitting, was created later than the building of the tower. The impossibility of correcting the levels, because of the lack of data, leads to accepting them and giving a solution —illumination of the stone corbels hidden by some boards that pretends to remind the meaning of those corbels.

Finally the slate soldier, extraneous to the place, was removed to realize an inverted roof with a finishing of local granite tiles.

Notes

- At present there is the book of Varela (1999), with a minimum fotographic report and a brief commentary about numerous galician towers, that can serve as a basis of support for the project maker.
 - At the national level, Sotelo (1999) has six galician castles.
- The rebellion of the «irmandiños» (hermandinos in spanish) was a turn against the knights and the lords of the

- Galician Kingdom as a consequence of the abuse of the latter that took place during 1466–69. See for example *«irmandiños»* in Silveiro Cañada ed. 1974 vol. XVIII.
- 3. As a proof there is a document of March 2, 1481 in which the abbot of Celanova sanctions those who were guilty of the destruction (Eguileta 1994, 514). Anno de mill e quatroçentos e oytenta e un anos, dous dias do mes de março en Celanova (...) diso (...) que o dito señor abade lles fazera pagar çento e vinte maravedis a cada un pera torre de Villanova que derribou a Yrmandade.
- Cristobal de Rojas introduces the new solutions in the «Teoria y practica de la fortificación», 1582. From 1587 starts the construction of the castles of San Felipe and of San Anton in the port of A Coruña according to the new methods (Varela 1999). The previous author realizes the fortification of the Ciudadela de Cadiz in 1598 (Soraluce, 1981).

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