Drawing has been and it still is the principal means of expression for the architect, in addition to being the base of all the arts. Indeed, in the genesis of every retable and building there is a master model, signed by the mentioned creator, as well as drawings and patterns belonging to the artist's workshop, which were partially executed at times to be used in the construction site by the architect's assistant and his workers. As paper is fragile, expensive and not very practical, in Galicia during the 16th, 17th and 18th centuries the usual choice is drawings on stone [in Spanish «monteas»], that is, architectonic outlines made directly on the stone or engraved in it; frequently on the floors and walls of the actual construction site.

The first European examples belong to Hellenic Greece, where as the oldest in Spain were found in Itálica. During the period of this present study, their knowledge was compulsory to pass the exams to become an architect's assistant or a master architect. The most common ones represent supports, arches and vaults, especially when they were larger in dimensions. Not only the components of the columns and pilasters but also the voussoirs of an arch or a vault have different shapes and their sizes and proportions had to be rigorously taken into account. Otherwise, it would provoke irregularities and deformations that would affect the look, symmetry and beauty of the work, as well as its safety and solidity.

We have examples of their usage in Galicia in documents dating from 1669 to 1671, referring to the construction of some parts of the Baroque furnishings of the main chapel of the cathedral of Santiago de Compostela, according to plans hewn into the floor of the cloister, and also a document from 1675 regarding the casting of the bell called «de la Concepción», from the bell tower of the same cathedral «en conformidad del modelo y tamaño de un dibujo que se ha de hacer en las claustros de dicha Santa Iglesia».

Nevertheless, the best examples are the testimonies I have found in the last four years in cathedrals, monasteries and churches of the four provinces of Galicia. There are not many left because the usual procedure was to erase them after their use, polishing the stone or covering them with various materials. The ones found expand the repertoire of this type of drawing, adding to others in Spain and Europe, such as the ones in the cathedral of Seville, the Rosslyn Chapel or the cathedral's of York and Auxerre. All of them exemplify the practice of this common technique of planning, in which the Galician master builders reached a great level of expertise. This is shown in the drawings on stone of the column, the bracket, the pediment and the straight arch located in the cathedral of Santiago; the abbatial stairs of the monastery of Montederramo; the entablature of the façade of San Telmo in Tui and the interior of the church of the monastery of Poio; the rib-vaulting of the cathedral of Tui and the church of Montederramo; the cross-vaulting of the college of Monforte; the arch of the monastery of Poio, among others.
In the investigation of them, it is very interesting to compare these drawings with the ones included in Spanish manuscripts of stereotomy from the 16th, 17th and the beginning of the 18th century, mainly devoted to the application of geometry to the design of arches and vaults.12 They are the Cerramientos y Trácas de Monte by Ginés Martínez (1556–1620),13 the Libro de Trácas de Cortes de Piedra by Alonso de Vandelvira (1575–1591)14 and the Cuaderno de Arquitectura by Portor y Castro (1708–1719),15 and the first and the third examples have some connections to Galicia.16 It is clear that the Galician master builders used this type of manuscript, which have since been lost. The only testimonies of their skill in the art of stone cutting that remain are the finished buildings and the patterns we want to analyse.

We do have documentation of the usage in the few books on the topic published in the 17th and 18th centuries.17 Domingo de Andrade, Master Builder of the cathedral of Santiago, was familiar with Arte y Uso de la Arquitectura (Madrid, vol.I, 1665 and vol.II, 1665) by Fray Lorenzo de San Nicolás, which includes several chapters devoted to the art of stone cutting.18 The same title was in the libraries of the architects and master builders Diego de Romay,19 José de Seixas,20 Fernando de Casas,21 Lucas Ferro Caaveiro and Fray Manuel de los Mártires. The books of these last two men are now kept in the Biblioteca Xeral (Central Library) of the University, with their ex libris intact.22 There are also other volumes about perspective, arithmetics and geometry, in some ways related to the topic, among the belongings of artists such as Juan Bautista Celma,23 Simón de Monasterio,24 Francisco de Antas,25 Diego de Romay,26 Domingo de Andrade,27 Fray Gabriel de Casas28 and Fernando de Casas.29

Significantly, in the library of the cathedral of Santiago there is a Tratado elemental de los cortes de cantería, o arte de la monte by Simonin, translated into Spanish by Fausto Martínez de la Torre and José Asensio (Madrid, 1795).31 and the two volumes of the Arte y Uso by Fray Lorenzo (the edition published in Madrid in 1796),31 already mentioned and used by the artists of the cathedral’s workshop. In the library of San Martín Pinario there is another copy of El arte de la monte by Simonin.32 And the old volumes of the Biblioteca Xeral, which came from the expropriation of the libraries of monasteries and convents of the city when the Disentail [«Desamortización»], from the libraries of the Jesuit Colleges of Santiago and Monterrei occurred after the expulsion of the Jesuits and from the purchasing of private libraries (as we can see from the ex libris of the books), include the two cited editions of the two volumes of Fray Lorenzo, property of Lucas Ferro Caaveiro (Madrid, vol.I, 1667 and vol.II, 1665)33 and Fray Manuel de los Mártires (Madrid, 1736);34 the Breve tratado de todo género de bóvedas by Juan de Torija (Madrid, 1661),35 that came from the library of the convent of Santo Domingo de Bonaval36 and contain the explanation of the different ways to build a vault; five copies of the volume V of Compendio Matemático by Tomás Vicente Tosca (two from the Madrid edition of 172737 and three from the Valencia edition of 175738) and their treatise, entitled De la monte y cortes de la cantería; two editions of El Arquitecto Práctico by Antonio Plo y Camín (Madrid, 176739 and 179340), which contains chapters on how to build arches, squinches, domes and vaults; and two copies of the volume IX, Part I of the Elementos de matemática by Benito Bails (Madrid, 1796),41 also containing fragments on the same topic. There is also a 19th century edition of the Geometría Descriptiva by Gaspar Monge (Madrid, 1803).42

Having considered all this information, we can study the practical application of the theoretical knowledge from the cited bibliography. We will classify the drawings on stone found according to their function and their particularities. I must point to the difficulties of interpreting the gathered material, especially some of the incomplete or heavily damaged drawings or the ones located in buildings that lack a detailed historic monography.

**DRAWINGS ON STONE OF BASES**

On the west wall of the cloister of the cathedral of Lugo there is an orthogonal network of red lines that is preserved and that covers the whole wall. On it you can see the profiles of the base of a column or pilaster (fig. 1). They consist of the canonic plinth, torus, scotia, fillet and the beginning of the fust. They belong to the Tuscan order, published in the Regla de los Cinco Órdenes de Arquitectura by Vignola. The wall where they are engraved is older than the present cloister, which replaces a previous wooden one, and
The drawings on stone in Galicia: Types, uses and meanings

this wall is part of the Palacio Capitular built by Domingo de Andrade in 1683. So it would be a logical link between the drawing and the cloister, which contains huge Tuscan pilasters and built by Fray Gabriel de Casas and Fernando de Casas between 1708 and 1714. And, in fact, the elements drawn in the profiles are repeated in the building but with very different measurements, so they could be not related.

But, on the floor of the gallery of the third floor of the Palacio Capitular of the cathedral of Santiago (nowadays the Cathedral’s Museum) there is another drawing which does correspond with the columns of the gallery (fig. 2). As Rosende Valdés has proved, that gallery is the result of a 1588 renovation of the Palacio Capitular built several decades before according to Rodrigo Gil de Hontañón. It has thirty-three Ionic columns and several pillars, joined by a parapet and with the particularity of having a zapata between the capital and the entablature. The drawing on stone includes the pattern of the plinth of the base and the apophyge of the fist of the column.

**DRAWING ON STONE OF A COLUMN**

On the floor of the first story of the cited Compostelan building there is a drawing of what looks like a classical column with its base, fist and astragal of the capital (fig. 3). The base consists of pedestal, plinth, torus and fillet and, in a geometrical feat, is projected with the same measurements in an angle of 90°. The fist does not have entasis and above it there is an outline of the capital and maybe part of the entablature. Its function has not been identified and, according to its characteristics, I doubt that there is a simple exercise of planning with didactic purposes and without an immediate practical use in the building of the cathedral. As in other cases, the drawing on stone corresponds with the illustrations of the Tuscan order published in the editions of Vignola.
DRAWINGS ON STONE OF CAPITALS AND 
ENTABLATURES

There are two discoveries and both are examples of Baroque architecture. The oldest one is an elaborated pattern of the piers of the crossing of the church in the Benedictine monastery of San Xoán Bautista of Poio (Pontevedra), a building from the end of the 17th century and the beginning of the 18th (fig. 4). It consists of the profile of the Tuscan capital, formed by the canonic fust, fillet, astragal, gorgerin, listels, equinus, abacus and listels clearly differentiated, combined with the profile of an entablature of the Ionic order, composed of an architrave divided in fascias, moulding, frieze, moulding, dentil, three quarters of a bead moulding, throating, corona and eaves. Once again, the referent is the book by Vignola.

The drawing on stone is located on the east wall, on the bottom aisle of the processional cloister. As it belongs to the previous century and there is a big door that connects it with the new temple, it is logical that the master stonecutters worked there, finding shelter from the weather under its vaults. In fact, on the floor near that drawing there are more, supposedly also related to the construction of the new church, but today it is impossible to read them because the stones have been moved from their original location.

The other drawing on stone is located in the narrow space of the top choir-loft of the church of San Telmo in Tui, built from 1769 on by the Portuguese architect Fray Mateo de Jesús María, following his own building plan. That, as Rosende Valdés has studied, shows the influence of the Baroque style from Braga. The drawing is the most elaborate of Galicia and relates to the edge of the main façade of the building (fig. 5). The façade has three parts and in both lateral ones you can see the first floor of two towers that were never finished. Such structures have two Corinthian pilasters set at an angle and share a dynamic and broken entablature, that corresponds with most of the found drawing on stone. In it we notice the curve formed by the three fascias of the architrave, the frieze and the dentil, and also the acute angle of the eaves and the cymatium.

DRAWING ON STONE OF A BRACKET

On the wall of the façade facing the Obradoiro Square of the mentioned Palacio Capitular of the cathedral of Santiago there is a drawing on stone of one of the twenty brackets that support the projecting balcony of the second floor, a result of a remodeling of this Renaissance building in 1614 (fig. 6). According to López Ferreiro, the one in charge of the work was Francisco González de Aradío, who followed the building plan of Jácome Fernández, Master Builder of the cathedral. The drawing consists of a curved profile of the overhanging element that supports the
The drawings on stone in Galicia: Types, uses and meanings

The drawings on stone in Galicia: Types, uses and meanings

~

Figure 6
Drawing on stone of brackets of the balcony of the Palacio Capitular of the cathedral of Santiago and drawing on stone of straight arch (drawing by José Manuel Yáñez Rodríguez)

weight of the afore mentioned structure. It is related to the straight arch that we will explain next.

DRAWINGS ON STONE OF ARCHES

The most frequent drawings on stone are the ones related to arches, with their different types and functions. For example, in front of the mentioned Palacio Capitular of Compostela, on the bottom floor, on the left of the present entrance, there is a drawing on stone of a straight arch, with the desing of its voussoirs in a wedgelfike fashion, perfectly drawn (fig. 6). As we have already noted, by it there is a drawing on stone of the brackets that support the balcony of the second floor, built in 1614, so we can relate both drawings with that construction, and date them around that year. Nevertheless, the number and the position of the voussoirs in the lintel does not fit with any of the openings that now exist in that wall, not even with the immediate gateways that could be connected to it. The projet was not complicated for the author because the same one is included in Ginés Martínez and any of the later manuscripts and books about the art of stone cutting.

Besides this, on the slabs on the floor of the cloister of the same cathedral, there is another drawing on stone representing a semicircular arch (fig. 7), whose chronology and function are unknown.

On the floor of the top aisle of the processional cloister of the monastery of Poio a basket-handle arch is engraved and, as in the first arch, there is a drawing of its voussoirs (fig. 8). It corresponds to a nearby access, in the north aisle. Bonet Correa dates the construction of the cloister in the second half of the 16th century and ascribes its completion to the...
Portuguese architect Mateo López, so this drawing on stone should belong to his work.55

These three types of arches we have studied are the most common ones and they are cited in practically every treatise about drawings on stone mentioned in the present paper.

**DRAWINGS ON STONE OF VAULTS**

On the floor of the well of the stairs of the college of Monforte de Lemos, there is a drawing on stone published by Freire Tellado and identified by him as corresponding to the cross-vaulting of the school cloister’s vault56 (fig. 9). This part of the building had a complex history on its construction, which may explain the survival of the drawing. It was built between the end of the 16th century and the beginning of the 17th century and, as the rest of the college, was sponsored by the cardinal Rodrigo de Castro, following the project of the Jesuit Andrés Ruiz and Vermudo Resta, the latter from Milan.57 The documentation informs us of the use of drawing on stones —“monteados”— from the onset of the construction.58 The drawing found consists of a cross-vaulting of uneven sides and with semicircular arches in its elevations. The measurements and shapes of the carving of the voussoirs of the structure are specified, in addition to its decorative fascias.59

On the other hand, on the floor of the north transept of the church belonging to the Cistercian monastery of Santa María de Montederramo, there is an unpublished drawing on stone of a rib-vaulting with the outline of the piers that support it (fig. 10). The peculiar cut of the keystone ashlar is remarkable. The church, of classical style, was built by Pedro de la Sierra between 1598 and 1632, following a project of the Jesuit Juan de Tolosa.60 It has a Latin-cross shape with three naves, transept with chapels and a very deep sanctuary. Its wide dimensions explain up to a certain point its use by the master builders, who did not have a more appropriate shelter and drew on the floor sketches for this and other remodelling efforts, as we will examine below. Later in the 18th century the top choir-loft was built or expanded above the nine rib-vaultings, covering the three first sections of the naves. The drawing on stone corresponds to that work and in fact its measurements coincide with the ones of the central vault of the third section, whose keystone bears the inscription «IHS. MA. 1772», referring to the date of the conclusion of the work.

Iglesias Almeida published the news about a drawing on stone on the floor of the Santa Catalina,61 chapel of the cathedral of Tui, which corresponds to a star vault with its keystones, ribs and liernes62 (fig. 11). This chapel belongs to the Palacio Episcopal built by the bishop Diego de Muros at the end of the 15th century.63 Apparently, at the beginning of the
The drawings on stone in Galicia: Types, uses and meanings

Figure 11
Drawing on stone of star vault: cathedral of Tui (drawing by José Manuel Yáñez Rodríguez)

building had only three sections, which today are the nave, and the drawing was located on the first two sections. The fourth section of the sanctuary was added in 1726. The present vaults of the building are cross-vaultings but they date from the 18th century and replaced older ones of an unknown shape. Probably the drawing on stone is related to some of the vaulting built during the 16th century in the cathedral, although what we have today (crossing-vault, main chapel, sacristy and old San Telmo chapel) do not correspond exactly with the drawing.

The first type of vault cited, very frequent in the Galician architecture of the time, is included in the manuscripts of Vandeviria and Juan de Portor and in the treatises of Juan de Torija and Fray Lorenzo de San Nicolás, among others, which means that the author could count on multiple sources for its elaboration. In the cases of the rib vault and the star vault, the sources are more complex due to their Gothic origin. In any case, it would be useful to contrast the ones in this paper with those included in the manuscripts by Simon García, Hernán Ruiz «el Joven», Vandeviria and Juan de Portor.

**DRAWING ON STONE OF A PEDIMENT**

On the floor of the north transept of the cathedral of Santiago, engraved on the floor itself, there can be found the only known drawing of a pediment (fig. 12).

It is well known that the construction of the Azabachería façade began in 1758, following a Baroque plan by Lucas Ferro Caaveiro, the Cathedral's Master Builder. Nevertheless, this artist was removed from the project, probably due to the growing relevance of the Academy of San Fernando all over Spain, and his plan was corrected by the architects from the Academy Ventura Rodríguez and Domingo Lois Montecagudo. They both abandoned the original building plan, using in its place one more connected to the classical Baroque Italian architecture; and their talent is patently obvious in the second floor and the ending.

The located drawing belongs to this second renovation and corresponds to the two Ionic pediments that crown the lateral sides. In it we can see the drawing of a classical triangular pediment with the characteristic denticular cornice. The influence of the engravings from the architecture treatises of the time, the sources of that item, is evident (for example Vitruvio, Arfe, Serlio, Labacco, Caramuel and so on).

**DRAWING ON STONE OF STAIRS**

I have only found one example. It is the drawing of the abbatial stairs of Montederramo, located on the stone paving slabs of the south transept of the church (fig. 13). It was built in the period that this article addresses to connect the two floors of the cloister and it has suffered a recent and very aggressive remodeling. It is composed of three flights enclosed
by a set of balusters recently arranged in an oblique perspective. The drawing shows the steps and the segmental arch of the last flight, with the exact number of voussoirs.

A SPECIAL CASE: THE TWO HUMANOID DRAWINGS ON STONE OF THE CATHEDRAL OF SANTIAGO

Two figurative drawings on stone found on the floor of the Goya Tapestries Hall of the Compostela Cathedral’s Museum deserve special attention (fig. 14). They are two anatomical studies of a bust seen from the front (or back, it is not clear), with a height of 2.3 metres, an a profile (measuring 2.8 m). The second has the particularity of still having the ortogonal grid and the scale. Both are reminiscent of similar studies by Durero and Juan de Arfe, the latter one published in his Varia commensuración para la escultura y arquitectura (first edition of 1585), and included in the personal libraries of the Galician artists, as I mentioned above.

The function of both drawings should be related to the approximate rendering of the human body’s dimensions and its proportions, to be later applied in works of sculpture. In this scene, the only place in the cathedral where numerous images where carved was the Baroque furnishings of the main chapel, made up by the wall revetment, the camarín and the tabernacle, built between 1658 and 1677. In fact, the revetment has forty-four angels holding lamps; the camarín has a Saint James Pilgrim and four kneeling kings; and the tabernacle has eight flying angels which hold the structure, the four Cardinal Virtues, a Saint James «Matamoros», four Turks and ten porter angels that used to hold banners.

This use of drawings on stone for the sculptoric plans is not so rare if we consider its use for the construction of the architectonic structure: its use is mentioned in the 1669 agreement about the revetment of the two penultimate piers of the sanctuary, which used to hold a bar of iron with votive lamps. They should be made «conforme [a] la planta que está disiñada en el losado del claustro y [luego] puesta en un tablero» Also, the 1670 contract says that the cornice of this covering should be made «conforme [a] la planta que iço Domingo de Andrade, aparejador de la obra del tabernáculo, en el losado y claustra de dicha Santa Yglesia». And the 1671 contract of the revetment of the first two piers had to follow the plan «puesta en el losado del claustro». The relative proximity to the hall with the Goya Tapestries, with the thrice times mentioned cathedral cloister, the place where the different pieces of the
furnishings where carved and held until their assembly in their precise locations is also significant.\textsuperscript{77}

It is also similarly useful to compare both drawings with the busts (profile and volume) of the Fortitude, Prudence, Justice and Temperance of the tabernacle, that were made by the sculptor Pedro del Valle from Villafranca del Bierzo and were commissioned in 1667 along with the images of the eight angels that support the tabernacle and with the Pilgrim Saint James and the four kings that pay homage to him in the \textit{«camarín»}.\textsuperscript{78} The chronological closeness to the already mentioned and documented architectonic drawings on stone should not be considered a mere coincidence. In fact, in the document of the agreement it is specified that the angels should be carved following the model and the \textit{«tamaño de otro que está echo»} of one made by sculptor Blas do Pereiro and that Saint James and the kings should be made following the patterns of Pedro de la Torre, a carver from Madrid. On the other hand, the virtues should be \textit{«del tamaño de las figuras de la traça, según el pitipie»}, probably meaning our drawings on stone.\textsuperscript{79}

From the global study of all the drawing on stone so far located in Galicia we can reach interesting conclusions. Most of the examples are in the cloisters of the cathedral of Santiago, the cathedral of Lugo and the monastery of Poio, due to the fact that they have ample and ventilated covered halls, where the master builders would have worked all year long without being bothered by the hassle, noise and dust generated by their work.\textsuperscript{80} On the other hand, in some other monasteries they are on the floor of their ample churches (in Montederramo, for instance), maybe because they are places easily isolated with movable walls from the rest of the building. It is not by chance that the drawings are related to the construction of the top choir-loft. And lastly, in some other temples they use other marginal spaces, mainly the galleries (like in the cathedral of Santiago and the church of San Telmo in Tui). All of these locations are the reason that most of them are lost because many buildings have been renovated in terms of their floorings, specially in the last decades.

A special chapter should be devoted to the drawings carved into stone on the floor of the first story of the \textit{Palacio Capitular} of the cathedral of Santiago. We are only analysing a classical column\textsuperscript{81} and its location in that place could be related to the establishment of the cathedral’s workshop of artists, which then occupied that same area during a long period of time. That is the only explanation of the number and superposition of drawings.

All the drawings on stone examined are carved directly into the granite of floors and walls, in contrast with the techniques used elsewhere, like the drawings on ceramic surfaces of the cathedral of Seville,\textsuperscript{82} or over lime mortar in the so-called \textit{«Hall of Drawings»} of the same building.\textsuperscript{83} In its making they used tools of the stoncutters, like chisels, rules, squares, ropes, big dimension compasses, tracers and patterns. There are good examples in the ethnographic collections about the trade in the Museo do Pobo Galego or the Olimpio Liste Collection. In several inventories of the possessions of architects and master builders we found these types of instruments, although it is not clear whether they were used for drawing on paper or stone.\textsuperscript{84}

There is an evident relationship between the different drawings on stone and the \textit{Regla de los Cinco Órdenes de Arquitectura} by Vignola (as in the base of the cathedral of Lugo, the column in the cathedral of Santiago and the entablature of Poio), which is not strange because that book is the principal manual of the architects and master builders of that time. This author’s work is present in their libraries (he is included in the ones of Simon de Monasterio,\textsuperscript{85} Diego de Romay\textsuperscript{86} and Fernando de Casas\textsuperscript{87}) and also in the contracts as the model to follow in a construction project. Some examples are the adjustment of the church of the college of the Jesuits of Monforte\textsuperscript{88} or the cloister of the abbots in the monastery of Santo Estevo de Ribas de Sil.\textsuperscript{89} Moreover, in the holdings of the Biblioteca Xeral there are three editions of the book, two Italian ones (Roma, 1602\textsuperscript{90} and 1732\textsuperscript{91}) and one Spanish (Madrid, 1792)\textsuperscript{92} and in the library of San Martín Pinario there is one, published in Madrid in 1760.\textsuperscript{93} On the other hand, we should take into account that other later experts in architecture had published the five orders of Vignola (such is the case of Fray Lorenzo de San Nicolás, Tosca, etc.) and those books could also be used when drawing.

The repertoire of drawings on stone presented here prove the possibilities of the Galician architectonic design and shows that although we know that most Galician master builders were illiterate (many could not even write their signature), they would have had basic notions of and practical experience with geometry, and they used that knowledge in their
professional endeavors.\textsuperscript{94} In any case, although we do not have drawings on stone of all of our buildings, the detailed study of Galician cathedrals, monasteries and pazos during the Modern Period should lead us to a reflection on the topic.

NOTES

All the reproductions of drawings on stone that illustrate this article were made by José Manuel Yáñez Rodríguez, Technical Architect of the Diputación Provincial of Coruña, and Professor of the University of A Coruña. I also owe him a good number of ideas and suggestions reflected in this article. Augusto Fernández González, José Manuel Rodríguez Pérez, Francisco Javier Novo Sánchez, Miguel A. Cañigar Vera and Adriana Candela Couñillas Lino helped him with the drawings. Pablo Yáñez Rodríguez did the computer work. I wish to express my gratefulness to all of them.

5. Even today the practice of drawings on stone is recommended for specific cases (see Guía práctica de la cantería, Escuela Taller de Restauración Centro Histórico de León, León, 1993, 197).
6. We will talk about it below.
7. A.C.S., Varia, leg. 718, doc. 484.
8. Some of them, located in the cathedral of Santiago, were published by me some years ago in my books Trazas, Planos y Proyectos del Archivo la Catedral de Santiago (A Coruña, 1999); and «Los aparejadores gallegos en la época moderna (siglos XVI-XVIII)», El Aparejador y su Profesión en Galicia, Santiago, 2001, 113–115.
22. It is not clear whether the first volume also belonged to Lucas (see Taín Guzmán, M., El taller . . . , art. cit., 264,
23. It is *Varia Commsnsuracion para la escultura y arquitectura* by Juan de Arfe (see Pérez Costanti, P., *Diccionario de artistas que florecieron en Galicia durante los siglos XVI y XVII*, Santiago, 1930, 134).

24. There are *La aritmética práctica y especulativa* by Pérez de Moya and *La aritmética práctica* by Jerónimo Cortés (see Goy Díz, A., op. cit., 179 and 188.).

25. They are *Tratado de Geometria Practica y Speculativa* by Pérez de Moya and *Elementos Geométricos de Euclides* by Luis Carduco (see Fernández Gasulla, L., art. cit., 332).


27. There are *Tratado de Geometria Practica y Speculativa* by Juan Pérez de Moya, *Libro de Aritmética Especulativa* and *Practica intitulado El Dorado Contador* by Daniel Santbech (see Fernández Gasalla, L., *ibidem*, 179 and 188.).

28. It is *La prospettiva* by Vignola (signature RSE 2.193 of the Biblioteca Xeral).

29. There are *Tratado de Geometria Practica y Speculativa* by Juan Pérez de Moya, *Libro de Aritmética Especulativa* and *Practica intitulado El Dorado Contador* by Miguel Jerónimo de Santa Cruz, *Varia Commsnsuracion para la escultura y arquitectura* by Juan de Arfe, (see Foiguer de la Colle, M. Del C., art. cit., 538, note 10, and 542).

30. Signature 1.292.

31. Signatures 2.015 and 2.016.

32. Signature 9.439 (I owe this information to Miguel Cajigal, to whom I wish to express my gratefulness). The book has the following ex libris: «Franc. S. Mosquera Villamarín, presb. lucens. doct. compost. regal. consil. advocat. brigtant. port. colegial eccles. princip. Dignit. etc. Han. MDCCCXXIV».

33. With the ex libris: «Coy de Lucas Antonio Ferro Caaveyro. Custe de 22 reales vellón.»

34. The ex libris of the first volume say: «Este libro es usu de Fray Manuel de los Mártires, religioso lego, y como el convento de Nuestro Padre Santo Domingo de Santiago» and «Librería de Santo Domingo. Estante 30, Cajón 4º». And the second says «Este libro es de Domingo Bagallo».

35. Signature RSE, FOLL.-IV–6

36. In fact, the book has two ex libris: «Librería de Santo Domingo de Santiago, Estante 30, Cajón 4º» and «Este libro es de Juan Antonio Lezana, Año 1723».

37. Signatures D556 and 4.640.

38. Signatures RSE 1.201, D559 and 10.711.

39. Signature RSE 4.081.

40. Signature 4.105.

41. With the title «De la Arquitectura Civil» (signatures RSE 2.424 and 17.537).

42. Signature R 4.334.

43. On the south wall of the southwest area there is what it looks like a carbon-pencil grid with drawings too faded to distinguish.


47. Its author is not clear although BONET Correa (*La arquitectura en Galicia . . .*, op. cit., 496–500) suggests the name of Fray Gabriel de Casas. In any case, the façade was built from 1691 on by Pedro de Monteagudo (see Rodríguez Fraiz, A., *Canteiros e Artistas de Terra de Montes e Ribeiras do Lérez*, Pontevedra, 1982, 287–291). In 1708 they are still working on the interior vaults (see Sa Bravo, H. De, *El monasterio de Poyo*, León, 1985, 39).


50. The rest of the lines corresponds to the other parts of the façade.


61. Today the chapel houses the Cathedral’s Museum.


65. They were built between 1707 and 1711 (see Ávila y la Cueva, F., Historia Civil y Eclesiástica de la Ciudad de Tuy y su Obispado, t. IV, Os Bispos de Tui, Santiago, 1995, 308 (facsimile of the 1854 manuscript); Iglesias Almeida, E., Arte y Artistas en la antigua Diócesis de Tui, Tui, 1989, 103).

66. Freire Tellado (La construcción renacentista, art. cit.) looked up the sources of the drawing from Monforte in Libro de Traças de Cortes de Piedra by Vandelvira. See his explanations in «Capilla quadrada por arista» (fol. 80r.) and «Capilla por arista prolongada» (fol. 81r.). About the first type of vault see also Palacios, J. C., op. cit., 185–187.


69. In the times of Sa Bravo (El monacato en Galicia, vol. II, La Coruña, 1972, 94) it did not have the present balustrade and lacked some of the steps.


72. The chapter did not foster painting within the cathedral’s workshop.


74. A.C.S., Varia, leg. 713, doc. 9.

75. A.C.S., Varia, leg. 713, doc. 17.

76. A.C.S., Varia, leg. 713, doc. 83.


78. The same sculptor did the angels holding lamps and banners (ibidem, vol. I, 361 and 368).

79. A.C.S., Varia, leg. 713, doc. 19. We have documentation of the payment of the Virtues two years later (A.C.S., Libro 2° de Fábrica, leg. 534, fol. 223v.).

80. Unfortunately, the relocation of the floor ashlers in the two first cloisters has rearranged most of the existing drawings.

81. My work «Las monteas de la Catedral de Santiago de Compostela: de la arquitectura a la escultura» (Actas del XIV Congreso Nacional del CEHA, Málaga del 11 al 21 de septiembre del 2002, to be published in 2003) is devoted to that drawing on stone and the rest of the cathedral’s drawings.


83. See Pinto, F., and Jiménez, A., art. cit., 80–81.


85. See Goy Díz, A., op. cit., 186.

86. See Fernández Gasalla, L., art. cit., 343.

87. See Folgar de la Calle, Mª. del C., art. cit., 541.

88. See Lorenzana Lamelo, Mª. L., op. cit., 56 and 58.


90. Signature 24.732.

91. Signature 24.818.

92. Signature 23.578.

93. This information comes from Miguel Ángel Cajigal.

94. The authors Ruiz de la Rosa and Rodríguez Estévez (art. cit., 965–966) arrived to similar conclusions in their above cited article about the drawings on stone of the cathedral of Seville.