A SPANISH VELVET WEAVE

by

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THE search for clues to establish the provenance of a work of ar is as fascinating as any detective story, and this paper is a preliminary report on a search that is still continuing. It started some years ago when The Royal Ontario Museum, Toronto, acquired a large embroidered velvet panel made from material for a Ming Dragon Robe of the early seventeenth century. There was no question regarding its provenance (it is one of the earliest Chinese velvets known), but the weave of the ground was unusual, being unlike any Far Eastern material yet examined.[1] An examination of European material showed that the same ground also occurred occasionally there in material dating from the end of the fifteenth century on. The next step was to endeavour to establish whether these pieces had been woven in Italy or Spain, the two major velvet-weaving countries, as this knowledge could have a bearing on the introduction of the craft into China. The construction of the weave which gave rise to the search is derived from 3/1 twill and is shown in Figure 1; a variation which is much less common is shown in Figure 2.

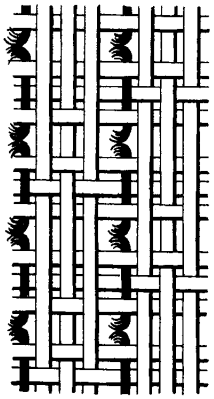

FIGURE 1

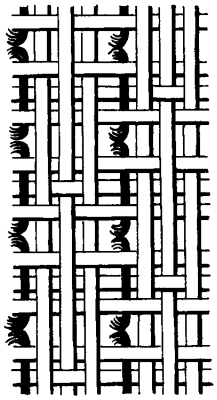

FIGURE 2

Velvet weaves derived from 3/1 twill.

Velvet is one of the high achievements of the weaver's art, requiring specialized equipment and highly skilled artisans. In principal, a secondary warp is used to produce a pile above a ground fabric. This warp is first raised so that a small rod may be inserted, and then lowered to hold the rod in place. The pile warp may then be left to float on the back of the fabric until another rod is inserted producing a loose-pile velvet, or may, as in the weaves considered here, be interwoven with the ground to produce a fast-pile velvet. Once the rod is securely held in position, it may be either pulled out, or cut out: the first method producing an uncut pile, the second a cut pile. To weave simple velvets, a loom must be fitted with an extra beam to hold the pile warp, and an extra harness to control it. In weaving figured velvets, a figure harness is employed to control the pile ends as required by the pattern, and, as the take-up of these ends is uneven, the extra beam must be replaced by a bobbin-rack with each spool separately tensioned, and each carrying the end or ends for one warp *découpure* of the pattern. In the study of ancient figured fabrics, one technical point of the utmost importance is generally overlooked. This is the number of pulley cords in the drawloom required to produce the transversal repeat of the pattern. We know from Italian records that the classic number of pulley cords used there for velvet was 800 and its divisions, although 900 were occasionally employed.[2] We have no similar knowledge of the capacity of Spanish drawlooms and one of the aims of the present investigation is to determine if there was a difference between them and those used in Italy.

This is a technical digression and it is time to return to our search. The construction was found in a few figured velvets which, on stylistic grounds, might well be assigned to either Spain or Italy, but it was also found as the ground for a number of sixteenth century embroideries, mainly ecclesiastical, which are always accepted as Spanish. On the basis of these findings it seemed worthwhile to concentrate on material of definite Spanish provenance, while still examining Italian material to see if the weave was found there. At this point it must be pointed out that it has yet to be found on any specifically Italian material before the eighteenth, or possibly the end of the seventeenth, century.

Furniture of undoubtedly Spanish origin seemed a natural place to look and the weave (Figure 1) was found in the crimson velvet covering two chests bound and decorated with wrought iron. The locks and other details of both of them show the scallop shells of St. James the Great, whose shrine at Santiago de Compostella was one of the great places of pilgrimage. One of these chests, illustrated in Plate 1, is in The Royal

Pl. 1—(Above) Velvet-covered chest on stand, with wrought iron decoration. Early sixteenth century. Royal Ontario Museum, Toronto. (Below) Panel of embroidered crimson velvet. Sixteenth century. Courtesy of the Metropolitan Museum of Art, New York. (Rogers Fund, 1906).

Ontario Museum, Toronto, and the other, which is very similar, is in the collections of The Hispanic Society of America, New York.[3] Both are undoubtedly of Spanish manufacture and date from the end of the fifteenth or the early sixteenth century.

Equally Spanish is the special type of sixteenth-century writing desk known as the *vargueño*, the name of which comes from Barga, a small town near Toledo, where they are supposed first to have been made. The fronts of these desks are hinged at the bottom and open down to reveal banks of drawers decorated with fine inlay. The outer faces of the front and of the sides are decorated with wrought iron lozenges mounted over crimson velvet and in practically all examples the construction is that shown in Figure 1. The Hispanic Society of America has a fine collection of these writing desks on display in their galleries.[4]

Although the presence of this weave on these two types of furniture strongly supported the view that it was Spanish, further proof was required and it was necessary to look again in more detail at the sixteenth-century embroideries, mentioned above, which are ascribed to Spain. To date a large number of these, somewhat over two hundred, have been examined and with a few exceptions the ground weave of the velvet is that shown in Figure 1. The exceptions are of slight consequence as they are basically the same weave showing only a variation in the position of the velvet rods, as shown in Figure 2. All the embroideries have certain characteristics in common. The motifs are in coloured silks, often satin, backed with coarse paper and are appliquéed on coarse linen. These are sewn to the velvet ground with outlines and details worked in couched silk cordonnet and gold or silver *filés* with occasional touches of satin stitch. Typical examples of this work can be seen in the orphrey of the chasuble in Plate 2, the panel in Plate 1, and the apparels of the dalmatics in Plates 4 and 5. Most of the designs of these embroideries with their stylized leaf scrolls and formal vases are drawn from the standard decorative repertoire of the period.

The crimson velvet chasuble (Plate 2) with blue orphreys may possibly have been for use at Passiontide. Although probably made towards the end of the seventeenth century, all the material used is considerably older. The weave of the material in the vestment is the one shown in Figure 1, while the weave of the blue velvet of the orphrey is that shown in Figure 2. The *I.H.S.* monogram and the *Agnus Dei* are both worked in couched gold *filé* and the other motives are in appliquéed coloured satins outlined with the same metal thread. The crimson velvet panel (Plate 1) is of even

Pl. 2—Crimson velvet chasuble with embroidered blue velvet orphreys. Seventeenth century. The materials are sixteenth century. Royal Ontario Museum, Toronto.

greater interest, as it is one of the few pieces found with heraldic motifs. The weave of the velvet itself is again that shown in Figure 1, but, as the technique of the embroidery is typical of the whole group, it would be wise to describe it in detail. The designs are appliquéed, and beneath an arcade in yellow satin outlined in couched green and white cordonnet are formal vases alternating with a coat-of-arms. The vases are also in yellow satin but outlined in white and blue cordonnet. The tulips in the vases are in white linen, an effective but unusual departure, with leaves in green satin. Above the arcade is a border of yellow and blue satin. These motifs, like the others, are outlined in couched cordonnet. One of the most interesting features of this panel is the Spanish coat-of-arms, probably those of an ecclesiastic. The arms are carried on an *ovolado cuartulado*, a typically Spanish field, within a gold bordure. In the first quarter are the arms of Castille: gules, a castle with three towers, or; and in the third those of Leon: argent, a lion rampant azur, langued gules. The charge of the second quarter is vert, a fleur-de-lys between four stars, or; of the fourth, or, a tree proper. Unfortunately it has not been possible to identify either of these charges, but that in the second quarter bears a resemblance to heraldic devices on grave furnishings found in the royal tombs at Burgos de las Huelgas.[5] The charge of the fourth quarter has been ascribed to the Sobrarbe family of Aragon, but it has not been possible to verify this attribution. All the devices on the arms are embroidered in the usual manner with appliquéed satin of the appropriate color outlined with couched gold *filé*. Certain details, such as the castle, the fleur-de-lys and the trunk of the tree are worked entirely in gold *filé* in brick-work couching, while the leaves and branches of the tree are in french knots in blue and green silks. Only one other example with heraldic decoration has been found and it too shows Spanish arms. They are found on the orphrey of a cope in The Cleveland Museum of Art and, although the details of the charges cannot be determined with certainty, the castle of Castille, the lion of Leon, and the baskets of the de Guzman family can still be distinguished.[6]

Another embroidery of undoubted Spanish workmanship but in a different style is the orphrey, morse, and hood of the vestment known as "The Cope of the Catholic Kings," now in the Musée Historique des Tissus, Lyon. According to tradition, this was presented to the first Archbishop of Granada by Isabella the Catholic shortly after 1492, when the city was finally captured from the Moors. The morse shows the Virgin and Child; the hood, the Ascension; and the orphrey, God the Father with three

Pl. 3—(Above) Stamped crimson velvet. Late sixteenth century. Cooper Union Museum for the Arts of Decoration, New York. Reproduced by permission. (Below) Chartreuse green cut voided velvet. Late fifteenth century. Musée Historique des Tissus, Lyon. Reproduced by permission.

Apostles on each side. The embroidery is extremely heavy and is worked in very high relief over a padded foundation. Small flat metal rings are sewn to the padded forms in coloured silks, the closeness of the stitches and the colors used providing the necessary shading. Faces, hands and some other details are worked in fine split stitch. At some point these figures have been remounted on new crimson velvet, but enough of the original remains to establish that it too was the weave shown in figure 1.[7]

Mention has already been made that somewhat over two hundred of these ecclesiastical embroideries in various collections have been examined. These include orphreys and apparels still forming parts of vestments of Spanish style, as well as many others which are now detached. These separate pieces include a number of apparels from amices and from dalmatics. A number of the complete vestments are of plain crimson velvet similar to the chasuble shown in Plate 2, and in every case the weave of the velvet has been that shown in Figure 1 or, more rarely, that shown in Figure 2.

Four other examples of embroidery require mention in which the same constructions are found. These are not, strictly speaking, ecclesiastical, but are confraternity banners carried in processions. These are of crimson velvet: two in The Hispanic Society of America date from the end of the sixteenth century (one is dated 1599)[8] and the other, probably from the seventeenth century, is in The Royal Ontario Museum. All are lavishly embroidered and bear inscriptions in Spanish or in Latin. Regardless of which language they are in, these inscriptions prove their Spanish origin. This is also true of the fourth banner which is dated 1596 and is a recent acquisition of The Metropolitan Museum of Art. It is unlike the others in that the ground is damask, but is decorated with the arms of the Mercedarian order on crimson velvet of the weave shown in Figure 1.

Before moving on to the related material which comprises patterned and figured velvets, it would be wise to summarize the findings to date. In the mass of material examined, no velvet of this construction has been found on material of Italian origin, but it occurs frequently, almost constantly, in Spanish work of the late fifteenth and the sixteenth centuries. Some of this work, such as the furniture, is of undoubted Spanish origin, and a provenance other than Spanish is unlikely for the ecclesiastical embroideries mentioned above, or for the confraternity banners. Granted it is possible that all this velvet was imported from Italy, but this is highly improbable. Without question, Spain was a major velvet-producing country

Pl. 4—Green *ferronerie* velvet dalmatic with embroidered green velvet apparels. First half sixteenth century. Courtesy of the Metropolitan Museum of Art, New York. (Gift of Mrs. Valentine A. Blaque, 1933, in memory of Valentine A. Blaque).

and there would have been no need for such commerce. It seems safe to assume that velvets of this construction that can be dated earlier than 1600 are definitely of Spanish origin. After this date the question is less simple, as we know that in the early seventeenth century the weave was being used in China, and some of this material probably reached Europe. This does not present a major problem as a close examination reveals a difference between Chinese and European warp threads both in character and in twist. The difference in character can be distinguished by the trained eye: the difference in twist is an easier matter, as Far Eastern organzine of the period has a Z-twist and European an S-twist. In examining threads for this distinction, it must be borne in mind that a Z-twist poil was occasionally used in Europe. In addition to this distinction, the yarns in the ground fabric are often undyed in Spanish examples, while in the Chinese the yarns are invariably dyed, often the same color as the pile.

The patterned and figured velvets are of much greater interest than the examples described above, as it is here that the greatest uncertainty exists regarding attribution. Lacking a better term, "patterned" is used here to cover the large mass of stamped velvets of the late sixteenth century, which are represented in almost every textile collection. The patterns are all on a small scale and the crimson velvet in Plate 3 from The Cooper Union Museum, New York, is typical of the whole group. This example is particularly interesting as one of the motifs is the crowned double-headed eagle of Hapsburg, the royal house to which Philip II of Spain belonged. The patterns employed for these velvets vary in quality but are related stylistically to one another. It seems likely they were produced in the same country. Over two hundred have been examined and all, whether green, red, crimson, or maroon, show the weave (Figure 1) which appears to be Spanish. It seems safe for this reason to assign them to that country.

The figured velvets are more interesting and more controversial, and it is in this field that research is still being carried on. As the evidence is not yet complete, it is not yet possible to cover the field in detail, but only to point out the possible scope of the ultimate results. Three examples with technical similarities are shown here. One is a cut voided length of chartreuse green in the Musée Historique des Tissus, Lyon (Plate 3); the other two are dalmatics, one a green *ferronerie* in The Metropolitan Museum of Art, New York (Plate 4), the other a solid cut crimson pile-on-pile in The Royal Ontario Museum, Toronto (Plate 5). It will be noticed that the apparels of both dalmatics are typical of Spanish embroidery of the sixteenth century, and in both cases the ground is green velvet of the usual

Pl. 5—Crimson pile-on-pile velvet dalmatic with embroidered green velvet apparels. First half sixteenth century. Royal Ontario Museum, Toronto.

construction (Figure 1). More important for this investigation, the ground of all three figured velvets is the same weave.

The length of chartreuse green velvet shown in Plate 3 has a pattern that resembles few of the pieces of the late fifteenth century. One other example with a pattern in similar style was acquired by The Museum of Fine Arts, Boston, in 1948, but it has not yet been possible to examine it in detail to determine its construction. The strong double arched compartments formed by heavy branches are unlike Italian design of the period, although the device of a fruited branch with figs and pomegranates might have been used in either country. The segmented circlet surrounding the branches is a device that occurs again in the pile-on-pile dalmatic described below. Besides the ground weave, the most interesting feature of this piece from a technical point of view is that the design is based on four comber units, two reversed, of 210 pulley cords.

A design based on the same number of cords is found in the green *ferronerie* velvet of the dalmatic in Plate 4, and its pattern is of a type that is of more frequent occurrence. Although it shows the flattened lobed medallion often considered typical of Spanish design, this characteristic has not been found in all the examples of *ferronerie* velvets studied, where the design is based on 210 pulley cords. The more common feature in all examples is the fine, almost incised, lines of the figures as opposed to the bolder patterns of unquestionably Italian velvets with their broad voided outlines.

The crimson pile-on-pile dalmatic in Plate 5 shows compartments formed by bracteated branches, a feature of many designs of the period, surrounded where they meet by a segmented circlet. It has as well the fruited branches bearing figs and pomegranates, though the central compartments show sprays of what are probably chestnuts. It is a pattern that was apparently very popular during the sixteenth century. It exists in a number of variations of differing quality and is also found on stamped wool velvets. A number of these latter pieces show the arms of Castille stamped near the base of the central spray. The pattern has been ascribed by various writers both to Italy and to Spain on stylistic grounds, and versions do exist which are probably Italian. This is not surprising, as a successful and popular pattern in one country might easily be copied and adapted to use in the other. Like the other figured velvets shown, the ground of this is the weave derived from 3/1 twill, but the more interesting technical point is that the figure is based on two comber units, one reversed, of 420 pulley cords.

It must be borne in mind that the construction of the figure harness of a drawloom is a highly complex undertaking and once built is not likely to be changed. It is only on the rarest occasions that a monture might be rebuilt to fulfill the requirements of an important special order. The other important point in this connection is that all designs must be based on the capacity of the loom. Weavers and designers would be trained to work to an established number of pulley cords and once established it is likely that the number would remain static over a long period. Simple arithmetic will show that all three of the figured velvets shown here were woven on a drawloom in which the number of pulley cords employed were divisions of 840. It has already been mentioned that we know from Italian records that the looms in that country employed 800 and occasionally 900 cords and their divisions. There is no mention in any of these reports of 840 cords and its divisions being used there. It is on the basis of this, combined with the fact that the velvets woven on a loom with this capacity employ a ground weave of Spanish origin, that the claim is put forward that the drawloom used in Spain for velvet weaving had a capacity of 840 pulley cords.

Textile research based on such technical points is still in its infancy, and the present research is one of the first attempts based on such information to establish the provenance of material. The research, of which the first steps are presented here, has been intensified, and a thorough study is presently being made of material in a number of major collections. It is hoped that at some future date it will be possible to present a body of evidence, both technical and stylistic, which will substantiate the claim put forward here.

NOTES

[1]Mrs. K. B. Brett, "A Ming Dragon Robe," *Bulletin of the Division of Art and Archaeology*, Royal Ontario Museum, Toronto, No. 27 (June, 1958). Harold B. Burnham, "Un velours impérial chinois d'époque Ming—Dossier de Recensement," *Bulletin de Liaison du Centre International d'Étude des Textils Anciens*, No. 9 (January, 1959), pp. 53-60. Harold B. Burnham, *Chinese Velvets* (Toronto: 1959), pp. 31-34.

[2]Tito Broggi, *Storia del Setificio Comasco, II, La Tecnica* (Como: 1958) p. 109.

[3]Hispanic Society of America, *Handbook* (New York: 1938), pp. 243-5.

[4]Ibid., Frontispiece and pp. 252-254.

[5]Manuel Gómez-Moreno, *El Panteon Real de las Huelgas de Burgos* (Madrid: 1946), Plates CXIX, CXLII, CXLIII.

[6]Cleveland Museum of Art, *Bulletin* (June, 1949).

[7]The chasuble and two dalmatics from the same suit of vestments, which are still in the Treasury of Granada Cathedral, are illustrated in Florence Lewis May, *Silk Textiles of Spain* (New York: 1957), p. 245. The orphreys and apparels are of the same style as the orphrey described here.

[8]Hispanic Society, op. cit., p. 289.

TECHNICAL RESUMÉ

A short analytical description of the pieces illustrated has been saved for the end. A number of them still have at least one selvage preserved and, in every case where this is true, the weave of the selvage is the same as the ground weave of the velvet. This is also the case for the selvages still intact on many of the other pieces examined, and all have been composed of S-twist organzine used either double or triple. The most frequent number of ends is 66, but 60 and 72 have occasionally been found. For the ground weave that is common to all pieces, the main warp was entered in a harness of six shafts with the first and third, and the fourth and sixth shafts working together. The pile warp was controlled by a special harness of two shafts and, when required, by a figure harness.

The details of the length in the Musée Historique des Tissus, Lyon, are from the *dossier de recensement* prepared by Monsieur Félix Guicherd, Secrétaire Général Techniques of the Centre International d'Étude des Textiles Anciens, and I am most grateful to him for permission to use this information. The details of the other pieces are based on my own examinations.

Plate 1, above. Velvet on chest with wrought iron decoration.
Warp; Main—organzine, S, degummed, white.
Pile—organzine, S, degummed, crimson.
Proportion—3 main ends: 1 pile end.
Weft; tram, slight Z, degummed, white.

Plate 1, below. Velvet of embroidered panel.
Warp; Main—organzine, S, degummed, white.
Pile—organzine, S, degummed, crimson.
Proportion—3 main ends: 1 pile end.
Weft; tram, slight Z, degummed, white.
Selvage; 66 ends, organzine, S, degummed, green, used triple. One yellow thread replaces a green one in the nineteenth end, and a heavy white thread, perhaps originally a *filé*, works together with the thirtieth end.

Plate 2. a) Velvet of chasuble.
Warp; Main—organzine, S, degummed, white.
Pile—organzine, S, degummed, crimson, used double.
Proportion—3 main ends: 1 pile end.
Weft; tram of 3 ends, slight Z, degummed, white.
Selvage; 66 ends, organzine, S, degummed, green, used double.
b) Velvet of orphrey.
Warp; Main—organzine of 2 ends, S, degummed, blue.
Pile—organzine of 2 ends, S, degummed, deep blue.
Proportion—3 main ends: 1 pile end.
Weft; tram, Z, blue.

Plate 3, above. Stamped velvet.

Warp; Main—organzine, S, degummed, white.
Pile—organzine, S, degummed, crimson.
Proportion—3 main ends: 1 pile end.
Weft; tram, slight Z, degummed, white.
Selvage; 66 ends, organzine, S, degummed, green, used triple.

Plate 3, below. Figured green velvet.

Warp; Main—organzine, S, degummed, reseda.
Pile—organzine, S, degummed, green, *jaspé*.
Proportion—3 main ends: 1 pile end.
Découpure—2 pile ends.
Weft; tram of 3 ends, Z, degummed, chartreuse green.
Découpure—1 rod.
Selvage; 66 ends, organzine, S, used double, old rose and white. The order is 18 ends old rose, 16 ends white, 42 ends old rose.
Figure; 4 comber units, 2 reversed, of 210 cords.

Plate 4. a) *Ferronerie* dalmatic.

Warp; Main—organzine, S, degummed, green.
Pile—organzine, S, degummed, green.
Proportion—3 main ends: 1 pile end.
Découpure—2 pile ends.
Weft; tram, slight Z, degummed, green.
Découpure—1 rod.
Selvage; 66 ends, organzine, S, degummed, crimson. A heavy yellow thread, perhaps originally a *filé*, works together with the 19th end.
Figure; 4 comber units, 2 reversed, of 210 cords.

b) Velvet of apparels.

Warp; Main—organzine, S, degummed, green.
Pile—organzine, S, degummed, green.
Proportion—3 main ends: 1 pile end.
Weft; tram, slight Z, green.

Plate 5. a) Pile-on-pile dalmatic.

Warp; Main—organzine of 2 each, S, degummed, white.
Pile—organzine, S, degummed, crimson, used triple.
Proportion—3 main ends: 1 pile end.
Découpure—2 pile ends.
Weft; tram, slight Z, degummed, white.
Découpure—1 rod.
Selvage; 60 ends, organzine, S, degummed, green, used triple.
Figure; 2 comber units, 1 reversed, of 420 cords.

b) Velvet of apparels.

The details are identical with those of the apparels in the *ferronerie* dalmatic, except in the narrow bands running up over the shoulders. In these, the ground warp and weft are black rather than green.