

## **The Roland statue at the Verona cathedral: an examination of the mail chausse, helmet straps and helmet decoration**

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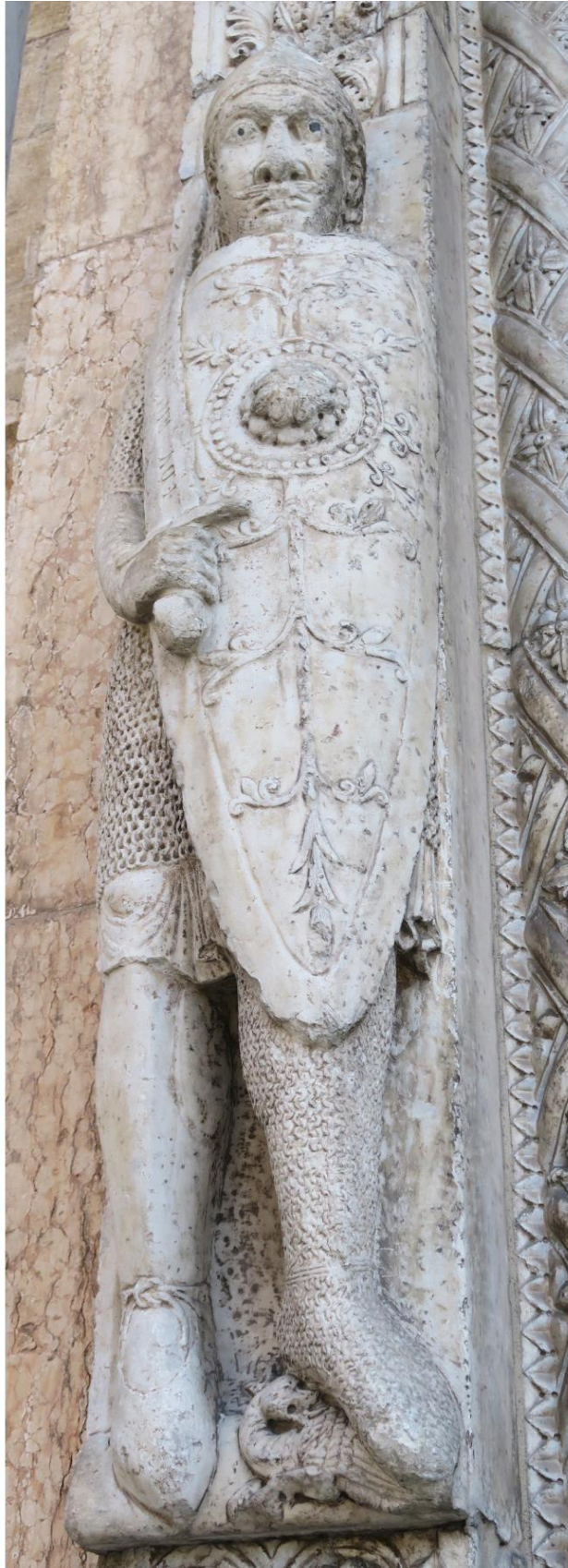
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### **Introduction**

The portal of the Verona Cathedral is one of the works by the master Nicolaus; a recent publication proposed that it was likely created between 1122 and 1158 (Spiro 2014). The portal is adorned with a number of statues, of which the largest and the most prominent are those of Roland and Olivier, the heroes of the eponymous *chanson de geste*. The two statues are executed with remarkable skill and attention to detail and must have been based on real-life models, perhaps the Verona city militiamen. The Roland statue, in particular, is very detailed and offers unparalleled insight into the construction of the early 12<sup>th</sup> century armour. The soldier is equipped with the arms typical of the time: a short-sleeved hauberk without a hood, a Phrygian hat-type helmet without a nasal, long and narrow flat-topped shield with an ornate boss and holds a sword with a straight cross-guard and a mushroom-shaped pommel (Fig. 1). Unusually, he also wears a single mail legging on his left leg. Each part of Roland's gear is executed with utmost care: the mail rings, leather straps and laces, flocks of hair, fabric and metal were made naturalistic to the highest standards of the time. The present article aims to improve the understanding of the three elements of the statue: the mail chausse and the helmet, and review the relevant contemporary visual sources.

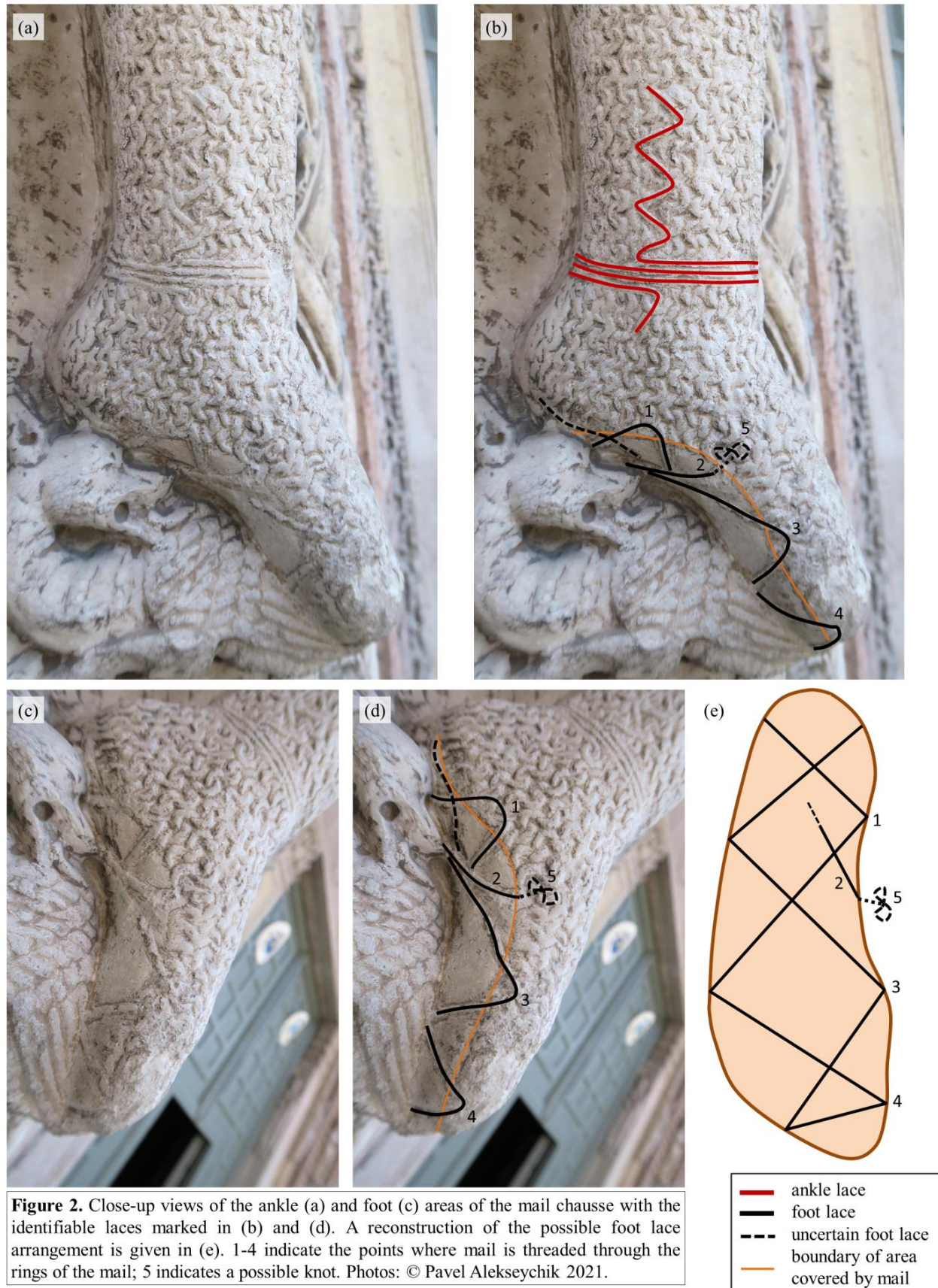
### **I. Mail chausse**

The very fact that this soldier is wearing a single mail chausse is unique and nothing similar can be seen in any other medieval artwork. This single chausse, however, is (intentionally?) turned towards the viewer as if to display its most interesting side (Fig. 2). There, we find a crafty representation of lacing that served to tighten and secure the mail on the foot and ankle. The mail chausse, with its apparent lacing, is unique in several ways. First, it is one of the very few sources for mail chausses dated before 1175: a review by the authors found only 25 artistic sources depicting such armour, excluding the Roland statue (Table 1). Second, the mail chausse of Verona Roland has some unique constructional detail – the meticulously carved thongs or laces securing the mail on the leg.



**Figure 1.** General view of the statue of Roland on the Verona cathedral portal.  
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To have a better view of the background, let us review other artistic depictions of mail chausses from the 11<sup>th</sup> century up to 1175 (Table 1). The abovementioned art shows lacing only along the back of the leg (in split chausses), and/or similar lacing on the underside of the foot, or no lacing at all. Based on these sources, there is no certainty whether the absence of lacing on any part of the chausses in depictions is due the actual absence of this detail in the chausses the artist intended to depict, or due to simplification on the artist's side. In some of these cases, shoes seem to be worn (Table 1, image 1, 5), and again, it is not clear if they are worn over mail, or if the mail chausses are footless, although some 13<sup>th</sup> century art make it clear in shoes could be worn over mail chausses.

The Roland chausse makes several important contributions to the above-mentioned 25 sources. The most notable detail is the lacing going down the inner side of the ankle and then around it, and the lacing under the foot. This lacing is realistic at the level unseen before the 13<sup>th</sup> century sculptural effigies – those, however, lack such detail on mail chausses. The use side lacing on the ankle is unique and not shown elsewhere, in any form. Second, the legging lacks a split at the back, which is made sufficiently clear, as that the leg is turned enough to display its rear. There is no evidence of lacing there – provided how finely and realistically executed the rest of the statue is, this must imply that the original chausse was actually not split at the back. The side lacing may have been needed to tighten the chausses in compensation of the missing rear ties, which further supports the idea that this chausse indeed provided continuous coverage for the back of the leg. Finally, that Roland wears mail on only one leg is a unique feature having no parallel in art; it may be a depiction of an infantryman fighting in a tight formation, which necessitates protection only for the front (left) leg (Nicolle 1999).

Let us examine the lacing more closely (Fig. 2). It consists of two parts: the ankle lace and the foot lace(s), which are respectively marked with red and black lines in Fig. 2b,d. The good-quality photos presented here allow, for the first time, to refine the arrangement of these laces.

- The ankle lacing is clearly represented by a single, continuous lace, comprising the spiral lacing section on the inside of the ankle, and the three circles around the ankle (Fig. 2b). Its lower end turns apparently passes through a ring before it turns down and disappears under mail. No knots are seen near the top or bottom end of this lace. The function of this lace was obviously to tighten and secure the mail chausse at the ankle.
- The foot lacing is highly interesting as well. The close-up photo (Fig. 2c) offers an insight into the arrangement. The mail covers the entire upper side of the foot and is tightened by lace(s) under the foot. Now, the question is, are we able to reconcile all the visible parts of the lace and reconstruct the likely method of attachment? Once again, given the above observations of extremely high realism in Roland's statue, we may assume that the represented sections of the lacing are nearly photographic. With that assumption at hand, a reconstruction is proposed. The main assumption is that a minimal number of laces would have been used to minimize the preparations for battle. There are three clear points where the lace passes through the rings (1,3,4 in Fig. 2b,d). These may,



in fact, represent a single lace fastened across the entire foot, in a double spiral fashion (Fig. 2e). Spiral lacing is attested by a number of other 12<sup>th</sup> century visual sources and would have been the most simple, robust and functional arrangement for the foot of mail chausses, as well. One lace (2 in Fig. 2d,e) seems more difficult to reconcile with the proposed spiral pattern. It appears to end in a knot, which is distinct in appearance from the surrounding mail rings (5 in Fig. 2d,e). We are of the opinion that it may therefore represent the beginning of the same single lace, an idea realized in the reconstructive painting (Fig. 5).

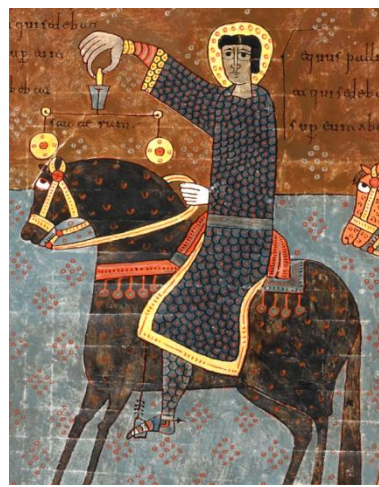
It is conceivable that the lower end of the ankle lace actually passes downwards under the mail to connect in some way with the foot lacing, but it not very likely as it means as increase in the complexity of the arrangement and would require a very long lace.

No other definite detail is observed. It is not clear whether the mail chausse is worn over a shoe, or over a fabric stocking: both alternatives seem possible. Fig. 5 assumes it is worn over a shoe. Overall, the statue provides valuable detail of mail chausses construction and lace arrangement which are not found in any other visual source (Table 1, image 20). The portal of San Zeno Maggiore in Verona, which was likely designed by the same master Nicolaus and completed by his students after his death (Spiro 2014), shows mail chausses with articulated undulations of the mail edge on the foot, indicative of lacing; several other sources display similar undulations on the foot (Table 1, images 3, 6, 10, 12, 18, 23, 24).

**Table 1.** Synthesis of the depictions of mail chausses in western European art from the 11<sup>th</sup> century up to ca. 1175.



1. 1070-1090 England, Bayeux Tapestry



2. 1091-1109 Spain, Burgos, BL Add. 11695 - Beatus of Liebana (Silos Apocalypse)



3. 1120 France, Herzog August Bibliothek Wolfenbüttel, Cod. Guelf. 1 Gud. lat. - Liber Floridus

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4. 1100-1150 Italy, Berlin, Kupferstichkabinett MS 78 A 5



5. ca. 1145 Germany, ÖNB Cod. Ser. n. 2701- Admont Bible



6. 1148 Brabant (Leuven), BL Add MS 14789 vol.2 - Parc Abbey Bible



7. 1148-1156 Germany, Brauweiler Kreis Köln, Benediktine abbey, Kapitelsaal



8. 1150 France, Le Mans, BM, MS 0263



9. 1159-1162 Italy, pulpit of the Cagliari Cathedral





10. 1140-1180 Germany, Fondation Martin Bodmer, Cod. Bodmer 127 - Passionary of Weissenau

11. 1155-1165 France, Troyes BM, MS 28, vol. 1

12. ca. 1160 Germany, Codex Vindobonensis Ser. n. 2700 - Antiphonar von St. Peter



13. ca. 1160 Germany, Codex Vindobonensis Ser. n. 2700 - Antiphonar von St. Peter



14. 1158-1165 Germany, BSB Clm 13002 - Prufening Miscellany



15. 1150-1175 England, Cotton MS Caligula A VII/1





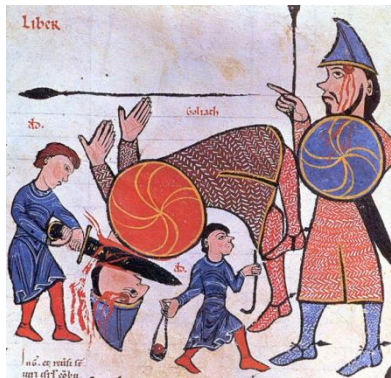
16. 1150-1175 England, Cambridge, Corpus Christi College, MS 003 - Dover Bible



17. 1150-1175 France, Boulogne-Sur-Mer, BM, MS 0036



18. 1150-1175 Germany, ULB Düsseldorf, Ms A-2 - Biblia



19. 1162 Spain, Biblia Segunde de Sant Isidoro



20. 1164-1178 Italy, Verona, San Zeno Maggiore.  
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21. 1160-1170 Germany, Bode Museum, Berlin, Inv. nr. 1888,470



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22. 1160-1180 France, Arles, Saint Trophime



23. 1157-1185 Germany, ThULB Ms. Bos. q.6 Chronicle of Otto of Freising



24. 1150-1200 Austria, Walters W.30 - Gloss on Lamentations of Jeremiah

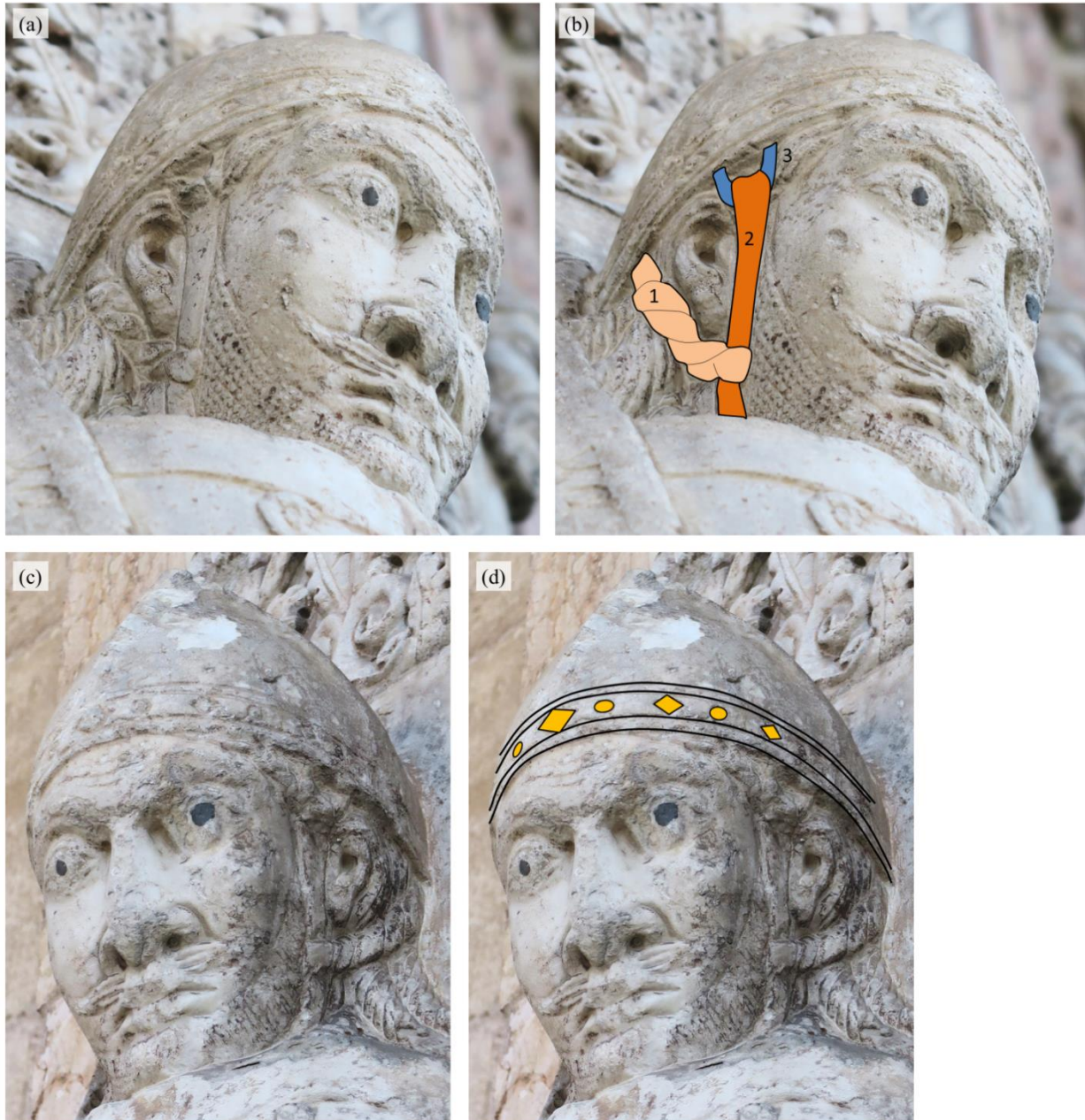


25. 1168-1189 Germany, BL Lansdowne 381 - Psalter of Henry the Lion



## II. Helmet chin straps

A zoomed-in image of Roland's helmet (Fig. 3) reveals interesting detail. However, to be able to fully appreciate the importance of these, let us review other visual sources for chinstraps.



**Figure 3.** Chin strap arrangement on Roland's helmet. (a) view of the right side; (b) schematic highlighting the two constituents of the chin strap (1, 2) and the hoop (3) to which 2 is tied. (c) view of the left side. In (d), the brow-band and its decorative pattern are marked.

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Generally, most of our knowledge of High Medieval helmet chin straps comes from 12<sup>th</sup> and some early 13<sup>th</sup> century Romanesque art, thanks to its propensity for depicting such fine detail (Table 2). In that period, chin straps are shown on conical and spherical helmets, sometimes equipped with nasal or visor, which were open enough for the chin straps to be seen. The development of more complete helmets in the later 12<sup>th</sup> century 1200 meant that chin straps could no longer be seen and was seldom shown at all, even in helmets that were taken off. The available sources summarized in Table 2 are mostly represented by single straps or straps forking to attach to the helmet in two points, but once by a strap with three ends (Table 2, image 18).

**Table 2.** Synthesis of the depictions of helmet chin straps in western European art of 12<sup>th</sup> century.



1. 1125-1140 France, Vezelay, Basilique Sainte-Marie-Madeleine



2. 1139-1140 Italy (formerly Austria), Tyrol castle  
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3. ca. 1145 France, Troyes, Bibliothèque municipale, 2391



4. 1140-1160 France, Mans (Le) - BM - ms. 0263



5. 1150-1175 France, Saint-Pierre à Nuaillé-sur-Boutonne



6. 1145-1158 France, south portal, Cathédrale Saint-Julien, Le Mans  
© Roel Renmans

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7. 1153 Germany, Magdeburg Gates – installed at the Novgorod Cathedral, Russia



8. 1164-1178 Italy, Verona, San Zeno Maggiore  
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9. 1160-1180 Spain, San Vicente Martir, Frias, kept in Cloisters, Metropolitan Museum of art, New York



10. 1170 Italy, Rome, Basilica di San Paolo Fuori le Mura



11. 1150-1200 France, Fragment from St Gery Church, in Musee Municipal, Cambrai



12. 12<sup>th</sup> c. France, ivory game piece, Louvre OA 3297





13. 12<sup>th</sup> c. Italy, San Marcello, Capua



14. 1170-1180 France, Musée du Cloître de Notre Dame en Vaux



15. 1178-1180 England, Canterbury Cathedral stained glass window



16. 1174-1189 Italy, Monreale, Santa Maria la Nuova



17. 1180-1200 Spain, Old Cathedral of Salamanca, cloister



18. 1180-1220 Spain, Orejana, Segovia, Iglesia de San Juan Bautista de El Arenal



19. 1174-1189 Italy, Monreale, Santa Maria la Nuova



20. 1181-1190 Spain, Iglesia de San Juan del Mercado, Zamora



21. 1175-1200 Spain, Frías, Castillo de Frías

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22. 1175-1200 Italy, Modena cathedral



23. 1175-1200 Spain, Old Cathedral of Salamanca



24. 1175-1200 Spain, Palencia, Revilla de Santullán, church of San Cornelio and San Cipriano



25. 1190-1203 Spain, Duratón, Segovia, Nuestra Señora del Asunción



26. 1185-1200 Germany, Basel Munster



27. 1200-1225 France, Metropolitan Museum of Art, New York, L.2008.58.1a-c, Guilhem of Orange coffret



28. 1200-1220 Italy, Padua, St. Justina church



The chin straps are mostly seen to disappear under the helmet, implying an attachment with a rivet, but in three cases (four, including the Roland statue) the single straps are tied to small metal loops extending from the skull (Table 2, images 1, 14, 28), probably intended to simplify the replacement of broken straps. Geometrical patterns can still be seen in a few carvings (Table 2, images 1, 5, 8, 17). The straps were tied under the chin in a simple knot, which is often articulated (Table 2, images 2, 5, 6, 20, 28).

Roland's helmet is informative about the construction of chin straps and adds substantially to the other evidence reviewed above. Three aspects of its chin straps are unique:

- Different method of attachment of the two ends of a chin strap: The forward end (2 in Figure 3b) is attached to a projecting loop (3), while the rear end (1) goes under the helmet skull and is likely attached with a rivet.
- The two ends of a chin strap are not cut from a single piece of leather, but are separate. The rear part is attached to the front part with a sliding knot.
- In addition, the rear part of chin strap is braided or twisted. This could be simply decoration - or a way to utilize the springiness of twisted leather for amortization?

The presence of such detail in this well-executed statue makes it possible that similar features were widespread, but seldom depicted due to the overall simplifying approach of the Medieval art.

### III. Helmet decoration

The horizontal brow band of Roland's helmet, which could be of gilt metal or brass, is decorated with alternating circles and rhombs (Fig. 3c,d). Maybe unsurprisingly, identical decoration is once again found in the San Zeno basilica portal (Fig. 4, center), which certainly depict the



communal forces of Verona. This match between the Roland statue in Verona cathedral and one of the mounted soldiers in San Zeno reinforces the view that the former was actually modeled after a real Veronese soldier.

**Figure 4.** Heads of the knights on the tympanum of the main portal of the San Zeno basilica in Verona.

Note, also, that the knights in the rear ranks do not have mail coifs, opening up a possibility that the Roland statue may, in fact, depict a dismounted rider and not an infantryman as earlier suggested by Nicolle (1999); a lacking mail chausse on his right leg may due to such armour being expensive and thus prioritized for the left leg.

#### IV. Reconstruction

**Figure 5.** Reconstructive hypothesis based on the Roland statue at the Verona cathedral. Painting © Robbie McSweeney.





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The reconstruction painting (Fig. 5) uses the features discussed in the previous sections to create a full impression of the early 12<sup>th</sup> century Italian communal forces soldier. The sole mail chausse is retained, as it may tentatively be adopted as a significant and realistic feature. The foot strap is extrapolated following the hypothesis in Fig. 2c in order for the sake of completeness; a leather sole is shown under the strap assuming the chausse is worn over shoes to facilitate fighting when dismounted, and also because a shoe is worn on the right foot. The elaborate shield decoration seen in the original statue, is, omitted, as it seems excessive for a shield of a soldier who may not even be a knight. Since the probable sword-belt is obscured by Roland's shield and arm, a simple sword-belt with ties is shown following a small number of visual sources from 1100-1150. Otherwise, all detail is kept maximally close to the original artwork.

## **Conclusions**

Roland's statue on the Verona cathedral portal provides one of the very few depictions of mail chausses and helmet chin straps prior to ca. 1175, both executed with an unparalleled degree of realism and care of detail. They significantly deepen the knowledge of how helmets and mail chausses were equipped with laces and straps, and the methods of armour fastening used in the 12<sup>th</sup> century.

## **References**

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