



Part 8a of the Royal Portal Series

March 2021

Chartres Royal Portal - the upper sculpture-1

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The errors in the upper parts of the Portal are manifold, and have kept us arguing the cause for centuries, especially in the south where the lintels have been narrowed, the archivolt cut short [a] and the capitals on one side are not level with the other; these being just a few of the anomalies.

The history looks complicated, and it is. It has not been solved as long as scholars have been looking for simple answers. The turgid history precludes simplicity. To understand the story, we have to attend to five building campaigns, three large teams of *imagiers* plus a couple of smaller groups, and accept that without documentation changes were inevitable under such a variety of decision-makers.

Altogether there were four major infractions.

In campaign-11^[F] most of the carvings up to the lintels, including the plinths, had been completed by a large group of *imagiers*, and left in the shed. The first item is that in campaign-12 the north plinth was placed 5±cm to the east. From this error came the decision by Master-13^[H] to add a second row of lintels over the lateral doors. This one mistake spawned a cavalcade of changes that

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created a portal like none had seen before. On the other hand, from this small offset came innovations that may not have occurred without it.

The second item was the enlargement of the south tower by Master-12^[G] so it encroached into the space allowed for the portal by 43±cm [Parts 2 and 6]. As a result, the master reduced the width of the centre door by 23±cm and the south by 20±cm. The latter was adjusted in the next campaign so the door width was reduced by only 9±cm [Part 6].

The third item was that Master-13^[M] increased the height of the north door by 8±cm. From this discrepancy came the decision to truncate almost half the colonnettes [Part 4a]. The fact that this relatively small change had enormous consequences highlights the importance the masters placed on accuracy.

The fourth item was the decision in campaign-14^[I] to reduce the height of the lateral tympani by 23±cm. From this came the decision to carve new tympani and to reduce the height of the two lower rows of archivolt. ¹

Two major changes in the second lintel and smaller tympani, and two relatively minor adjustments in door widths and heights were enough to leave thirteen very visible anomalies, ² and a few others less visible.

As most items have been discussed in other parts of this series, we are left with only three items for this discussion,

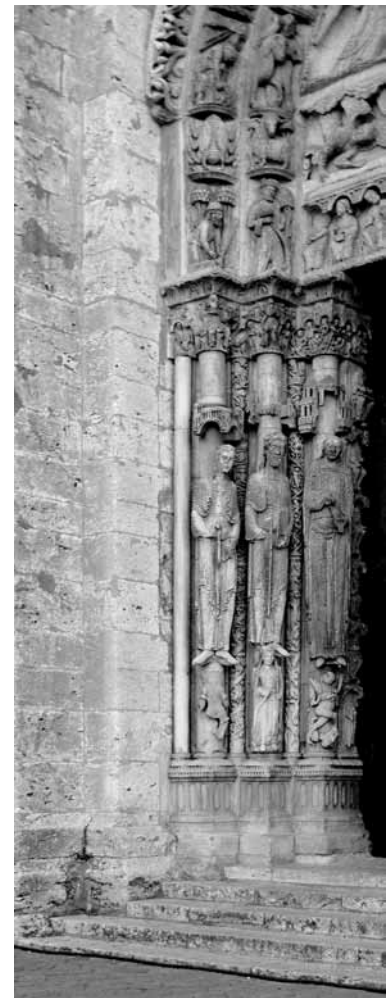
- The decision to add a second row of lintels over the lateral doors,
- the decision to reduce the height of the lateral tympani and
- the decision to reduce the two lower rows of archivolt.

To which I would add an investigation into the remote possibility that the portal may have been designed for round-arched tympani.

Second north lintel: The Angels

The north plinth was set against the wall of the north tower [r], but offset to the east 50mm from the plane of the portal compared to the other plinths [b].

The misplacement meant that the archivolt and tympanum in the upper parts of the portal would not be in line with the central and southern doors. There would be a bend in the façade. I would not be surprised if they had not discovered the error for a while, considering the amount of scaffolding, though once the upper jambs and the capitals were being placed any string line would



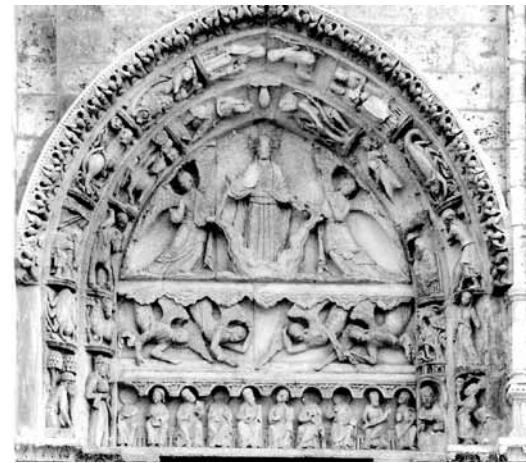
North embrasure set against the side of the earlier tower.

To the left of the northern plinth a 50mm strip of *calcaire* has been inserted into the *berchere* wall of the tower. Whoever cut the recess took no account of the projection in the base when the plinth was set into the recess, and this pushed the entire plinth to the east.

have made it obvious. It was too late to change anything as the jambs and probably the capitals to this jamb were in place. As the bend affected only the upper part of the portal, in my opinion they could have lived with this error and adjusted the wall face at the junction between the north and central portals.

However, the master decided to correct the alignment by carving a second lintel that would be twisted to bring the upper part back to square [b]. The twist would be disguised within the height of the lintel. The lower frame follows the line of the misaligned lower lintel, and the upper is set correctly parallel to the wall above. Thus, on the left the tips of the angels' wings and their hands hang over the lower frame as it was moved back, while the bodies and the other elements at the top sit comfortably within the upper frame. The workmanship is subtle and involved considerable skill.

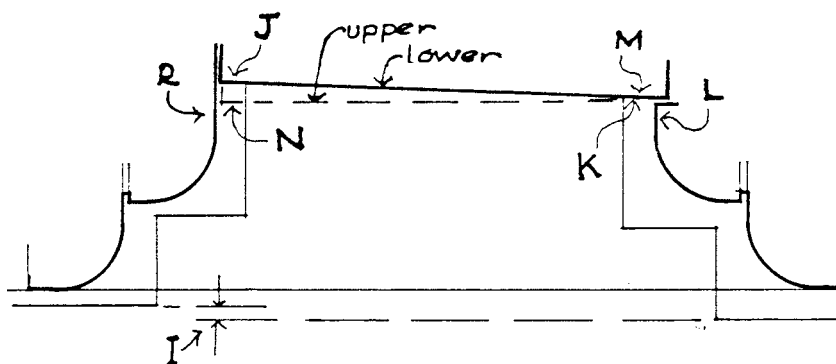
The adjustments were summarised in these two drawings [b1]. The capitals and impostes were offset the same 5cm as the plinths I. The upper edge of the lintel lies parallel to the tympanum M and N, while the lower edge is twisted parallel to the lower lintel J and K. This is drawn in the two sections [b2].



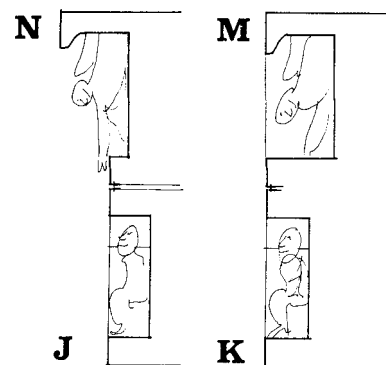
The north portal above the capitals



Two lintels over the north door.



Plan showing how the second lintel "straightened" to eliminate the 5cm offset.

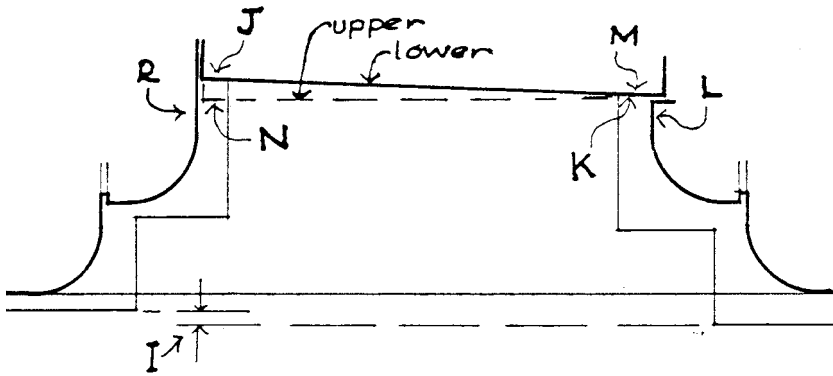


Section at left and right ends of lintel

On the left a gap was formed where the lower half of the new lintel shifted inwards from the true face of the portal, N-J [b]. To fill that gap, the back of the three lower archivolt was extended into that space [arrow r], marked R-J. This shows that the archivolt were carved with or after the upper lintel, but not before.

Similarly on the other side [b2], the stone with February has been extended into the top of the lintel M, and the end of the lintel cut back to receive it. This integrated relationship shows the two stones were carved at the same time.

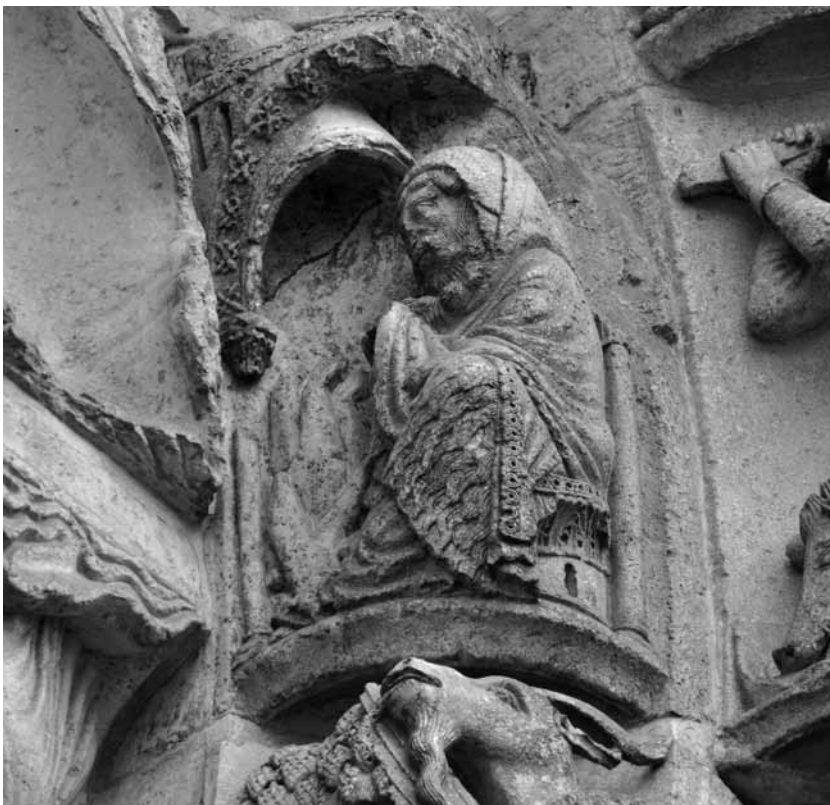
The height of the new lintel was determined from the combined height of the two in the south, where the lower Nativity lintel measures 83cm in height, and the upper Presentation lintel measures 76cm.³ When placed on the shed floor (for the builders were not nearly ready to erect them at this time) the two southern lintels measured 1,59cm. From the Tallon survey the two northern lintels measure the same.⁴ This was a unique solution as there are no double lintels in any other portal at this time.



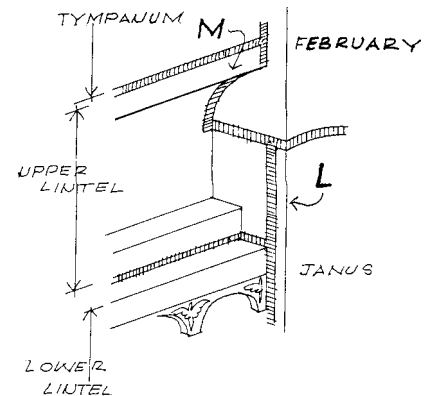
Plan of upper lintel and connections with archivolts. The junction L refers to the lower archivolt.



Lower archivolts left side of lintels



Third archivolt right side of upper lintel, February



The relationship between February and the right side of the upper lintel



Two lintels in the south, with the joints of the figures that were added to the upper lintel

Upper south lintel: The Presentation

The upper lintel in the south is made of three stones [arrows a]. The joint is not easy to see as the junctions are finely-carved. The head on the right was lost after the figure was chopped in half at a later date [b2].⁵

The two extra figures were carved in a different manner to those in the middle section. Whereas the middle is somewhat archaic in manner, the posture and proportion of the limbs of the flanking figures are natural. The clothing in the middle panel tends to be a single sheath or stole with less subtle and refined embroidery than the side panels, where in the panels the clothing falls in multiple layers so almost nothing of the arms or legs show.

In the middle stone all the figures play a part in the narrative, while maintaining a spatial separateness with considerable openness between them. On the other hand, the flanking figures are more like sentinel book-ends to the central scene, under wider canopies and elongated arches. The carving style of the centre is closer to that of the lower lintel, so much so that I suspect they were carved by the same team, though not necessarily by the same man.

The canopies that run across the top follow the same pattern with balls in the arch and fronds in the spandrels, though there are enough subtle differences in the handling of the outlines and tips of the foliage, and in the space left between the leaves, to confirm another hand [b].

Upper south lintel, left canopies. The joint is clearly visible from this angle



The faces in the central panel are beautifully rendered, and the eyes drilled [b2], the bodies are thinner and lean sideways to suggest movement whereas the two on the flanks have their feet solidly planted on the ground. The head of the female figure on the left is exquisitely modelled [b1]. It is larger in proportion to the body than the heads on the middle stone. The eyes are undrilled, with a notable space between the eyelid and line of the eyebrow. The features are quite soft and plump, the lips carefully modelled.



South door, second lintel, left addition



South door, second lintel right end central stone

The head is very like those on the two archivolt to the right, Music and Grammar [b2,3] and may all have been carved by the same team, if not the same sculptor. Though there are a few subtle differences, the archivolt figure of Dialectic on the left also seems part of this group [b3], just examine the way the hair falls over the ears. The philosophers at the bottom are on the same blocks of stone and were therefore carved by the same team.

I conclude that the extensions to the upper lintel and the adjacent archivolt were carved under the direction of one *imagier*, though the participation of assistants may be visible in the seats, the detailing of the foliage and so on. Nevertheless, the way the figures fill the available space, the handsome



Music, south, first right, second row.



Grammar, south, second right, second row.



Dialectic, south, first left, second row



Details in archivolts: dragons, lovers and a conversation



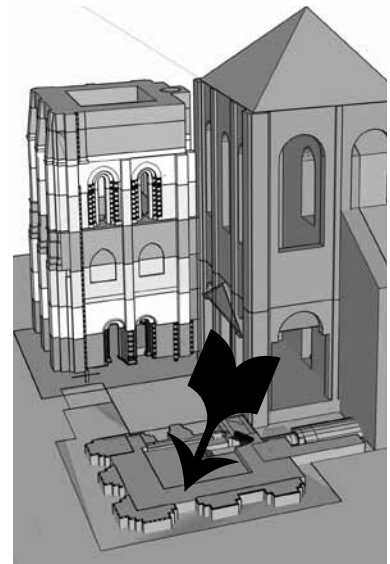
Details in archivolts: 4 musical instruments

clothing and features, and the exquisite detailing of ancillary objects such as the dragon, the musical instruments and the scholars, show a common touch. All are carved from the same extremely fine-grained *calcaire* that has survived the weather with almost no abrasion.

The obvious explanation is that the short middle lintel was meant for somewhere else, and the side pieces were added to make up the difference when it was decided to double the lintels. It is almost the right length to have been placed over the blocked-up entry into the tower from the south, as in our model [r].



South facade of south tower, "door" on the left



Model in campaign-11, arrow to blocked door

The original widths of the south lintels

To establish the width of the lintels before they were cut back, we can add estimates for the figures that have been cut off. In the upper lintel I calculated the width of the figure on the right by using the width of the canopy on the left as a guide [r1]. In the lower lintel repeat on the right the first shepherd as both have an arm raised and may have needed as much space [r2].

Once the lintels were adjusted to what might have been their original widths, I set them hard up against the archivolt on the left in order to show that the upper lintel is not as long as the lower [b]. The length of the lower southern lintel as originally carved, was close to 2,85cm, which is the same as the lintels of the north door. Therefore, this lintel had been carved at the time the width was established in campaign-11^[F] for a wider door than we have today.

The upper lintel with its two additions, is not as long as the lower by 9cm. This is precisely the difference between the north and south doors today. It demonstrates that the additions to the upper lintel were designed for the current door width, and were therefore carved in or after campaign-13^[H].



Possible width south lintels, pushed to the right. Lower and middle upper carved in 11, upper sides carved in 13.

The earlier lateral tympani

It is hard to imagine they would have carved the surrounding archivolt without having a clear idea of the shape of the tympani that were to support them. It is therefore likely that tympani had been carved at the same time as the lower lintels, in campaign-11^[F].⁶ Though it was possible for the outline to have been drawn on the deck and for the carvers to work from a wooden template, it would not have been as secure as having the actual stones against which the encircling arches would be placed. In any case, the logical carving sequence is the lintel, the tympanum on it and then the lower archivolt.

And of course, the question arises, what did they do with the originals? Were they thrown away, or perhaps transported to another church? I doubt if anyone would want to simply toss them into a pit, though goodness knows, we have ample examples of great works being used as filling. If these were the originals, then what had been designed for the middle?

The Nativity in the Chartres lower southern lintel is similar to the north transept at La Charité-sur-Loire, also with the loss of one of the shepherds [r3]. The tympanum over it is round-arched with Christ within a mandorla flanked by seven figures. Similarly, the Presentation in the upper lintel at Chartres is like the south transept at La Charité, also round-arched, with the Transfiguration of Christ [r4]. Can we, by any stretch of the imagination, consider that these were, like their lintels, subjects being considered for Chartres?⁷



Upper lintel with estimate for right figure



Lower lintel with estimate for right figure



La Charité-sur-Loire, north transept portal



La Charité-sur-Loire, south transept, ex nR portal

Were the original tympani intended to be round-arched?

In itself the *Maiestas Domini* design for the central portal would not have necessarily required a pointed arch. Bourges south is round, as is Dijon [r1], Vermenton and Chassenard, and the modified version in Rochester [r2]. The rest have pointed tympani, but some points such as Chartres are so slight as to be hardly noticeable. There is no clear chronology.

One only has to look at the door and window openings in the towers to see that there are more round openings than pointed. Five campaigns employed round arches, whereas only three used pointed.⁸ We are so used to the pointed forms in the Chartres portal that we forget that this was a period of transition. Even in the nave eighty years later the clerestory arches are round. Were we fortunate that Master-14 decided to use pointed arches when the tympani were carved?

It need not have been so.

This, then, is what the original portal may have looked like if it had been initially designed for round arches [b1].⁹ And later, after the addition of the second lintels [b2], this is the template the sculptors could have worked to for the archivolts. The second lintels would have shifted the north and south tympani upwards and created three of almost equal height [b2].¹⁰

Consequence of doubling the lintels

Whether round or pointed, the major consequence of doubling the lintels was to raise the lateral tympani and with them all the archivolts that encase them, an enormous transformation. This produced a non-hierarchical scheme in which Christ in heaven was at the same level as His story on earth. Equal heights was equating the divine and the mundane, a definite misdemeanour at that time.

The equality could not have been recognised when the archivolts were carved because they were carved to suit the height with doubled lintels. It is understandable, as they were working in the shed with pieces of sculpture scattered all around, and it took imagination to realise the implications of what they had created.

When people understood what had happened, they took action. It took a radical situation to override all aesthetic and financial considerations to compel the drastic decision that followed.

We can imagine the discussions and heart-searching that followed, as much among the masons and sculptors on the site as the clergy and their patrons. To dispense with the tympani already carved and to mutilate the archivolts was an expensive and time-wasting decision that would have delayed completion.

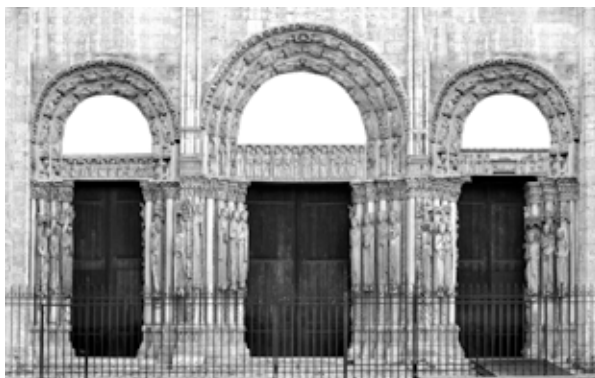
Who would have made such a ruthless choice? The clergy would surely have had the final word, but could the impetus have come from the master masons or the sculptors? One could argue that whereas many things were aesthetic



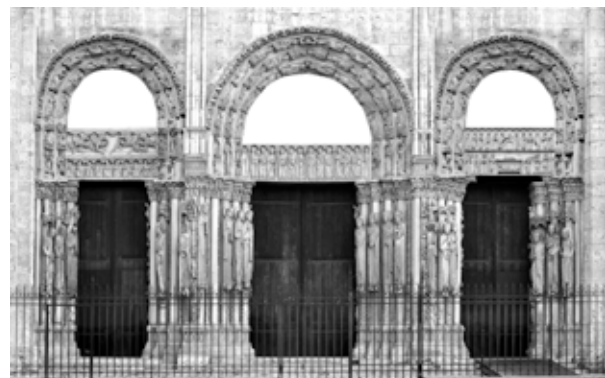
Dijon Saint-Benigne tympanum



Rochester cathedral west tympanum



Possible first proposal, with round-arched tympani, campaign-11



Consequences when the lateral lintels were doubled in campaign-13

choices and most probably determined by the masters, the decision to lower the heights would have been a theological issue, and therefore a matter for the clergy. Whoever it was, it was commanded that the lateral tympani be replaced with shorter ones with a pointed silhouette, and the archivolts be adjusted to make the new scheme fit.

The replaced lateral tympani

The current north and south tympani are not cut down versions of the earlier ones because the lower borders have not been modified in any way. Elsewhere, the continuous frame of clouds and decoration may be broken in a couple of places, the most noticeable being over the panel with the Virgin in the south, but careful examination shows this was more from handling or settlement than adjustment. Consequently, they were not re-carved from older stones but were made anew. The fact that the archivolts were cut down shows that the tympani were carved with or after them.

To lower the tympanum the centres for the curved frame lie not on the base, but are sunken $23\pm\text{cm}$ below the base [r]. This condition is unique in the early gothic portals of France. Normally the curves are struck from centres that lie on the base of the tympanum, as can be seen in the central door. To adjust to the shorter size, the upper curved archivolts had to be pushed down into the space of the lower two.⁹ Therefore, most if not all the archivolts would have been carved before the changes to the tympani, and only the keystones may have been left for the placement crews in campaigns-15 or 16.

The archivolts were not reduced during erection, for the chiselling is too neat. As the masons did not have tape measures the amount to be cut would have been determined from templates or by moving the blocks themselves around on the floor of the shed, piece by piece as they were making the adjustments, until each of the cuts were organised to perfection.

Timing

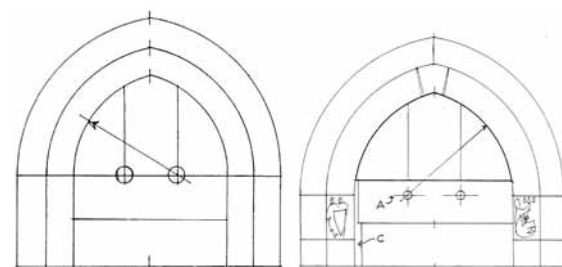
The sculptors would have placed their finished pieces on shelves or the floor of the shed, hopefully set out in the way they were to be installed, and sometime long after the *imagiers* had left, the builders collected these pieces and put them up. The gap is understandable, as the sculptors preparing elements for later erection were able to be on site when it suited them, whereas builders were constrained by the timing of their tasks in relation to the building as a whole.

Among further complications, the *imagiers* were not necessarily on site at the same time as any of the builders and could, individually or collectively, have had various degrees of independence from them. The north tower was begun many years before the south and the sculpture begun long before the space was ready for it. This turned what could have been a two-year program into five or more. It increased the number of men with authority and thereby multiplied the possibilities for errors and changes with many opportunities for mistakes and for minds to be changed.

As progress was linked to the campaigns in the towers, we can estimate the dates for the carving of the portal sculpture to years 1137-41. Anyone writing of the portal being the work of the 1150s has to relegate the whole of the south tower to that decade, whereas the portal, as with the other *Maiestas Domini* portals, was carved in its entirety well before the Second Crusade.

Here is the timing:

All the plinths and all the capitals were carved by the *imagier* team during campaign-11^[F] or before. They were not necessarily part of the building team,



Setout for a traditional tympanum
Setout for the "sunken" tympanum at Chartres

nor need they have been on site at the same time. The sculpture was not placed when carved, but was stored in the shed.

The plinths from this campaign were erected piecemeal [r], starting in the north and gradually in tandem with the foundations and the south tower as it gained height out of the ground [Part 5]. The north plinths were placed in campaign-11, the central left in 11 and/or 12, the central right in 12 and/or 13, while the south was not laid until the tower rose above the threshold in 13. Above the plinths the embrasures were builder's work and were carved over three campaigns, 12, 13 and 14 [Part 3].

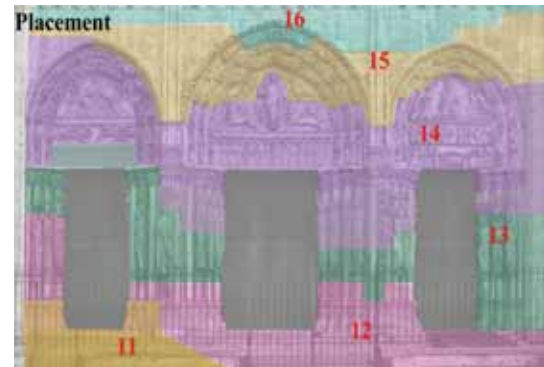
As the embrasures were placed the pre-made capitals were set over them, along with the statues and colonnettes, and the height of the openings was not established until 13 [Part 3]. Above that the program became more complicated.

The lintels were carved in 11 or before, and the upper lintels in 13, along with all the archivolt for the north and the lower ones in the centre and south.

The earlier tympani may have been carved in 11, in which case the centre and south would have been too wide once the lintels were reduced in 12, or they were carved in 13 after the door widths had been determined.

Then it was decided to reduce the height of the north and south portals that required they be carved anew. This was in 14 because the archivolt carved in 13 had to be cut down to suit the new tympani.

After that it was up to the next couple of building teams to erect what still lay in the shed to the best of their ability, and as they did more mistakes were made to be discussed in the next part.



Placement history, most carved before erection

References

1. The consequences on the design of the upper parts of the portal were detailed in Gesta. See <https://creationofgothic.org/COGA/files/articles/Anomalies-in-the-royal-portal.pdf>
2. These major items are
 - threshold and plinth against the north tower misplaced
 - lower north lintel too wide for the width of the doorway
 - upper north lintel twisted
 - small nib that would have reduced the width of the door ignored;
 - capitals against both towers misaligned on erection
 - south capitals not same level as the rest of the portal
 - central lintel too wide for the width of the doorway
 - two southern lintels made to different lengths
 - both these lintels adjusted to suit altered door widths
 - half the colonnettes truncated to fill gaps left under the capitals
 - heights of the north and south archivolt reduced
 - lateral tympani not the same width as the lintels
 - south lintels and tympanum adjusted as capitals out of level.
3. The heights of the lintels are 79, 81 = 160, 121 in the centre, 83, 76 = 159.
4. High definition laser survey by Andrew Tallon, kindly shared with the author, not published.
5. The reduction to the right figure of the lower lintel is so beautifully executed that it was probably done in the workshop before erection, the stone being delivered to the erecting gang already reduced. If the right side of the portal was a little further advanced than the left, even by one course, the erecting gang would have first installed the two right hand archivolt figures, Music and Grammar, and then, assuming that the lintel was the correct size, have butted it against those archivolt. Only when the time came to lay Dialectic and Gemini on the left would the error have been realized. Part of the tympanum may have been placed by then, and the erecting gang may have decided that a gap on one side was better than starting again. The details will be discussed in the next part.
6. Or even earlier as the north lintel is not as tall as the south, at 79cm compared to 83cm.
7. They are unlikely to have been the rejected tympani from Chartres as the widths of those in La Charite are smaller than the lintels of Chartres.
8. Campaigns 6, 7, 11, 14 and 19 were round, 8, 16 and 17 were pointed.
9. The lower archivolt could only have suited a single lintel if the tympanum had had stilts. Since there are no stilted tympani from this period, the lower figures were carved after the doubled lintels. The round central tympanum on today's width would have been 32cm shorter than the pointed.
10. To estimate the original height of the double lintel, the figure next to the Twins on the south does not appear to have been reduced. The height is 84cm. If we add the lost fish in Pisces the original for this stone may have been 54+21cm, or 75cm. Together their combined height is about 1,59cm, which is the height of the double lintel. To locate the height of the tympanum, place the compass centre on the top of the upper lintel and form the curves from that [Part 7]. The overall height for lintel plus tympanum and archivolt would have been very close to the height of the centre.