

# THE CAPPELLA PALATINA CEILING AND THE MUSLIM MILITARY INHERITANCE OF NORMAN SICILY

BY  
DAVID NICOLLE

## THE CEILING; ITS STRUCTURE, STYLE AND DATE

THE Cappella Palatina was the royal chapel of the Norman rulers of Sicily and southern Italy. It stood within their palace in their chief city of Palermo. Built for king Roger II (1130-1154) between the years 1132 and 1143,<sup>1</sup> the chapel still has as one of its greatest glories a painted wooden ceiling. This ceiling, which is constructed in an Islamic style, is widely believed to have been begun around 1140.<sup>2</sup> The chapel itself falls into three sections: a nave and two flanking aisles. The ceiling of the nave, formed of *muqarnas* or superimposed suspended quarter-domes, arches, squinches and niches, has attracted most attention from art historians because of its splendid surface decoration and because it is an early example of the *muqarnas* style.<sup>3</sup> Nevertheless, the ceilings over the two aisles, each formed of a sequence of beams and recessed curved panels, were apparently built and decorated at around the same time.<sup>4</sup>

Each ceiling was originally coated with a thin layer of plaster which was then painted with naturalistic scenes, decorative motifs and inscriptions.<sup>5</sup> Though damaged in many places, and with layers of painted plaster flaking away in even more, these paintings are among the most extensive still surviving from the 12th century as well as being virtually unique in style and content. It is also worth noting that the degree of 15th century overpainting appears to have been exaggerated,<sup>6</sup> and is,

<sup>1</sup> DALU JONES, «The Cappella Palatina in Palermo: Problems of Attribution,» in *Art and Archaeology Research Papers*, I (1972), p. 41.

<sup>2</sup> R. ETTINGHAUSEN, *Arab Painting* (Geneva 1962) p. 44.

<sup>3</sup> JONES, *op. cit.*, p. 45.

<sup>4</sup> R. H. PINDER-WILSON and C. N. L. BROOKE, «The Reliquary of St. Petroc and the ivories of Norman Sicily,» in *Archaeologia*, CIV (1973), p. 290.

<sup>5</sup> JONES, *op. cit.*, pp. 41-42.

<sup>6</sup> JONES, *op. cit.*, p. 42, follows U. MONNERET DE VILLARD, *Le pitture musulmane al soffitto della Cappella Palatina* (Rome 1950), pp. 221-222, in believing that most

in the opinion of the author, very obvious where it has been done. The panels illustrated in this article (figs. 1-26) seem almost entirely free of such later overpainting, although a few other military or otherwise mounted figures have clearly been tampered with.

It is not the intention of this article to discuss the structural origins, decorative style or iconographic intentions of this splendid ceiling, and only to a limited extent to consider the question of artistic attribution. These issues have been thoroughly argued by a number of scholars,<sup>7</sup> although many questions still remain unresolved. Here I hope merely to draw attention to the military equipment illustrated on the three sections of ceiling, including horse harness and certain features that could have had ceremonial military associations.

Panels showing military subjects are, in fact, relatively few when one considers the emphasis on royal authority, power and triumph seen in the overall decoration of the Cappella Palatina.<sup>8</sup> This was, of course, the Royal Chapel and so the number of military saints and Christs Triumphant seen on the Byzantine-style wall mosaics, plus the courtly life, hunting scenes and powerful symbolic animals on the ceiling, should come as no surprise.<sup>9</sup> On the other hand, the very fact that the repertoire of scenes and decorations was almost entirely Islamic,<sup>10</sup> though drawn from both the east and west of the Muslim world,<sup>11</sup> meant that the artists could use an extremely wide selection of symbolic motifs. Meanwhile their Christian European contemporaries tended more often to fall back upon the reality of power or authority in the medieval world by illustrating warriors or priests.

Before looking at the details of military figures on the ceiling one needs to review the leading opinions on attribution and artistic origins. These must have a bearing, not only on the style of painting but also on

of what can now be seen is really 15th century overpainting. PINDER-WILSON and BROOKE, *op. cit.*, p. 293, note 1, state that there has been a lot of overpainting of faces on the ceiling but that there is no reason to suppose that major, as opposed to purely stylistic, alterations were made.

<sup>7</sup> A. PAVLOVSKY, «Décoration des plafonds de la Chapelle Palatine,» in *Byzantinische Zeitschrift*, II (1893); U. MONNERET DE VILLARD, *Le pitture musulmane al soffito della Cappella Palatina in Palermo* (Rome 1950); R. DELOGLU and V. SCUDETRI, *La Reggia dei Normanni e la Cappella Palatina* (Florence 1969); SIMON-CAHN, *The ceiling of the Cappella Palatina in Palermo and its Program* (Unpub. thesis, Columbia University, New York, 1971).

<sup>8</sup> ETTINGHAUSEN, *op. cit.*, pp. 44-45 and 50.

<sup>9</sup> *Ibid.*

<sup>10</sup> PINDER-WILSON and BROOKE, *op. cit.*, pp. 290-291.

<sup>11</sup> *Ibid.*; Monneret de Villard also sees many non-Islamic elements on the ceiling, *op. cit.*, pp. 34-47; Jones similarly sees some clear Romanesque features, *op. cit.*, p. 43.

the content, at least as far as costume, arms and harness are concerned. Monneret de Villard regarded the question as ultimately unanswerable, but expressed a preference either for a Fāṭimid, presumably Egyptian, artist working with local Muslim help or for artists from Edessa or Diyarbakr.<sup>12</sup> Ettinghausen quotes André Grabar as disliking both Christian or even Sicilian connections,<sup>13</sup> and then goes on to state his own preference for an artist or artists rooted in Fāṭimid traditions but cut off from current mid-12th century Fāṭimid developments in Egypt. Thus he suggests a Tunisian connection since elements of earlier Iraqi 'Ab-bāsīd styles may have survived longer in this Muslim province, a province which lay under very strong Siculo-Norman political influence at the time that the Cappella Palatina was being built.<sup>14</sup> Dalu Jones refines this latter argument further. She points out that Sicily's links with Fāṭimid Egypt were both attenuated and long past, that the Norman domination of Sicily had lasted long enough for a distinctive artistic style to have developed, that its cosmopolitan character meant that its art was unlikely to have been an off-shoot of any one school and that there is surviving architectural evidence to support a strong cultural link between post-Fāṭimid North Africa and Norman Sicily.<sup>15</sup> She also draws attention to the cultural links that had existed between Muslim Sicily and Muslim Spain, as well as arguing that there is no valid reason why Christian Sicilians should not have participated in the essentially Islamic decoration of the Cappella Palatina ceiling. They and their forebears would have been fully conversant with Muslim art and culture following almost two hundred and fifty years of Muslim rule.<sup>16</sup> Why then should this magnificent and singular piece of 12th century art not be a truly Sicilian creation, reflecting the characteristically mixed influences on that island's culture?<sup>17</sup> There is certainly nothing in the arms, armour, harness or ceremonial regalia illustrated on the Cappella Palatina ceiling to dispute such a conclusion and, by contrast, much to support it.

Other aspects of Sicilian and southern Italian art confirm a process of enthusiastic cross-fertilization and the borrowing of motifs from other cultures. The artists who worked on the Cappella Palatina ceiling were fully conversant with Arabic script<sup>18</sup> and motifs. But the earlier crafts-

<sup>12</sup> MONNERET DE VILLARD, *op. cit.*, pp. 48-49.

<sup>13</sup> A. GRABAR, in ETTINGHAUSEN, *op. cit.*, p. 50.

<sup>14</sup> ETTINGHAUSEN, *loc. cit.*

<sup>15</sup> JONES, *op. cit.*, pp. 44-45.

<sup>16</sup> *Ibid.*, p. 46.

<sup>17</sup> *Ibid.*, p. 47.

<sup>18</sup> *Ibid.*, p. 46.

men who carved that series of ivory oliphants which are generally attributed to 10th or 11th century Apulia, Amalfi or Salerno used Islamic decorative motifs wrongly, though clearly being aware of them.<sup>19</sup> Sicilian painted ivory boxes from rather later than the Cappella Palatina ceiling, probably from the late 12th or early 13th centuries, bear inscriptions that are so accurate that their craftsmen are generally assumed to have been Muslims.<sup>20</sup> Also from early 13th century Sicily comes a Latin copy of *The Book of Fixed Stars* by 'Abd al Raḥmān al Sūfī (Bib. Arsenal Ms. 1036, Paris) which, by its faithful adherence to an Islamic original is proof that Christian illuminators copied from Muslim artists.<sup>21</sup> It is particularly unfortunate that, of those slightly earlier illuminated manuscripts so far given a Siculo-Norman attribution,<sup>22</sup> none include military figures that might have parallels with those on the Cappella Palatina ceiling.

The very fact that differing cultures probably influenced the decoration of the ceiling means that the figures appearing on that ceiling could in turn shed light on the costume, armaments and perhaps even tactics of regions neighbouring Norman Sicily as well as upon the Siculo-Norman kingdom itself. The figures that are to be discussed in this article can be divided into five main groups: Military but Unarmoured Horsemen (figs. 1-11), Clearly Armoured Horsemen (figs. 11-13), Mounted Huntsmen (figs. 14 and 15), Infantrymen (figs. 11 and 16-23) and Miscellaneous Riders who include those on camels and elephants (figs. 24-26).

#### THE MILITARY TRADITIONS OF NORMAN SICILY

Since the ceiling and its decoration must, essentially, be seen as a Muslim work of art produced under Siculo-Norman rule, it would be advisable to take a brief look at the Muslim warriors of pre-Norman Sicily and their descendants who served the Norman kings up to the time that the ceiling was painted.

It was the Berbers, above all men from the Huwārah tribe,<sup>23</sup> who

<sup>19</sup> PINDER-WILSON and BROOKE, *op. cit.*, p. 297.

<sup>20</sup> *Ibid.*, p. 290.

<sup>21</sup> *Ibid.*, p. 293.

<sup>22</sup> H. BUCHTAL, «A school of miniature painting in Norman Sicily,» in *Late Classical and Medieval Studies in honor of Albert Matthias Friend Jr.* (Princeton 1955), pp. 312-339; H. BUCHTAL, «The beginnings of MSS. illumination in Norman Sicily,» in *Papers of the British School at Rome*, XXIV (1956), pp. 78-85.

<sup>23</sup> M. AMARI, *Storia dei Musulmani di Sicilia* (Catania 1933), vol. I, pp. 394-395.

played the leading role in the Muslim conquest of Sicily from the Byzantines in the 9th century.<sup>24</sup> Two centuries earlier the backward Berbers had differed from their Muslim Arab conquerers more in their relative lack of military equipment than in the forms or styles of such weaponry. Around 903 AD, however, and within a year or so of the completion of the conquest of Sicily, an Arab geographer could write that the Berbers now fought with Arab horses, Arab camels and Arab bows.<sup>25</sup> He was probably referring to the tribal leadership or élite, as there is plenty of later evidence suggesting that the mass of Berber warriors still fought on foot with the javelin as their favourite weapon.<sup>26</sup>

While the Berbers subsequently won a dominant political position in the Maghrib, they never achieved the same in Sicily. The Kitama and later the Şanhāja tribes at various times and in various provinces provided the backbone of Fāṭimid armies,<sup>27</sup> but in Sicily the Kitama, having virtually conquered the island for the Fāṭimids in 917 AD,<sup>28</sup> degenerated into little more than a harrassed minority under subsequent autonomous Arab Kalbite rule.<sup>29</sup> The Berber community in Sicily remained, however, a troublesome and apparently warlike one until the Norman conquest.<sup>30</sup> It retained a distinct identity under early Norman rule,<sup>31</sup> but thereafter seems to have been absorbed into the island's general Muslim population.

Although the Şanhāja are rarely mentioned in a Sicilian context, they may provide a good example of Berber military organization and equipment at this time. As the dominant force in what is now Tunisia, they could, in the 11th century, field a small élite of lance — armed and armoured cavalry. Most of their horsemen would, however, have been more lightly equipped.<sup>32</sup> Such an élite, or at least its leadership, have been described as wearing *kazāghand* mail-lined jerkins and helmets or coifs.<sup>33</sup> Perhaps the majority of Berber armoured cavalry would have

<sup>24</sup> AZIZ AHMAD, *Storia della Sicilia Islamica* (Catania 1977), p. 62.

<sup>25</sup> IBN AL FAQĪH AL HAMADHĀNĪ, «Kitāb al Buldān,» extracts in *Description du Maghreb et de l'Espagne au III<sup>e</sup>-IX<sup>e</sup> siècle*, edit. M. Hadj-Sadok (Algiers 1949), pp. 40-41.

<sup>26</sup> BESHIR IBRAHIM BESHIR, *The Fatimid Caliphate 386/996-487/1094* (Unpub. Ph. D. Thesis, London Univ., 1970), pp. 67-70; M. BRETT, «The Military Interest of the Battle of Haydarān,» in *War, Technology and Society in the Middle East*, edit. V. J. Parry and M. E. Yapp (London 1975), pp. 83-84.

<sup>27</sup> BESHIR, *op. cit.*, pp. 28-34.

<sup>28</sup> AHMAD, *op. cit.*, pp. 78-79.

<sup>29</sup> *Ibid.*, p. 84.

<sup>30</sup> *Ibid.*, pp. 62 and 92.

<sup>31</sup> *Ibid.*, p. 140.

<sup>32</sup> BRETT, *op. cit.*, p. 84.

<sup>33</sup> *Ibid.*, pp. 84-85.

worn quilted or buff-leather protections, as their descendants wore in the 14th century.<sup>34</sup> A relative poverty in armour might have decreased the effectiveness of Berber cavalry, which was rarely noted for its striking power either in the Middle East or in the Iberian Peninsula. But it seems to have had little influence on Berber infantry which generally enjoyed a higher military reputation than did its mounted counterparts. The most characteristic North African and Saharan item of equipment was, of course, the large leather *lamt* shield which, being a body-covering defence, meant that armour was largely unnecessary.<sup>35</sup>

Some Berber troops in Fāṭimid North Africa were described as being dark-skinned and virtually indistinguishable from Black Africans.<sup>36</sup> Negro soldiers, particularly an élite guard unit commanded by a Muslim, are subsequently recorded in Norman Sicily.<sup>37</sup> As yet, however, the origins of these latter troops are unknown. They may have been descended from those Muslim negroes who lived in Sicily before the Norman conquest<sup>38</sup> or have been Sudanese *mamlūk* or 'abīd slave-recruited warriors<sup>39</sup> such as those who had earlier served in Aglabid and Zirīd armies.<sup>40</sup>

While Arab troops played a secondary role, numerically speaking, in the Muslim conquest of Sicily,<sup>41</sup> Arabs certainly took a leading role politically, culturally and in the command of most military forces.<sup>42</sup> Hence their importance to the development of Siculo-Muslim armies, and the military traditions inherited by the Normans must not be underestimated. Muslim battle tactics during their 9th century conquest of the island were essentially those that had won the Umayyads an empire from the Atlantic to Central Asia. In other words they were fundamentally passive with the Muslims adopting a static defensive position and only counter-attacking with cavalry and infantry after the latter had absorbed the shock of an enemy's initial charge.<sup>43</sup> Combined with a

<sup>34</sup> Ibn Khaldūn, trans., *Histoire des Berbères* (Paris 1934), vol. III, pp. 118-119; Anon., *Chronique du Bon Duc Loys de Bourbon*, edit. A. M. Chazaud (Paris 1876), pp. 218-257.

<sup>35</sup> H. T. NORRIS, «The Hauberk, the Kazāghband and the 'Antar Romance,» in *Journal of the Arms and Armour Society*, IX (1978), pp. 98-99.

<sup>36</sup> BESHIR, *op. cit.*, pp. 28-34.

<sup>37</sup> F. CHALANDON, *Histoire de la Domination Normande en Italie et en Sicile* (Paris 1907), vol. II, p. 739.

<sup>38</sup> AHMAD, *op. cit.*, p. 62.

<sup>39</sup> BESHIR, *op. cit.*, pp. 38-44.

<sup>40</sup> BRETT, *op. cit.*, p. 82.

<sup>41</sup> AHMAD, *loc. cit.*

<sup>42</sup> *Ibid.*

<sup>43</sup> AMARI, *op. cit.*, vol. I, p. 397.

broader offensive strategy of raiding and sieges, such defensive tactics remained highly effective among many Muslim armies and were even echoed in the great Ottoman conquests.<sup>44</sup>

Arab influence, plus a continuing strong political and cultural connection with the Arab Middle East, probably accounted for the fact that Siculo-Muslim armies were recruited and organized along Middle Eastern lines rather than along the quasi-feudal lines apparent in Muslim al Andalus.<sup>45</sup> Troops of servile or slave origin, plus mercenaries, played a vital role<sup>46</sup> although the introduction of the *iqṭā* and regional *jund* systems of military land-holding to parts of Sicily did produce some aspects of feudalism,<sup>47</sup> as they did in Egypt, Syria and elsewhere.

Both these forms of military organization persisted under the Normans. The *iqṭā* were transmuted with little apparent difficulty or alteration into Norman fiefs for the new Christian élite. Meanwhile the *jund* system of western Sicily, with its territorial militias based upon the *iqḷīm* or district, continued to provide the Norman rulers with reliable Muslim troops.

In equipment the admittedly sparse evidence seems again to point towards similarities with the east, above all with Fāṭimid Egypt, rather than with al Andalus. Such parallels refer, however, to urban-based or professional troops rather than to those tribal auxiliaries who also played an important role in Sicilian forces. Sicily was a rich agricultural and urbanized island and as such its warriors were likely to mirror those of the Nile Valley, perhaps Syria and almost certainly Ifriqiyah (Tunisia) more than those of the nomad-dominated semi-desert and steppe. Differences in arms and armour are, however, likely to have been ones of quantity and perhaps quality rather than of type or style. Christian sources indicate that light troops and light arms predominated, but armour is certainly recorded by Muslim authors and was worn not solely by leaders or commanders.<sup>48</sup> The very fact that the entire Muslim population, not merely a warrior élite, had, and often exercised, military responsibilities may account for many such fighters not possessing armour. There was also the characteristic Muslim fashion for covering

<sup>44</sup> V. J. PARRY, «La manière de combattre», in *War, Technology and Society and the Middle East*, edit. V. J. Parry and M. E. Yapp (London 1975), pp. 218-219 et seq.

<sup>45</sup> F. GABRIELI, «Gli Arabi in Spagna e in Italia,» in *Ordinamenti Militari in Occidente nell'alto Medioevo. Settimane di Studio del Centre Italiano di Studi sull'Alto Medioevo*, XV (Spoleto 1968), vol. II, p. 717.

<sup>46</sup> *Ibid.*

<sup>47</sup> AHMAD, *op. cit.*, pp. 64, 73 and 93.

<sup>48</sup> GABRIELI, *op. cit.*, p. 718.

one's mail or scale armour with another garment such as a *burd*, a striped upper garment, which was typical among the Fāṭimids as early as the 10th century.<sup>49</sup>

It is clear that by the end of the 10th century at least a sizeable minority of Fāṭimid horsemen, perhaps forming a hard-core of shock troops as had been the case even in later Umayyad times, used armour including mail hauberks, helmets and *tiifāf* horse-bards of felt.<sup>50</sup> Sword and javelin remained the preferred weapons of cavalry as well as of infantry.<sup>51</sup> Nevertheless a possible decline in the popularity of the javelin among Fāṭimid horsemen by the mid-12th century probably reflected an increasing use of armour. The wearing of armour would, of course, have made throwing a javelin more difficult while the armour worn by an opponent similarly made such a weapon less effective.<sup>52</sup>

Fāṭimid infantry forces were basically divided into spear- and sword-armed men, many of whom wore armour, and archers who were generally not protected.<sup>53</sup> Lightly equipped and extremely mobile infantry archers were, of course, to be among the most effective Siculo-Muslim troops available to their Norman overlords.<sup>54</sup> The highly sophisticated communications system, probably of beacons, that characterized Fāṭimid defensive strategy<sup>55</sup> also seems to have been mirrored in Muslim Sicily. A pidgeon-post that linked the island of Pantelaria to Ifriqīyah in 1088 AD is similarly likely, at least originally, to have been but one link in a chain of comparable communications between Sicily and the African coast.<sup>56</sup>

Nor had Muslim Sicily been isolated by war or religious differences from the Italian mainland during these centuries. The island's mixed population made cultural contacts almost inevitable, but there were also a surprising number of friendly military links despite frequent and continuing outbreaks of hostilities. A fluctuating alliance between Muslim

<sup>49</sup> MUHAMMAD IBN HĀNĪ AL ANDALUSĪ, edit. ZĀHĪD ʿĀLĪ, *Tabyīn al Maʿānī fī sharkh diwān Ibn Hānī* (El Cairo 1934), vol. I, pp. 686-687; M. CANARD, «L'Imperialisme des Fatimides et leur Propagande,» in *Annales de l'Institut d'Études Orientales de la Faculté des Lettres d'Alger*, VI (1942-1947), p. 168.

<sup>50</sup> BESHIR, *op. cit.*, p. 71.

<sup>51</sup> *Ibid.*, pp. 67-70.

<sup>52</sup> ZAKĀRIĀ MUSBAH GHATH, *The Crusades in Arabic Poetry up to the Death of Nūr al Dīn* (Unpub. M. Litt. thesis, Edinburgh University 1970), *passim*.

<sup>53</sup> BESHIR, *op. cit.*, pp. 76-79.

<sup>54</sup> C. FITZ-CLARENCE, «Mémoire sur l'emploi des mercenaires mahométans dans les armées chrétiennes,» in *Journal Asiatique*, XI (1827), p. 47.

<sup>55</sup> J. F. VERBRUGGEN, *The Art of War in Western Europe during the Middle Ages* (Oxford 1977), p. 292.

<sup>56</sup> *Ibid.*



Sicily and the virtually independent quasi-Byzantine city-state of Naples was a major factor in southern Italian politics during the 9th and 10th centuries.<sup>57</sup> Many Muslims even fought as mercenaries for Athanasius II, Bishop of Naples, alongside local militia forces and a small Byzantine contingent.<sup>58</sup> While many Sicilian Christians adopted Islam after the Muslim conquest of their island, numbers of Arabs in the Benevento area settled down and turned Christian after the failure of Muslim attacks on southern Italy in the 10th century.<sup>59</sup> Further south, in the Byzantine *theme* of Lucania, the situation was even more fluid. Here, in the 10th century, a great many Arabs were recruited as soldiers and enjoyed, for a while,<sup>60</sup> the same atmosphere of toleration that enabled the southern Italian Jewish community to become one of the most flourishing in the so-called Dark Ages.<sup>61</sup> Later these Arab soldiers abandoned Islam and were absorbed by the local community. Perhaps even more convoluted was the fate of a band of 10th century Byzantine Greek soldiers who, having adopted Islam, seized the stronghold of Pietrapertosa and operated as free-booters in the *theme* of Lucania until they also seem to have been absorbed into the surrounding Christian population. It would also be interesting to know more about the origins of the Masnada, a band of mercenaries who remained largely responsible for Papal security until the mid-12th century.<sup>62</sup> Their name sounds astonishingly Arabic and makes one think of *masnad*, a prop or support, and *musānadab*, meaning help or assistance, all of which are terms not inconsistent with their role in Papal Rome.

Christians remained a majority in Sicily throughout the years of Muslim rule and herein lie other possible cultural links with the outside world, this time with North Africa. Latin-speaking Christian communities, almost certainly town-orientated as they had been since Byzantine times, survived in Ifriqiyah at least until the late 9th century.<sup>63</sup> Some were, perhaps, involved in that slave-trade from Europe in which North

<sup>57</sup> A. R. LEWIS, *Naval Power and Trade in the Mediterranean, AD 500-1000* (Princeton 1951), p. 134.

<sup>58</sup> J. GAY, *L'Italie Méridionale et l'Empire Byzantin* (Paris 1904), p. 137.

<sup>59</sup> F. E. ENGREEN, «Pope John the Eighth and the Arabs,» in *Speculum*, XX (1945), p. 320.

<sup>60</sup> A. GUILLOU, «L'Italia byzantina, douleia e oikeiōsis,» in *Bulletino dell'Istituto Storico Italiano per il Medio Evo*, LXXVIII (1967), p. 11.

<sup>61</sup> A. GUILLOU, «Inchiesta sulla popolazione greca della Sicilia e della Calabria nel Medio Evo,» in *Rivista Storica Italiana*, LXXVI (1963), p. 56.

<sup>62</sup> P. PARTNER, *The Lands of St. Peter* (London 1972), p. 195.

<sup>63</sup> W. H. C. FREND, «North Africa and Europe in the Early Middle Ages,» in *Transactions of the Royal Historical Society*, 5 ser., V (1955), p. 76.

African Christians played a prominent role.<sup>64</sup> Though long in decline, the Christian agricultural population of Ifriqīyah only went into eclipse following invasion by the nomadic Banū Hilāl in the 11th century.<sup>65</sup> Even up to 1140 the rulers of present-day Tunisia employed Christians and recent Christian converts to Islam in their armies.<sup>66</sup>

Differences in culture and religion were clearly not as yet the barriers to communication, both physical and cultural, that they were later to become. Muslim Sicily was part of a wider world with contacts to the north and south. In military terms its associations were, naturally enough, largely with Muslim North Africa. As such it had a relatively highly militarized population, at least as far as the Muslim community was concerned. This community probably reached a maximum of approximately half a million under Kalbite rule in the 11th century.<sup>67</sup> So it was hardly surprising that the Normans found their conquest of the island a far tougher and lengthier business, some thirty years, than had been their progress in southern Italy. In Sicily the Norman conquerors faced a population of soldiers, Arabs, Berbers, local converts and others, who were prepared to defend their existing political supremacy.<sup>68</sup>

Before looking at the Normans themselves, the Italians and Byzantines should first be fitted into the military context, even if only for comparison. Both would have an influence on the development of the Norman army, certainly on the mainland and to some extent even in Sicily.

The demilitarization of the local population under Byzantine rule applied to the rural rather than urban sections of society.<sup>69</sup> It seems to have been more typical of the early Byzantine centuries than the later and, as such, might have meant that the Greek population of eastern Sicily retained a demilitarized status under Muslim rule while the Greeks of the mainland gradually tended to lose theirs. Evidence for increasing local participation in regional defence in the Byzantine *themes* of Langobardia (Apulia), Lucania and Calabria portrays land-owners leading their own forces in support of Imperial units sent from Constantinople, even in the 10th century.<sup>70</sup> As these regions developed economically, they became administratively more self-sufficient. Around 1040 the full-time *theme* armies were disbanded and defence devolved to local urban

<sup>64</sup> ENGREEN, *op. cit.*, p. 321.

<sup>65</sup> FRIEND, *op. cit.*, p. 78.

<sup>66</sup> FRIEND, *op. cit.*, p. 78, note 3.

<sup>67</sup> AHMAD, *op. cit.*, p. 92.

<sup>68</sup> GUILLOU, «Inchiesta sulla popolazione greca,» pp. 63-64.

<sup>69</sup> *Ibid.*

<sup>70</sup> A. GUILLOU, «L'Italia bizantina,» p. 12.

militias stiffened by occasional units sent from the Byzantine capital.<sup>71</sup> Such urban, largely infantry, militias tended to show greater loyalty to their own locality and to local interests than to the Byzantine Empire as a whole. Subsequently they came to terms with the Norman invaders and helped eject the Byzantine authorities.<sup>72</sup>

Such Byzantine local militias were not, of course, necessarily Greek. The population of Calabria may have been predominantly so, but that of Lucania was extremely mixed while that of Langobardia, with the exception of the Salento area on the very tip of the heel of Italy, was largely Italian.<sup>73</sup>

A very similar system operated in those areas under Lombard authority in the duchies of Capua, Benevento and Salerno,<sup>74</sup> almost certainly reflecting Byzantine influence.<sup>75</sup> These turbulent minor states were not feudally organized and their rulers relied primarily on urban militias, the local aristocracy having, by the 10th century, largely lost the military interests that it had shown in the preceding two centuries.<sup>76</sup> In the countryside fortified positions such as castles were garrisoned by servile troops recruited by the castle's owner.<sup>77</sup> In coastal cities like Naples there already existed, by contrast, a class of citizens whose status and military obligations, probably as cavalry, were sufficiently impressive for the Normans to enfeif them as knights within a few years of taking control of the city.<sup>78</sup> A similar situation was seen in certain Adriatic towns, including Bari.<sup>79</sup> Mounted troops were also fielded by the major ecclesiastical authorities and land-owners.<sup>80</sup> Many, if not most, such Church troops seem to have been mounted and armoured in normal European fashion. Such expensive equipment was probably made possible because church estates were, in general, more feudalized than were those of neighbouring secular land-owners.<sup>81</sup> Secular militias included armoured horsemen, though they were probably few, as well as light cavalry and numerous infantry.<sup>82</sup>

<sup>71</sup> A. GUILLOU, «Italie méridionale byzantine ou Byzantins en Italie méridionale?», in *Byzantion*, XLIV (1974), pp. 174-175.

<sup>72</sup> *Ibid.*; D. P. WALEY, «'Combined Operations' in Sicily, AD 1060-78,» in *Papers of the British School at Rome*, XXII (1954), p. 121.

<sup>73</sup> GUILLOU, «L'Italia bizantina,» p. 11.

<sup>74</sup> C. CAHEN, *Le Régime Féodal de l'Italie Normande* (Paris 1940), p. 72.

<sup>75</sup> CAHEN, *Le Régime Féodal*, p. 68.

<sup>76</sup> J. BEELER, *Warfare in Feudal Europe 730-1200* (Ithaca 1971), pp. 64-65.

<sup>77</sup> CAHEN, *Le Régime Féodal*, p. 74.

<sup>78</sup> E. CURTIS, *Roger of Sicily* (London 1912), p. 356.

<sup>79</sup> CURTIS, *op. cit.*, pp. 357-358.

<sup>80</sup> CAHEN, *Le Régime Féodal*, p. 65.

<sup>81</sup> CAHEN, *op. cit.*, pp. 65 and 72.

<sup>82</sup> CAHEN, *op. cit.*, pp. 72-73.

The bulk of such Italian troops were militiamen whose primary economic interests lay outside their military duties. They are, therefore, unlikely to have provided those Christian troops who reportedly served in Fāṭimid and other Muslim North African armies. A large contingent of Christians had marched eastward from Tunisia with Jawhar in 1005 during the Fāṭimid conquest of Egypt. Jawhar was, in fact, himself of Christian Sicilian origin. A Christian fleet from Amalfi also helped in this operation.<sup>83</sup> While some of these troops may simply have been European mercenaries, such as those later reported in Zīrīd Ifriqīyah,<sup>84</sup> others could have been numbered among those North African Christians previously mentioned as serving various Tunisian rulers.<sup>85</sup> Equally they were just as likely to have been natives of Sicily or Sardinia, both of which were then under some degree of Fāṭimid control.

These then were the military circumstances into which the Normans erupted so violently and so successfully in the 11th century and which they were soon to inherit. The Normans themselves were mostly armoured horsemen of the normal north European type.<sup>86</sup> The feudal military obligations that provided the foundation of the expanding Norman state were similarly typical, consisting of forty days of duty with «hauberk and destrier» and a suitable feudal following.<sup>87</sup> The number of such «one hauberk» knight's fees was to grow quite large, three thousand four hundred and fifty-three on the mainland alone according to the *Catalogus Baronum*. This referred to the years between 1154 and 1166 and excluded the region of Calabria.<sup>88</sup> New knight's fees created in Sicily tended to be small,<sup>89</sup> which could indicate that they followed the pattern of the previous Muslim *iqta* military land-holdings. Perhaps they were, as a consequence of their small size, large in number. Elsewhere there is mention of non-noble freeholders, probably new settlers and colonists, whose land tenure was on condition of military service.<sup>90</sup> Such an essentially feudal structure was, nevertheless, firmly rooted in the pre-Norman administrative system. Variations between provinces also betrayed the pre-Norman foundation. In Apulia and Ca-

<sup>83</sup> C. CAHEN, «Un texte peu connu relatif au Commerce Oriental d'Amalfi au X<sup>e</sup> siècle,» in *Archivio Storico per le Province Napoletane*, n. s. XXXIV (1955), pp. 64-65.

<sup>84</sup> BRETT, *op. cit.*, pp. 82-83.

<sup>85</sup> FRENCH, *op. cit.*, p. 78, note 3.

<sup>86</sup> WALEY, *op. cit.*, p. 121.

<sup>87</sup> CAHEN, *Le Régime Féodal*, pp. 62-64.

<sup>88</sup> CURTIS, *op. cit.*, p. 351.

<sup>89</sup> BEELER, *op. cit.*, p. 72.

<sup>90</sup> *Ibid.*, p. 74.

pua Lombard elements were visible,<sup>91</sup> in Calabria Byzantine and in Sicily, most noticeably of all, Islamic.

The Norman rulers could not, however, rely solely on such feudal resources.<sup>92</sup> There was, for example, a theoretical widening of military obligation so that the entire adult male population could be called upon to fight.<sup>93</sup> The serfs, *servientes defensati*, were expected to provide their own equipment<sup>94</sup> while in Sicily the villein class, whether of Lombard, Italian, Greek or Muslim origin, had to undertake specific local garrison duties.<sup>95</sup> In reality, however, the growing centralization and wealth of the Norman government seems to have led to a steady decline in such a reliance on local levies, particularly in traditionally well administered ex-Byzantine and ex-Islamic areas like Calabria and Sicily.<sup>96</sup> In turn there was a rapidly increasing reliance on paid professional mercenaries.<sup>97</sup>

This increased employment of paid professionals introduced yet more elements into an already complex military situation. Troops as well as sailors were recruited from northern Italian states like Pisa and Genoa, being used to garrison coastal cities as well as to man the fleet.<sup>98</sup> It has, in fact, been suggested that the Norman rulers of Sicily relied on strictly Italian troops far more than has normally been realized.<sup>99</sup> Non-Muslim as well as Siculo-Muslim troops were, of course, needed to support the feudal core of the Norman army. The Normans made war on almost all their neighbours at various times, including the rulers of North Africa. It was here that the non-Muslims were required since it seems to have been agreed that the Normans' Muslim troops would not be sent against their co-religionists.<sup>100</sup> Altogether the Norman field army could consist of heavy and light cavalry, some of the latter being armed with the bow though probably not fighting in Turkish Central Asian horse-archer fashion, plus heavily armoured and more lightly equipped infantry. Other contingents of volunteers fought without pay, but for

<sup>91</sup> E. JAMISON, «The Norman Administration of Apulia and Capua,» in *Papers of the British School at Rome*, VI (1913), p. 266.

<sup>92</sup> BEELER, *op. cit.*, p. 62.

<sup>93</sup> *Ibid.*, p. 74.

<sup>94</sup> CHALANDON, *op. cit.*, vol. II, p. 535.

<sup>95</sup> CURTIS, *op. cit.*, p. 365.

<sup>96</sup> CAHEN, *op. cit.*, p. 118.

<sup>97</sup> CAHEN, *op. cit.*, p. 76.

<sup>98</sup> E. JAMISON, *Admiral Eugenius of Sicily* (London 1957), p. 114.

<sup>99</sup> WALEY, *op. cit.*, p. 121.

<sup>100</sup> F. GABRIELI, «La Politique Arabe des Normands de Sicile,» in *Studia Islamica*, IX (1958), pp. 92-93.

booty alone.<sup>101</sup> These latter *rizico* seem to recall those *muṭṭawwi*<sup>x</sup> volunteers who figured so prominently in the Muslim armies of the period.

A Muslim landed aristocracy also survived, at least in western Sicily. Although probably depleted and in decline, it still seems to have held a number of castles and to have fielded its own military forces of both infantry and cavalry until the early 13th century.<sup>102</sup> Most of the Muslim troops serving the Norman rulers were clearly professionals paid by the Treasury rather than a part-time militia. Though paid, their service was in a way a quasi-feudal duty performed in return for the religious toleration extended towards Islam by the Norman government. Such troops formed a standing army that included light cavalry, a corps of skilled siege-engineers and numerous infantrymen of whom the archers were renowned for their speed of movement and rate of shooting. These Muslim troops were organized along lines that reflected the pre-Norman *jund* system and were led by men of their own faith.<sup>103</sup> An élite, significantly drawn from the ranks of the infantry archers, formed a guard for the Royal Treasury or Camera.<sup>104</sup>

Muslim troops, the most reliable part of the ruler's military potential, were reputedly led by their own *quwwad* (sing. *qā'id*).<sup>105</sup> This explanation has, however, recently been placed in some doubt. The title merely indicated leadership but carried no particular rank. Many *quwwad* were, in fact, legally registered as serfs.<sup>106</sup> The first such leaders seem to have survived from the preceding Kalbite military hierarchy. Later others were of higher social rank, but this status bore no apparent relationship to the title of *qā'id*. In fact the title was probably little more than an honourific which could also be given to Christians.<sup>107</sup>

#### THE SICULO-NORMAN COURT AND ITS CEREMONIAL

The élite Muslim Treasury guards may, to some extent, have also had ceremonial functions. Siculo-Norman court ceremonial was among the most complicated and splendid in western Europe. King William II,

<sup>101</sup> AMARI, *op. cit.*, vol. III/2, p. 547.

<sup>102</sup> E. LÉVI-PROVENÇAL, «Une héroïne de la Résistance Musulmane en Sicile au début du XIII<sup>e</sup> siècle.» in *Oriente Moderno*, XXXIV (1954), p. 286.

<sup>103</sup> BEELER, *op. cit.*, pp. 74-75; FITZ-CLARENCE, *op. cit.*, pp. 46-47.

<sup>104</sup> JAMISON, *Admiral Eugenius*, p. 39.

<sup>105</sup> CURTIS, *op. cit.*, pp. 371-372; BEELER, *op. cit.*, p. 75.

<sup>106</sup> LÉON-ROBERT MENAGER, *Amiratus-L'Émirat et les Origines de l'Amirauté (XI<sup>e</sup>-XIII<sup>e</sup> siècles)* (Paris 1960), p. 88, note 1.

<sup>107</sup> *Ibid.*

during the latter part of the 12th century, presided over a palace where Muslim forms of ceremony seem to have predominated, although Byzantine fashions may earlier have been more important.<sup>108</sup> Many court officials were Muslims and ceremonial dress seems to have been a mixture of Byzantine and Muslim styles.<sup>109</sup> The source of such Muslim inspiration must surely have been either the memories of surviving Kalbite officials or the contemporary courts of Ifriqīyah and Egypt. The former were, incidentally, almost certainly a provincial variation of the latter. If so, then one should logically look to Cairo for the originals of any elements of Muslim court ceremonial in Norman Palermo. That, in fact, is precisely what seems to be indicated on those Cappella Palatina panels which illustrate ceremonial scenes. Not all the elements known to have featured in Fāṭimid ceremonial are, however, to be seen on the Palermo ceiling

Fāṭimid official ceremonial was, even as early as the end of the 10th century, more sophisticated than that of any other court with the exception of the Byzantine Empire.<sup>110</sup> Symbols of military rank included collars or necklaces and decorated staffs or wands.<sup>111</sup> In procession various military functionaries carried the Caliph's weapons and other symbols of authority including a parasol, sword, glaive, spear and shield.<sup>112</sup> Decorated staffs of rank were covered with silver. Some were also gilded. To these were fastened embroidered streamers, while their tops were surmounted by gilded silver balls.<sup>113</sup> The ruler's own flags and banners were of assorted shapes and sizes. The most important «Banners of Glory,» of which there were two, seem to have been carried furled. But numerous other smaller silk flags, embroidered with Koranic inscriptions, were flown from simple bamboo shafts. Large wind-socks in the form of lions were also prominent.<sup>114</sup> Although no such devices appear on the Cappella Palatina ceiling, they were known in Carolingian Europe and were probably of ultimate Central Asian origin (fig. 370). The senior «Men of the Sword,» who were the military rather than civilian or administrative élite of the Fāṭimid state, were distinguished

<sup>108</sup> CHALANDON, *op. cit.*, vol. II, pp. 738-739.

<sup>109</sup> *Ibid.*, pp. 738-740.

<sup>110</sup> M. CANARD, «Le Cérémonial Fatimite et le Cérémonial Byzantin,» in *Byzantion*, XXI (1951), p. 355.

<sup>111</sup> CANARD, «Le Cérémonial», p. 367.

<sup>112</sup> *Ibid.*

<sup>113</sup> CANARD, «La Procession du Nouvel An chez les Fatimides,» in *Annales de l'Institut des Études Orientales de la Faculté des Lettres d'Alger*, X (1952), pp. 370-371.

<sup>114</sup> CANARD, «La Procession du Nouvel An,» pp. 383-386.

by a special *mubannak* turban.<sup>115</sup> This, as its name implied, went under the wearer's chin like a bridle. Certain troops also wore parade arms which were normally kept in a separate arsenal, the *kbizān al tajammul*.<sup>116</sup> These would presumably have included those gilded swords, helmets with shagreen-covered aventails or neck-guards, shagreen-covered maces, javelins with silvered shafts decorated with silk tassels and shields with silvered bosses that appeared during important processions.<sup>117</sup> Not surprisingly, the saddles and horse-harness of senior officers were similarly magnificent. Gold, silver, enamelling and inseting with precious stones were all used as decoration, while some horses also wore collars of gold chain or amber and even gilded bracelets around their legs. Brocade and silk fabrics decorated certain saddles on which a senior man's insignia, rank and even official number or *'idād* was inscribed.<sup>118</sup>

It is worth noting that symbolic camel litters, or *'ammārīyāt*, were also used as emblems of rank in Fātimid Egypt.<sup>119</sup> These were apparently unoccupied, unlike those illustrated on the Cappella Palatina ceiling. But their brocaded sides, silk streamers and silver-decorated leather rails were otherwise reminiscent of those in Palermo<sup>120</sup> (figs. 24 and 26).

## ARMS PRODUCTION AND TRADE IN THE NORMAN KINGDOM

The Norman rulers of Sicily and southern Italy inherited a flourishing, although probably small-scale, local armaments industry. As yet, however, it is impossible to say how the products of such industries differed from, or were similar to, the arms and armour of neighbouring arms manufacturing regions in Western Europe, Byzantium, North Africa or the Middle East.

It is also unfortunate that we do not know how many, and to what degree, various late Roman arms manufacturing centres continued production during the so-called Dark Ages. In the present context it would be particularly useful to know the fate of the Roman *fabricae* at Benevento which, although it appears to have been of minor importance pro-

<sup>115</sup> CANARD, «La Procession du Nouvel An,» p. 374; ID., «Le Cérémonial,» p. 368.

<sup>116</sup> CANARD, «Le Cérémonial,» p. 355.

<sup>117</sup> CANARD, «La Procession du Nouvel An'» pp. 367-370.

<sup>118</sup> *Ibid.*, pp. 374-375.

<sup>119</sup> *Ibid.*, p. 371.

<sup>120</sup> *Ibid.*



ducing unspecified arms,<sup>121</sup> was situated in a city whose political importance grew rather than declined during those confused centuries. Some ex Roman centres probably continued production under barbarian rule, particularly those in the Rhineland and upper Danube provinces<sup>122</sup> which were to become Europe's most important sword-making regions. A similar survival has been suggested for Pisa and Lucca,<sup>123</sup> the latter city having had a *fabricae* making swords in the 4th and 5th centuries.<sup>124</sup>

Muslim Sicily was not only rich in iron from around Messina and Palermo<sup>125</sup> but also in the timber needed to provide the energy for metal-working. Armourers were, in fact, reported to have been active in late 9th century Palermo,<sup>126</sup> Muslim Sicily certainly seems to have shared the general economic expansion, both agricultural and industrial, that was seen in the western provinces of Islam from the 8th to 11th centuries.<sup>127</sup> In North Africa a growing metallurgical industry far outstripped anything seen in Classical times, largely because the Romans had enjoyed access to other more easily exploited mineral-rich regions.<sup>128</sup> Under the Fāṭimids this expansion also involved an arms industry, high-quality leather shields and rather less renowned swords being specifically mentioned.<sup>129</sup>

A comparable, though perhaps less dramatic, process of economic expansion was taking place in southern Italy from the 7th to early 11th centuries. There was a growth of wealth and production in both the Byzantine provinces and the Lombard duchies which involved industry and agriculture.<sup>130</sup> Although silk production was the most vital industrial sector, there was also plenty of mining, metal-working and shipbuilding.<sup>131</sup>

<sup>121</sup> O. SEECK, *Notitia Dignitatum* (Berlin 1876).

<sup>122</sup> M. TODD, *Everday Life of the Barbarians, Goths, Franks and Vandals* (London 1972), pp. 116-117.

<sup>123</sup> D. M. BULLOUGH, «The Early Medieval City in Western Europe» (Unpub. paper delivered to the colloquium on *The Early Medieval City*, Edinburgh University, 6 may 1978).

<sup>124</sup> A. H. M. JONES, *The Later Roman Empire, 284-602 AD* (Oxford 1964), p. 834.

<sup>125</sup> M. LOMBARD, *Les métaux dans l'ancien monde du V<sup>e</sup> au XI<sup>e</sup> siècle* (Paris 1974), p. 162.

<sup>126</sup> AHMAD, *op. cit.*, p. 95.

<sup>127</sup> LEWIS, *op. cit.*, pp. 161-167.

<sup>128</sup> LOMBARD, *op. cit.*, pp. 159-162; G. MARCAIS, *La Berbérie Musulmane et l'Orient au Moyen Âge* (Paris 1948), pp. 79-80.

<sup>129</sup> BESHIR, *op. cit.*, pp. 55-62 and 67-70; Murḍā ibn ʿĀlī ibn Murḍā al Tarsūsī, trans. and edit. C. CAHEN, «Un Traité d'Armurerie composé pour Saladin,» in *Bulletin d'Études Orientales*, XII (1947-48), pp. 106 and 127.

<sup>130</sup> GUILLOU, «Italie méridionale byzantine,» pp. 166-167.

<sup>131</sup> *Ibid.*, p. 170.

The lively Mediterranean trade of coastal cities like Amalfi during these centuries is perhaps better known, although the importance of this latter maritime republic declined steadily in the face of Pisan and Genoese competition from the 10th century onwards.<sup>132</sup> Nevertheless, it is worth noting that trade between the southern Italian ports of Amalfi and Salerno, particularly in their traditional cargoes of wood and iron, revived immediately after their occupation by the Normans. Thereafter it continued until relations with Egypt were ruined by Siculo-Norman attacks on the Nile Delta in 1153.<sup>133</sup> In this context it should be pointed out that the Norman rulers of Sicily and southern Italy continued their predecessors' strict state monopoly over the exploitation of forests and iron mines, and hence over arms production, as well as over the export of primary products.<sup>134</sup>

#### EQUIPMENT ILLUSTRATED ON THE CEILING

The arms and armour illustrated on the Cappella Palatina ceiling is as varied as one would expect in such a culturally mixed island as 12th century Sicily. Yet Islamic elements predominate and it may even prove to be the case that those aspects which at first glance appear very European may, in fact, also have been known in western Islam.

All the swords on the ceiling are straight, but within this limitation they show a great deal of variety. Only one weapon (fig. 1 left) could be described as a typical 12th century European sword with its gradually tapering outline, sharp point, prominent quillons and heavy pommel. Similar weapons survive in a number of western European countries (figs. 302, 323 and 334) and their various features are shown in much mid-12th century Italian art (figs. 248, 250, 257, 263 and 267). Interestingly enough, the Cappella Palatina horseman who is carrying this perhaps sheathed sword is, judging by his costume, not intended to be a Norman or indeed a Christian.

Swords with non-tapering blades having rounded, blunt ends predominate on the Cappella Palatina ceiling and could be regarded as showing Islamic characteristics (figs. 3, 8, 13 and 23; possibly also 17, 18 and 20 to 22). Such weapons were certainly typical of much of the

<sup>132</sup> S. M. STERN, «A document from the Fāṭimid Chancery concerning Italian Merchants,» in *Studi Orientalistici in Onore di Giorgio Levi della Vida* (Rome 1956), pp. 534-537.

<sup>133</sup> CAHEN, «Un texte peu connu,» pp. 64-65; M. CANARD, «Une lettre du Calife Fāṭimide al Hāfiz (524-544/1130-1149) à Roger II,» in *Atti del Convegno Internazionale di Studi Ruggieriani* (Palermo 1955), pp. 125-127.

<sup>134</sup> BEELER, *op. cit.*, p. 74; CURTIS, *op. cit.*, p. 370.

Muslim and Byzantine worlds prior to the adoption of the curved Central Asian sabre. That is from the late-Roman period to the 12th century (figs. 93, 123, 126, 127, 141, 145, 146, 148, 155, 158, 188, 201, 203, 210, 276 and 346) and beyond. They are also clearly described by such Muslim authors as al Kindī,<sup>135</sup> who also pointed out that European swords differed by having tapering blades.<sup>136</sup> Essentially the same weapons were, however, to be seen in parts of western Europe, particularly those having close cultural, commercial or political links with the Muslim world in the 11th (figs. 221 C, 233, 280 C, 282 and 312) and even 12th centuries (figs. 238 A, 242, 243, 254, 286, 292, 299, 318, 324 and 325).

Perhaps apparently single-edged weapons might be a more specific pointer to one or other influence (figs. 1 and 11 right). Those with a single curved edge and blades that are too thin to be termed falchions and too late to be regarded as *scramasaxes* appear to have been characteristic of Byzantium and some of its neighbours in earlier centuries (figs. 140, 147, 217 and 348). Yet they were confined almost entirely to Sicily and Italy by the 11th and 12th centuries (figs. 31, 61 and 223).

The design of quillons has traditionally been used as a guide by those studying swords and representations of swords. They come in a greater variety than do blades while at the same time tending to be more easily recognized and categorized than the often crudely represented swordblades of much medieval art. Quillons are also normally visible even when a sword is in its scabbard. On the Cappella Palatina ceiling there are four major categories of quillons. The first is, paradoxically, a lack of apparent quillons (fig. 1). Although missing from most daggers and knives in both Islam and Christendom, the absence of quillons from weapons long enough to be called swords does, by the 11th and 12th centuries, seem strongly associated with western Islam and the immediately neighbouring Christian regions (figs. 31, 32, 35, 61, 69, 71, 84, 96, 113, 115, 120, 224 and 277). One might have been tempted to speculate on a specifically North African, *Maghribī* origin for this style, given that it seems to be present even in the probably 7th century *Asbburnham Pentateuch* (figs. 76 and 77), had it not been for the clear presence of quillons in later, Islamic, sources from the *Maghrib* (figs. 79, 81 and 87).

Thick quillons which extend only slightly beyond each side of the blade are the most characteristic of all those illustrated on the Cappella

<sup>135</sup> AL KINDĪ, «Al Suyūf wa Ajnāsuha,» edit. A. R. Zaki, *Bulletin of the Faculty of Letters, Fouad I University*, XIV (1952), pp. 9-11.

<sup>136</sup> AL KINDĪ, *op. cit.*, pp. 32-33.

Palatina ceiling (figs. 3, 4, 8, 19 and 21). They are also seen throughout the 12th century Mediterranean world, though perhaps most often along the southern shore. Asymmetrical quillons are quite another matter. Shown once very clearly (fig. 13) and twice in a more debatable form (figs. 19 and 23), such asymmetrical quillons are, without doubt, an Islamic characteristic and an eastern one at that. Their origins are probably to be found in eastern Iran or Transoxania (figs. 191, 368 and 371) and their presence strongly suggests either a single-edged weapon or the slashing style of sword-play that would later be associated with sabre-fencing. The migration of this form westwards may have preceded the coming of Islam (figs. 142 and 143) but was certainly stimulated by that event (figs. 136, 139, 160, 161, 177, 181, 182, 198, 307 and 348). Turkish tribal migrations similarly took asymmetrical quillons westward along a northern axis (fig. 343). Nowhere, outside the Iberian peninsula, have I been able to find a representation of this type of asymmetrical quillons in Christian western Europe.

The langet, or projection from the quillons down the blade, similarly reached Europe via Islam. This feature was known in many parts of Europe in the 12th century but was not widely adopted until the 15th. It is clearly, though only once, shown on the Cappella Palatina ceiling (fig. 20). During the 12th century such langets may have formed part of most swords in Egypt (figs. 125 and 126), many in the Iberian peninsula (figs. 295, 296 and 299) and a few such weapons in southern France (fig. 324). Such a langet could have developed from an almost triangular style of quillons which, having its apparent origins in India, spread across Islam and Byzantium from the 7th to 10th centuries, eventually being represented in southern Italian manuscripts of the 11th century (fig. 226).

Four figures on the ceiling appear to be ceremonial guards and, judging by their very Islamic costume, could represent those élite Muslim units that protected the Norman ruler and his Treasury (figs. 17 and 20 to 22). Their stylized stance probably had its iconographic origins in Iranian art and it mirrors that adopted by supposed «guard» figures in courtly art from other Islamic lands from the 8th to 13th centuries (figs. 103, 157, 169, 187, 193, 204 and 271). The Cappella Palatina ceiling is not the only example from Sicily or southern Italy (fig. 29) and another example may even illustrate Islamic iconographic influence almost at the centre of 9th century Christian Europe (fig. 218).

Spears appear six times on the Cappella Palatina ceiling, but only on three occasions are they in use, twice with a single-handed downward thrust (figs. 1 and 12) and once in that two-handed technique seen in most Islamic art (fig. 7). The two downward thrust pictures, although

realistic and perfectly feasible, should be treated with caution because both figures are obviously posed so that they fit the constricted space of half a semi-dome. Of greater interest is the third horseman (fig. 7). I have attempted to discuss the question of medieval European and Islamic cavalry spear techniques elsewhere.<sup>137</sup> The two-handed technique with a long lance was obviously extremely ancient, long preceding the adoption of stirrups. Yet it persisted in the Middle East and North Africa at least until the end of the medieval period. Such a survival is evidenced not only by the illustrated sources, of which other Sicilian examples are known (figs. 64 and 65), and where iconographic conventions might have been expected to persist, it is also described in written sources such as *furūsīya* cavalry training manuals.<sup>138</sup>

Here, however, we are more concerned with the weapons rather than the way in which they were used. Where visible most of the spears have normal diamond-shaped blades with sharply angled edges (figs. 2, 10 and 25). Such would seem to have been preferred in western and central Islam from the 11th to 13th centuries, although broader leaf-shaped spear-blades were also illustrated. In Europe, meanwhile, there was a gradual move away from diamond-shaped cavalry spear-heads with angled edges towards a narrower version of the leaf-shaped blade. This trend probably reflected the increasingly widespread possession of armour among European horsemen. Two clearly illustrated and, from a European viewpoint, unusual features do, however, demand comment. The first is an elaborately shaped, almost fleur-de-lys, spear-head wielded by an armoured horseman (fig. 12). This I have not found in a strictly European context and, in fact, the only apparent parallels all date from the 12th century and stem either from Sicily (fig. 63) or western Iran (figs. 174, 175 and 178). Large spear-blades with a waisted or barbed outline having, in effect, two cutting angles on either side are, however, seen in Egyptian art from around this time. They appear on javelins as well as true spears or lances (figs. 105, 106, 108 and 130). These would be widely illustrated in Syria and Mesopotamia during the following century. Nevertheless, where such small details are concerned too much

<sup>137</sup> D. NICOLLE, «The Impact of the European Couched Lance on Muslim Military Tradition,» in *Journal of the Arms and Armour Society*, X (1980), pp. 6-40.

<sup>138</sup> MUHAMMAD AL AQSARĀ'Ī, *Nibāyat al Su'l wa'l Umniya fi Ta'lim A'māl al Furūsīya* (Ms. Or. 3631, British Library, London); anon. *Kitāb Majmū' fi al Rumb wa Ghayrihi* (Revan Ksku Coll., Istanbul); IBN 'AKHĪ KHAZZĀM, *Kitāb, 'Ilm al Furūsīya wa'l Bayāra* (Ms. Arabe 2824, Bib. Nat., Paris). For other important *furūsīya* manuscripts see HASSANEIN RABIE, «The Training of the Mamlūk Fāris,» in *War, Technology and Society in the Middle East*, V. J. Parry and M. E. Yapp, edits. (London 1975), p. 154, note 6 et seq.

can be read into what might have been little more than a slip of the artist's hand or a product of his imagination.

The same might be true of the spherical protuberance clearly illustrated beneath the blade of a spear carried by a camel rider on the Cappella Palatina ceiling (fig. 25). On the other hand comparable protuberances are also seen within a clearly defined geographical region. They could have served the same function as so-called «boar-spear» lugs which were characteristic of many spears from early medieval Europe, Byzantium and Islam. Such devices ensured that the weapon did not penetrate too far into a victim and thus risk either breaking the shaft or being difficult to extract. Spherical, or at least not lug-shaped, anti-penetration devices seem to be illustrated with varying degrees of clarity from 8th or 9th century eastern Turkistān (fig. 370) to 13th century Iberia (figs. 303 and 304). Its apparent migration westwards is very erratic and it would be dangerous to suggest that this form of anti-penetration device was of Turkish origin, thereafter being introduced to other peoples via Islam (figs. 98, 105, 154, 162, 163, 190, 227, 283, 308, 313, 360, 361 and 362). That such a feature was a reality rather than an artistic device might be confirmed by its presence on surviving later Islamic weapons (fig. 186).

Attached to two spears on the Cappella Palatina ceiling are flags or pennons (figs. 2 and 10). Neither could be described as typically European although there was, of course, plenty of variety in the flags, banners and pennons of 12th century Europe. The first is a long triangular flag with a vertical decorative band which, in a more specifically Muslim context would probably have borne a Koranic inscription (figs. 196 and 197). Certainly the *rāya*, normally considered to be a large banner when compared with the *liwā'*, often carried pious inscriptions in Fāṭimid Egypt.<sup>139</sup> This I would take as the most obvious source of inspiration for those artists working on the Cappella Palatina ceiling.

Large triangular flags are extremely rare in early medieval European art, and where they are shown they tend either to be associated with infidel foes or are illustrated in contexts having strong Islamic or Central Asian links. Examples include Mozarab manuscripts from Spain (figs. 273, 274, 279 and 284), a Spanish manuscript illustrating a Babylonian army (fig. 306), a 12th century Russian manuscript in which such banners predominate (fig. 344), Sicilian and south Italian sources (figures 54 and 237A), enemies overthrown by the Maccabees in an early 10th century manuscript from St. Gallen (fig. 331), and a manuscript illuminated in the Crusader States (fig. 330) which also betrays many

<sup>139</sup> CANARD, «La Procession du Nouvel An,» pp. 383-384.

other minor Islamic features. Interestingly enough, this latter source is one of the few in European art to show streamers of a sort referred to in Fāṭimid Egypt as *mā'ājir*.<sup>140</sup> The second standard on the Cappella Palatina ceiling does look more like three such streamers than it does a rectangular flag with a trifurcated edge. Although such an obvious form of decoration as a streamer is shown in many countries it does, around the period in question, seem to have been more popular within the Islamic orbit than within Christendom (figs. 108, 165-168, 172, 176, 268, 313 and 360). The question of Islamic flags and banners has caught the attention of many scholars but still remains highly complex.<sup>141</sup>

The only other weapons that appear on the Cappella Palatina ceiling are a supposed mace (fig. 9) and two forms of axe (figs. 16 and 23), although in the latter case two of the objects in question (fig. 16) could also be interpreted as fans. The supposed mace, apart from apparently being in the process of having its haft broken, is also a very basic weapon. As such it would equate with the Arabic *dabbūs* which, in most original sources, seems to indicate a simple mace rather than the winged form of *'amūd*.<sup>142</sup> Maces had long been common in Muslim armies, particularly those of the richer eastern and central provinces where armour was abundant. The mace was, of course, primarily an armour and helmet-breaking weapon. Maces were prominent during Fāṭimid ceremonial parades,<sup>143</sup> clearly caught the attention of European warriors who faced them during the later 12th century<sup>144</sup> and were widely adopted by Byzantine cavalry from the 10th century onwards.<sup>145</sup> But they did not become important in western Europe until the 12th or 13th century.<sup>146</sup>

Simple maces similar to those seen on the ceiling appear regularly, if not particularly frequently, in pre-Islamic and Islamic art from the 7th to 12th centuries (figs. 94, 97, 144, 149, 157, 185, 192, 194, 195,

<sup>140</sup> *Ibid.*, pp. 370-371.

<sup>141</sup> M. GIERS, «Sur la question des drapeaux arabes,» (in Russian) *Zapiski Kollegii Vostokoviédov*, V (1930), pp. 342-365; A. R. ZAKI, *Al A'lam wa'l Sharat al Mulk fi Misr (Flags and Coats of Arms in Egypt)* (Cairo 1948); also the relevant entries in *The Encyclopedia of Islam*, second edition.

<sup>142</sup> AL ṬARSŪSĪ, *op. cit.*, pp. 117 and 139.

<sup>143</sup> CANARD, *op. cit.*, pp. 367-369.

<sup>144</sup> ANON., *Itinerarium Peregrinorum*, trans. K. Fenwick (London 1958), pp. 64, 78, 93 and 131-132.

<sup>145</sup> J. F. HALDON, «Some Aspects of Byzantine Military Technology from the Sixth to the Tenth Centuries,» in *Byzantine and Modern Greek Studies*, I (1975), p. 39.

<sup>146</sup> E. OAKESHOTT, *The Archaeology of Weapons* (London 1960), pp. 178 and 258; P. MARTIN, *Armour and Weapons* (London 1967), p. 244.

209, 363 and 369). They also appear in Byzantine sources, though generally in the hands of Biblical villains, infidels or, more specifically, Bedouin Arabs. This association of the simple mace with the Muslim world is also seen in western European art where such weapons are almost invariably found in provinces under varying degrees of Muslim influence (figs. 216, 220, 225, 240, 241, 273, 280, 280 B, 285, 298, 301 and 314). In 12th and early 13th century Sicily itself this weapon was particularly abundant (figs. 41, 44, 60 and 73).

As to the Palermo axes, one appears to be a perfectly normal war-axe (fig. 23) that would not have looked out of place in the hands of a northern European warrior (figs. 332, 335, 340 and 342). The only feature that distinguishes the Cappella Palatina axe is that its «beard», or the extension of its blade, clearly projects up rather than down the haft as was normal with asymmetrical forms of European war-axe. As such it is of a form not generally seen outside 12th century Sicily and southern Italy (figs. 62 and 241) although it will be clearly shown in later Spanish sources (fig. 305). It could, in fact, be misleading to assume any north European influence on these particular Sicilian and south Italian weapons. War-axes were certainly not uncommon among Mediterranean warriors, both Muslim and Christian during this and preceding centuries (figs. 228, 231, 232, 241, 245, 280 A, 281, 288, 291, 309, 311, 315, 317, 326, 328, 353, 355 A and 357). They are also prominent in Sicilian art of the 12th century (figs. 36, 40, 46, 47, 59, 62, 70 and 72). The popularity of various war-axes in this region at around this time lends support to the interpretation of the two objects on the Cappella Palatina ceiling (fig. 16) as axes rather than as fans. Broad, half-moon-shaped axes in which the two ends of the blade almost touch the haft are to be found among the other Sicilian weapons figured above. They were also not unknown in Islamic art from the 9th to 14th centuries (figs. 131, 137 and 195), often in a ceremonial context just as they are on the Cappella Palatina ceiling. This, in addition to their shape, leads one to assume that the weapons in question are examples of the *nāchakh* or *nājikh*. In 13th century Muslim India this was considered a «noble» weapon suitable for princes,<sup>147</sup> and an Indian origin seems to be suggested.<sup>148</sup> In Egypt, during the preceding century, the *nājikh* was stated to be of eastern, perhaps Persian, origin and often to have a highly decorated blade.<sup>149</sup> Similar axe-blades are certainly placed

<sup>147</sup> MUḤAMMAD IBN MAṢṢŪR FAKHR AL DĪN MUBARAKSHĀH, *Adab al Ḥarb wa al Shujāʿah*, edit. A. S. Khwānsārī (Tehran 1969) pp. 260 and 268.

<sup>148</sup> MUBARAKSHĀH, *op. cit.*, p. 272.

<sup>149</sup> AL ṬARSŪSĪ, *op. cit.*, pp. 118 and 140.



in the hands of the Hindu deities Ganesa and Durga by Indian artists both in continental India (figs. 372 and 373) and the East Indies (fig. 374). Broad axe-blades fastened to their hafts at two points rather than the normal single fixture are rare, but again not unknown (figures 152, 163 and 241).

It is worth noting that one particular weapon is missing from the Cappella Palatina ceiling, namely the bow and arrow. This might seem strange given the importance and high status of Muslim archers among the Norman rulers' élite guard units. On the other hand, bows seem to have had no ceremonial status in Islamic lands that lacked a dominant Turkish or Turkified military aristocracy. The weapons are, however, widely illustrated in other Sicilian and neighbouring sources from this period (figs. 34, 37, 42, 43, 45, 51, 52, 56, 66, 82, 123, 130, 220, 233, 238B, 247 and 262). The majority of such weapons have angled «ears.» These are the unbending outer parts of a bow which are also illustrated in an interesting Sicilian manuscript from a century later (fig. 75). This may, however, have been a case of a Latin scribe directly copying an earlier original, just as might have been true of the Moroccan artist who produced a similarly dated Arabic edition of the same manuscript (fig. 91).

A minority of the presumed warrior figures on the Cappella Palatina ceiling clearly wear helmets (figs. 5, 9, 11 left, 12 and 13). Others probably do so (figs. 2, 3, 4, 8, 16 and 19), although in some of these latter cases their headgear could be non-protective hats. The most clearly delineated helmet (fig. 5) is worn by a horseman with a kite-shaped shield. It is of a tall conical form commonly seen throughout 11th and 12th century Europe. Here there is no evidence of a segmented spangenhelm construction, but by the mid-12th century helmets beaten from a single piece of iron were common. Though more rarely illustrated than in contemporary Europe, pointed helmets, some clearly of a segmented structure, were seen throughout most of the Muslim world (figs. 113, 114, 138, 155, 156, 158, 199, 205-208, 364 and 365). This is true even if one excludes Iberia where, of course, pointed helmets of a thoroughly European form predominate among those illustrated in Mozarab, Castilian and Catalanian manuscripts. A particularly clear Muslim representation of a pointed spangenhelm is to be found in the early 13th century Moroccan manuscript mentioned earlier (fig. 90). This is of great interest as so few illustrated sources are known from medieval North Africa, a region in close cultural and political contact with both Muslim and Norman Sicily. This manuscript is of further interest in the present discussion because it also illustrates a figure wearing a turban wrapped around a helmet or hat that is drawn in almost exactly the

same manner as is the spangenhelm in the manuscript (fig. 89). Might one not be justified in assuming that the headgear partially hidden by turbans on the Cappella Palatina ceiling (figs. 8 left, 16 left and 19) are also pointed helmets, as might be a similar form of headgear seen on a Fāṭimid Egyptian dish (fig. 112)? This is, however, mere speculation. So is the interpretation of other pointed headgear on the ceiling as helmets rather than hats. One might have a form of nasal (fig. 4) but this is too confusingly drawn to identify the headgear without question as a helmet. The very large nasal of the first helmet is in itself of interest. These were highly characteristic of 12th century Italy (figs. 246, 249, 255, 256 and 263), as they were of many other parts of Mediterranean western Europe. Substantial nasals also appear in 11th century perhaps Islamic-influenced southern Italian ivorywork (figure 221 C), Mozarab manuscripts from Spain (fig. 278), an earlier and more obviously Islamic ceramic fragment from Andalusia as well as on 10th century frescoes from Nubia (fig. 138) and Iran (fig. 200).

One other helmet on the Cappella Palatina ceiling is of sufficiently distinctive shape to merit comment. It appears to have a forward-angled crown (fig. 13), although lacking the smooth outline normally associated with 12th century European helmets with such forward-angled crowns (figs. 257, 290, 327, 337 and 339). Such forward-angled crowns, which almost certainly indicated that the front part and top of the helmet were thicker than the sides and rear, are a distinctively western European feature. Even when it does appear in Middle Eastern sources it betrays European influence, either because the piece of art was executed under Crusader domination or because Crusaders were the subject of the illustration (fig. 130). The abrupt, almost knob-shaped angle on the Cappella Palatina helmet need not pose a problem, however. Similarly abrupt forward tilts on a helmet's crown are widely shown in 12th century European sources. Most come from Italy or Spain, which may itself be significant as far as the Cappella Palatina illustration is concerned (figs. 245, 251, 255, 289, 293, 294 and 300).

The headcovering with the previously discussed possible nasal (figure 4), if it is indeed a helmet rather than a soft pointed cap, has a reverse-angled crown. Such a shape is rarer for a helmet than a forward-angled crown but is not unknown in the art of the period. It appears on 12th century headcoverings that clearly were real helmets, both in Sicily (figs. 49, 53 and 58), Italy (fig. 260 B) and as far away as western Iran (fig. 178).

Hauberks are twice clearly illustrated on the Cappella Palatina ceiling (figs. 11 left and 13). Such armour may also be worn by a third, less clearly defined, horseman (fig. 12). All these armoured men are, it

should be noted, horse riders. They all also wear helmets and carry kite-shaped shields. The representation of armour on the two well-preserved illustrations poses the classic problem of whether mail or scale is intended. The use of a repeated scalloped line looks at first glance more like scale, but there is evidence from other painted rather than carved sources in southern Italy, as elsewhere, to suggest that such a pattern was often used to indicate mail (figs. 54, 227, 228, 260 A and 261). The device was not popular in Egypt where the best-known representation of 12th century mail is rendered as a series of random dots (fig. 130) very similar to that just visible on the third, perhaps armoured, Cappella Palatina cavalryman (fig. 12). Otherwise it would seem that Egyptian artists used a series of tightly packed small circles to represent mail (figs. 101 and 105), a convention that was also popular in eastern Islamic painted sources. A third and more debatable Egyptian system of representing mail appears on a recently published 12th century ceramic fragment (fig. 129), but this has a parallel on the Cappella Palatina ceiling.

The case for scale armour cannot entirely be ignored, however. Such armours were certainly known in Italy and Sicily. Sometimes they are almost unmistakable (figs. 44, 238, 239 E, F and G, 246, 249 and 265) and at other times are less certain (figs. 55, 57, 221 and 269). Although I have argued elsewhere that the relatively frequent appearance of scale armour in Mediterranean Europe probably reflected strong Arab influence during the so-called Dark Ages,<sup>150</sup> surviving representations of supposedly Sicilian Muslim warriors from this and the immediately preceding century almost certainly indicate that mail was worn quite extensively (figs. 27-32, 74 and 224). North African illustrative material from this period is executed in a very crude style but I believe that we do have one reasonably clear representation of mail (fig. 78). Another probably shows the padded, quilted soft-armour widely associated with North Africa and the Sahara (fig. 81) while others almost defy interpretation, although they could represent mail (figs. 86 and 102). A fragmentary but clear illustration from Egypt shows a horseman wearing a scale or lamellar hauberk over his mail (fig. 101). The details of the representation seem to point to lamellar, while the still westward-looking orientation of Fāṭimid recruitment and military organization perhaps points towards scale armour.

A feature of two of the Cappella Palatina armoured riders is the apparent slit up the sides of their hauberks (figs. 12 and 13). A horseman's hauberk was, of course, normally slit up the front and back for

<sup>150</sup> D. NICOLLE, *Islamische Waffen* (Graz 1981), p. 17.

ease of riding, and is generally illustrated as such. But hauberks slit at the sides are not unknown (figs. 234, 258 and 267). Such a style must surely have been intended for fighting on foot as it would not only have been uncomfortable when riding but would make a horseman's legs vulnerable. Despite the fact that it is twice shown being worn by men on horseback, as it is on the Cappella Palatina ceiling, it should be born in mind that this fashion seems to be restricted to Italy. Here, from the 10th to 12th centuries and particularly in the pre-Norman south, urban infantry militias rather than feudal cavalry may have played a dominant role in local warfare.<sup>151</sup>

It might also be noted that one of the armoured riders has a decorative band around his upper arm (fig. 13). This may be taken as a *tirāz* such as those worn by various other figures on the ceiling (figs. 1 left, 4, 10, 12, 18, 21, 22, 25 and 26). Some of these, plus other figures, have sleeve decorations that may, however, be more satisfactorily interpreted as the borders of a sleeveless outer garment (figs. 2, 3 left, 14, 15, 16 left, 20, 21 and 22). The whole question of the Muslim *tirāz* remains vexed.<sup>152</sup> Essentially the term *tirāz*, in a medieval Islamic context, could refer to an embroidered garment normally signifying rank or honour, or to a garment bearing an inscription demonstrating loyalty or allegiance, or to the embroidered band on which this inscription was placed.<sup>153</sup> Some fabrics had woven tapestry or brocaded cotton ornamental bands applied to them, but in Egypt under the Fāṭimids the tapestry version became more popular and was manufactured, often for export, in Alexandria, Cairo and Tinnīs.<sup>154</sup> A workshop, the *khizānah al malikiyah*, specializing in the making of fabrics known as *tirāz al malik* existed under Norman patronage in 12th century Palermo and apparently continued to operate into the 13th century.<sup>155</sup> For this reason alone the appearance of the *tirāz* on the Cappella Palatina ceiling comes as no surprise. Yet the fashion of wearing decorative bands around the upper arms of ceremonial costumes may have been adopted both in Byzantium and Italy before the establishment of the Siculo-Norman realm (figs. 226 and 347), almost certainly as a result of Islamic influen-

<sup>151</sup> BEELER, *op. cit.*, pp. 66 and 192-194; VERBRUGGEN, *op. cit.*, pp. 103 and 125-126.

<sup>152</sup> A. GROHMANN, «Tirāz,» in *Encyclopedia of Islam*, first edition, vol. IV, pp. 785-792; L. GOLOBEK and V. GERVERS, «Tirāz Fabrics in the Royal Ontario Museum,» in *Studies in Textile History, in Memory of Harold B. Burnham* (Toronto 1977); M. MAZROUK, «Tirāz Institution in Medieval Egypt,» in *Studies in Islamic Art and Architecture in Honour of Prof. K. A. C. Creswel* (Cairo 1965).

<sup>153</sup> GOLOBEK and GERVERS, *op. cit.*, p. 82.

<sup>154</sup> *Ibid.*, pp. 82-83.

<sup>155</sup> GROHMANN, *op. cit.*, p. 790.

ce. The fashion may also have survived the collapse of the Norman kingdom (fig. 244). Certainly the application of a *tirāz* type of band over a hauberk was unusual, but again it was not unknown. Sometimes it is clearly illustrated (figs. 131, 170 and 213), at other times less certainly so (figs. 134, 265 and 329).

A further costume feature is also interesting enough to demand comment. This is a scarf or cloak slung across the chest and over the arm of the horseman who is wielding his spear in the supposedly «bedouin» two-handed style (fig. 7). Such cloaks may also be draped across the shield of a second horseman (fig. 8 right) and be used as rudimentary protections by two huntsmen (fig. 1). This manner of draping a cloak or sash over one shoulder and beneath another, rather as rolled blankets were carried by certain 19th century infantrymen, is characteristic of the 12th and 13th century Middle East (figs. 132-135, 151, 159, 164, 165, 168, 170, 171, 211 and 214) but disappeared in the 14th century. Interestingly enough it also appears in 11th century Italy (figs. 222 and 230B).

Such evidence is too thin for any theories to be based upon it, yet a general eastward spread of this fashion does seem to be indicated. Almost every representation of a Coptic warrior saint in both Egypt and Nubia, from the 8th to 13th centuries, portrays a substantial cloak over one arm. But this iconographic convention never shows cloaks going beneath an arm. Perhaps the fashion developed, barely recorded in surviving art sources, in Egypt and then spread across the central providences of Islam in the wake of Ayyūbid expansion (figs. 93, 100, 115 and 124).

The turbans illustrated on the Cappella Palatina ceiling are of two main types, those with (figs. 7, 8 left, 17, 20 and 22) and those without (figs. 9, 16 left, 23 and 25) the *mubannak* loose loop of cloth slung beneath the chin. As mentioned earlier, the *mubannak* style of wrapping a turban was a mark of senior military rank in the Fāṭimid Caliphate. Here it appears, paradoxically, to have been less frequently illustrated (figs. 108, 112 and 118) than the turban lacking a chin loop. Turbans of this latter style, essentially similar to those in Palermo, both with and without a trailing end or *raḥraḥ* hanging at the back, are seen in 10th to 13th century art from Egypt to Morocco (figs. 83, 86, 88, 91, 101, 103, 105, 106, 119, 120 and 128), and of course beyond.

Three quite distinctive forms of shield appear on the Palermo ceiling. These are the ordinary kite-shaped, so-called Norman shield (figs. 3, 5, 8, 9, 10, 11 left, 12 and 13), a kite-shaped shield with a flat base (fig. 9) which, judging by its proportions, may also have originally appeared on another damaged and now incomplete picture (fig. 8 left),

and small, round, hand-held bucklers (figs. 4, 11 right and 25). It is now widely accepted that the so-called Norman kite-shaped shield was known in Byzantium and parts of the Muslim world before the First Crusade. It cannot, therefore, have been introduced to the area by the north European warriors of that expedition. Known in the Arab world as the *ṭāriqab*, this shield was primarily considered an infantry defence suitable for siege-warfare.<sup>156</sup> In Persian-speaking regions it was known as the *sipar-i shūshak* or lute-shaped shield.<sup>157</sup> Apart from those well-known carvings on Cairo's al Naṣr Gate (fig. 117), the *ṭāriqab* also appears on a possibly 10th century Fāṭimid ceramic fragment (fig. 107), in large and small forms on a comparable 12th century fragment (figure 130), on a late 12th century Coptic Egyptian Gospel (fig. 126) and on the probably 12th century *Warka wa Gulshāh* manuscript from Azar-bāyjan (figs. 173 and 178-180). There is, therefore, no reason to insist on a Norman or even Christian inspiration for the Cappella Palatina kite-shaped shield, despite the fact that they are widespread in southern Italian and Sicilian art from the immediately preceding decades (figures 221 B, 229, 230 A, 236-239 and 242).

Of perhaps greater significance is the flat-bottomed shield (fig. 9). Known in Islam as the *janūwiyah*, it was specifically considered an infantry protection ideal for foot soldiers lined up in defensive array behind their shield-wall.<sup>158</sup> Clearly shown in both Christian and Muslim art from the Middle East (figs. 122, 126, 212 and 364), it only appears in Europe in Palermo (fig. 9) and Rome (fig. 259). In the former instance an Islamic inspiration is perfectly feasible while in the latter it would not be inappropriate since soldiers at Christ's crucifixion could well be represented as pagans, infidels or other sorts of undesirables.

The round shields on the Cappella Palatina ceiling are of the small, hand-held variety more accurately referred to as bucklers. Such shields abound in both Christian and Islamic art throughout the Middle Ages. So it may only be worthwhile drawing attention to a few examples from neighbouring regions, cultures and centuries (figs. 27, 28, 31, 32,

<sup>156</sup> BESHIR, *op. cit.*, p. 74, note 210; AL HARAWĪ, «Les Conseils du Ṣayḥ al Harawī a un Prince Ayyūbide,» trans. J. SOURDEL-THOMINE, *Bulletin d'Études Orientales*, XVII (1961-62), pp. 205-210; E. REHATSEK, «Notes on Some Old Arms and Instruments of War, chiefly among the Arabs,» in *Journal of the Bombay Branch of the Royal Asiatic Society*, XIV (1880), pp. 242-243; AL ṬARSŪSĪ, *op. cit.*, pp. 114 and 137.

<sup>157</sup> MUBARAKSHĀH, *op. cit.*, p. 242.

<sup>158</sup> AL HARAWĪ, *loc. cit.*; REHATSEK, *op. cit.*, p. 227; AL ṬARSŪSĪ, *loc. cit.*; ṬIMĀD AL DĪN AL KĀTĪB AL ISFAHĀNĪ, *Conquête de la Syrie et de la Palestine*, edit. Le Comte Carlo de Landberg (Leiden 188), pp. 68, 77 and 191.

78, 81, 85, 98, 100, 224, 226 and 240-242). These often have a very convex shape and as such might, at least in the Arab world, be examples of the *daraqah* or «bulbous» shield which would normally have been of leather.

A final form of rudimentary shield shown on the Cappella Palatina ceiling is a cloak slung over the left arm (fig. 1) in a manner that would later be associated with southern European cloak-and-dagger duelling techniques.<sup>159</sup> That the technique was known in the 11th century Mediterranean world, and probably beyond, is confirmed by the reminiscences of a Nordic warrior who served for some years in the Byzantine Varangian Guard.<sup>160</sup> It is also seen, sometimes clearly, sometimes less so, from the 4th century onwards in many works of art (figs. 92, 219, 275 and 345).

This leaves only horse furniture to be analyzed. The bridles all incorporate a nose-band (figs. 1-3 and 7-14). With the possible exception of Moorish Spain and a couple of representations on an Egyptian painted paper fragment, one of which illustrates a European (fig. 130), all 11th and 12th century Islamic bridles, including those from Egypt and North Africa, have nose-bands (figs. 83, 86, 102, 104, 108, 110, 111, 113, 115, 116 and 120). The majority, though not all, of European 12th century bridles were of a new form, lacking a nose-band, that was to remain popular for a further two centuries. It probably resulted from the adoption of a more savage form of curb bit (figs. 237 A-C, 253, 257, 266, 267, 286, 316, 320-322 and 333). The most obvious exceptions to this 12th century trend, outside Byzantium and Byzantine-influenced eastern Europe, was to be found in southern Italy and Sicily. Here the majority, though again not all, of bridles continued to incorporate nose-bands (figs. 221 A and B, 222, 227, 229, 234, 236, 239, 243 and 260 A). I venture to suggest that this could indicate a lingering Islamic and perhaps also Byzantine influence.

Where still visible, the horse-bits on the Cappella Palatina ceiling (figs. 2, 10, 12 and 14) seem to be of the curb variety, having a cross-piece or chain beneath the animal's chin to join the lower ends of the two cheek-pieces. Two other pictures are more difficult to interpret (figs. 7 and 8 right) but show no certain evidence of having illustrated snaffle, rather than curb, bits. The curb bit was probably introduced into Europe from the east during the so-called Dark Ages, perhaps via

<sup>159</sup> R. MARTÍNEZ DEL PERAL FORTON, *La Navaja Española Antigua* (Madrid 1979), *passim*.

<sup>160</sup> S. BLONDAL and B. S. BENEDITZ, *The Varangians of Byzantium* (Cambridge 1978), p. 212.

the Muslims in Spain and southern Europe<sup>161</sup> as well as via the Turks in eastern Europe.<sup>162</sup> But it does not seem to have been widely adopted throughout most of western Europe until the 14th century.<sup>163</sup>

Straightforward curb bits, lacking the linking chain or semi-rigid crossbar, had long been known in the pre-Islamic Iranian and Turkish worlds. They appear in Islamic art from the very beginning and shortly thereafter also in Byzantine sources. Their probable first appearance in the immediate vicinity of Sicily is, not surprisingly, on a fragment of 10th or 11th century Fāṭimid ceramic from Tunisia (fig. 78). They are, however, seen in the more abundant surviving Egyptian sources a century or so earlier (figs. 95, 98, 101, 102, 270 and 272). Here I am leaving aside a pair of dubiously dated, but supposedly early 8th century, curb-bits from Spain, one in the Real Armeria in Madrid and the other in the Metropolitan Museum of Art in New York (No. 47.100.24). As far as the rest of Europe is concerned, one must await the 11th century to see clear representations of the curb-bit, firstly in southern Italy under strong Islamic influence (figs. 221 A and B, and 222), then gradually progressing up the peninsula (figs. 229, 236 and 237), thence to Norman England (fig. 336) and, around the turn of the century to France (fig. 310). It is interesting to note how relatively soon the crossbar curb-bit was seen in the Norman realm of the north. Could this have been a result of contact with their cousins to the south, in Sicily? It is particularly unfortunate that the only 11th century Sicilian source to show a horseman is fragmented and lacks the animal's head (fig. 33). The curb-bit, with and without a linkage between its cheek-pieces, is, however, clearly shown in 12th century Sicilian ivorywork (figs. 64 and 68), as well as on the mainland (figs. 243, 260 A and 266).

Some pieces of horse furniture, or perhaps more accurately decorations, that betray Middle Eastern influence are horse-collars shown somewhat unclearly on the Cappella Palatina ceiling (figs. 1 left, 5, 7-10 and 11 left). This *qilādab* was essentially a broad strap running around the horse's throat but not apparently attached to the throat-lash. The origins of this fashion are obscure, but it has been suggested that decorative horse-collars were copied by the Muslims from the Turks in Central Asia.<sup>164</sup> While this may have been true, there is also pictorial evidence to suggest that similar decorations were known in Yemen, Par-

<sup>161</sup> BEELER, *op. cit.*, p. 170; L. LOURIE, «A Society Organized for War: Medieval Spain,» in *Past and Present*, XXXV (1966), pp. 68-69.

<sup>162</sup> A. KIRPITCHNIKOFF, *The Equipment of Rider and Horse in Russia from the 9th to 13th centuries* (Leningrad 1973), pp. 138-139.

<sup>163</sup> V. NORMAN, *The Medieval Soldier* (London 1971), pp. 233-234.

<sup>164</sup> M. LOMBARD, *The Golden Age of Islam* (Oxford 1975), p. 168.



thian and Sassanian Iran, Palmyra and the eastern regions of the Roman and Byzantine Empires during the pre-Islamic era. Exceptionally rich horse-collars, some even decorated with gold or amber, were a feature of Fāṭimid ceremonial harness,<sup>165</sup> while under the later Mamlūk Sultans of Egypt comparable scarves would act as emblems or means of identification.<sup>166</sup> Decorated collars also featured in the Marīnid army of early 14th century Morocco.<sup>167</sup>

As far as those shown in mid-12th century Sicilian sources are concerned however, the most obvious antecedents and parallels are to be found on the one hand in Egypt and the Maghrib from the 10th century onwards (figs. 83, 102, 109, 120, 129 and 130) and on the other hand in Byzantium during that same period (figs. 351, 353, 355 B, 356 and 359). Such collars do not appear in Europe outside Sicily and the Iberian peninsula, except on Italo-Saracenic ivories (fig. 222), until the 12th century. Even then there is only a single instance from Norman Apulia (fig. 239G), plus the 12th century «Song of Roland» stained-glass window at Chartres where Moors are represented (fig. 321). The fashion was not, in the event, to be adopted in medieval Europe.

The saddles illustrated on the Cappella Palatina ceiling are all of basically the same Middle Eastern type. They have rounded skirts, normally two girths and a moderately high flared cantle, though not of the wrap-around type associated with the European high or war saddle. The pommels, though only visible in a few panels, are clearly low and provide no protection to the groin or thighs as did the pommel of the later European war saddle. One may, therefore, fairly assume that all these seats were of the wooden, or in some cases bone, framed leather-covered type that had its origins in Central Asia (fig. 341). Such saddles were standard throughout the medieval Muslim world and were the direct ancestors of all forms of modern saddle, especially of the high and supportive so-called Cowboy saddle. They were also the original of the normal «peace» saddle of medieval Europe.

The skirts of such saddles did not, of course, have to be rounded. Their shape and size varied according to current fashion which was itself often governed by political factors such as the rise and fall of military élites from differing ethnic backgrounds. Suffice to say that rounded rather than squared saddle-skirts were characteristic of Byzantium (figs. 349, 350, 354, 356, 358 and 359). In Egypt and North Africa

<sup>165</sup> CANARD, «La Procession du Nouvel An,» p. 375.

<sup>166</sup> L. A. MAYER, *Mamluk Costume* (Geneva 1956), glossary.

<sup>167</sup> IBN FADLALLĀH, «Masālik al Aḥsār,» trans. J. SAUVAGET, in *Historiens Arabes* (Paris 1946), p. 135.

saddles having rectangular skirts retained their popularity (figs. 80, 102, 109, 113 and 120). A sharp increase of the rounded form in provinces slightly further east during the 11th and 12th centuries leads one to speculate that this fashion had been introduced, or at least encouraged, by the Saljūq Turks (figs. 153 and 366). However, it equally cannot be denied that such forms of saddle appear in Italian art from the 8th or 9th century to the 11th, predating any possible Saljūq influence. Perhaps in Italy the fashion survived from earlier Lombard days when again it was probably a reflection of Central Asian, Hunnish or Avar, influence (figs. 215, 222 and 235). Elsewhere in 12th century Italy, as in the rest of Europe, saddles for both peace and war normally had rectangular skirts and were quite unlike those shown on the Cappella Palatina ceiling (figs. 239 B-G, 243, 254, 257, 266 and 267).

A further feature that places these saddles on the frontier between Byzantino-Islamic fashion and that of western Europe is that some are secured by both breast and crupper straps (figs. 2, 4, 10 and 15) while others only have the former (figs. 1 right, 3, 5 and 7-9). During the first half of the 12th century, throughout most of western Europe including the Iberian peninsula, the crupper strap was gradually abandoned (figs. 252, 260 A, 266, 267, 287, 297, 319, 320, 333, 336, 338 and 339). In Italy, particularly in the south, there is evidence to indicate that the crupper strap was abandoned more reluctantly (figs. 54, 67, 239 A-D and 257). The continued use of the crupper strap in the Muslim and Byzantine worlds is, meanwhile, very obvious (figs. 83, 86, 120, 155, 183-185, 189, 358 and 359).

The sum total of evidence gained by a detailed analysis of the arms, armour, horse furniture and certain costume details illustrated on the Cappella Palatina ceilings points strongly towards an Islamic inspiration for most of the subjects shown. Where European elements can be isolated, they can generally also be found in western Islamic countries, particularly Egypt and North Africa. Other evidence already suggests that, in general, these provinces of the Muslim world had much in common with their Christian neighbours along the northern shores of the Mediterranean. In fact, one may be tempted to see, painted on the Cappella Palatina ceiling, representatives of a long-established early medieval Mediterranean military culture. This culture had, by the mid-12th century, all but been swamped by newer northern European styles on the Italian mainland, southern France and to a lesser degree Christian Spain. In Egypt it would soon be mixed with, though not entirely swamped by, those essentially Turkish military styles that already dominated most of the rest of the Middle East and which would also take over Byzantine military culture.

I would also venture to suggest that this interpretation of the subject matter on the Cappella Palatina ceiling in no way contradicts the theory that these panels were painted by local Sicilian craftsmen working within an established artistic heritage. This had its first roots in the golden age of 'Abbāsīd civilization and its more immediate roots in a Fāṭimid school of art transmitted and transmuted by the provincial but vibrant culture of Muslim Ifriqīyah (Tunisia). A strictly European, and more immediately Norman, influence is almost impossible to pinpoint even in those items of military equipment where one would most expect to find it.



## ILLUSTRATIONS



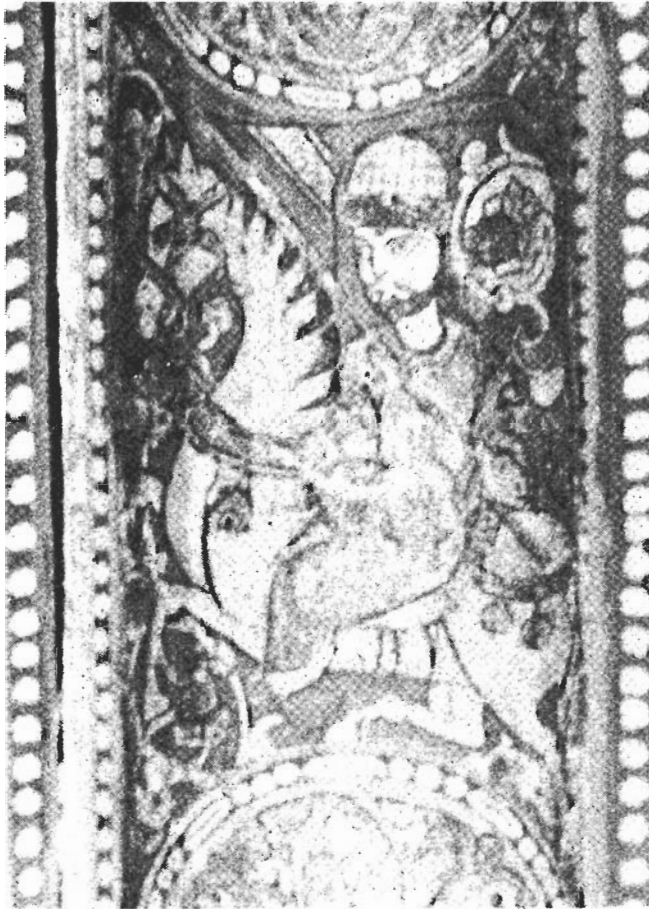


PHOTO 1. Painted ceiling panel, ca. 1140 (*in situ*, Cappella Palatina, Palermo). Military unarmed horseman.



PHOTO 2. Painted ceiling panel, ca. 1140 (*in situ*, Cappella Palatina, Palermo). Military armed horseman.





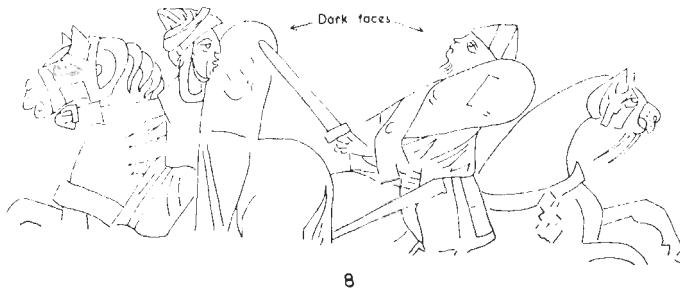
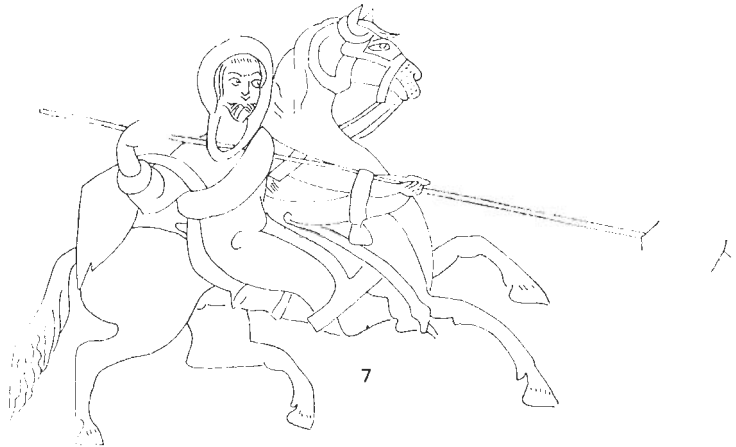
PHOTO 3. Painted ceiling panel, ca. 1140 (*in situ*, Cappella Palatina, Palermo). Turban-dressed rider on camel.

- 1-26. Painted ceiling panels, c. 1140 (*in situ*, Cappella Palatina, Palermo). Monneret de Villard photograph numbers (Dept. of Oriental Antiquities, British Museum, London) are shown in brackets below.
1. Nave (M. de V. 2861).
  2. Nave (M. de V. 26987).
  3. Nave (M. de V. 27030).
  4. Nave (M. de V. 27042 and 27057).
  5. Nave (M. de V. 2882).
  6. Nave (M. de V. 2782).



Figs. 1-6

7. Nave (M. de V. 2839).
8. Nave (M. de V. 2843).
9. Nave (M. de V. 2782).
10. Aisle (M. de V. 26984).



Figs. 7-10

11. Nave (M. de V. 27016).
12. Nave (M. de V. 2774).
13. Nave (M. de V. 2774).
14. Aisle (M. de V. 26983).
15. Aisle (M. de V. 26983).



Figs. 11-15

16. Nave (M. de V. 2811).
17. Nave (M. de V. 27023).
18. Nave (M. de V. 2946).
19. Nave (M. de V. 2757).
20. Nave (M. de V. 2870).
21. Nave (M. de V. 2831).
22. Nave (M. de V. 2758).
23. Nave (M. de V. 2757).
24. Aisle (M. de V. 26985).
25. Aisle (M. de V. 26985).
26. Nave (M. de V. 2755).





Figs. 16-26

- 27-29. Carved figures on an ivory box, Sicily or southern Italy, 1050-1100 (Inv. 17.190.241, Met. Museum of Art, New York).
30. Carved figure on an ivory box, Sicily, 11th century (Inv. K.3101, Staat. Museum, West Berlin).
31. Carved figure on an ivory oliphant, Sicily or southern Italy, late 11th century (Musée Crozatier, Le Puy-en-Velay).
32. Carved figure on an ivory oliphant, Sicily or southern Italy, 11th century (Inv. 04.3.177, Met. Museum of Art, New York).
33. Fragment of Siculo-Muslim ceramic, probably from Erice, 11th or 12th century (Russo Perez Coll., State Ceramic Museum, Caltagirone).
- 34-44. Carvings on capitals, late 12th century (*in situ*, Cloisters of the Cathedral, Monreale).



FIGS. 27-43

45. Carved panel over north door, mid-12th century (*in situ*, La Martorana, Palermo).
46. «The Betrayal,» mosaic, 1180-1190 (*in situ*, Cathedral, Monreale).
47. «The Crucifixion» (*as above*).
48. Shield of «St. Demetrius,» mosaic, mid-12th century (*in situ*, Cappella Palatina, Palermo).
49. «Siege of Salerno, defenders,» Sicily or southern Italy, early 13th century (f. 116a, *Chronicle of Peter of Eboli*, Cod. 120/II, Burgerbib., Berne).
50. «Henry VI's entry into Palermo» (f. 134a, *as above*).
51. «Siculo-Muslim archer» (f. 131, *as above*).
52. «Constance besieged in Salerno» (f. 117a, *as above*).
53. «Sicilian crossbowmen» (f. 131, *as above*).
54. «Richard of Acerra captures Capua» (f. 124a, *as above*).
55. «Siege of Mopsvestia,» Siculo-Byzantine; early 13th century (f. 151v, *Skylitzes Chronicle*, Cod. 5-3, N2, Bib. Nac., Madrid).
56. «Al Ma'mūn's siege of Amorium» (f. 59v, *as above*).
57. «Emir Chabdan defeated by Bardas Phocas» (f. 136v, *as above*).
- 58-60. (*as above*).



Figs. 44-58

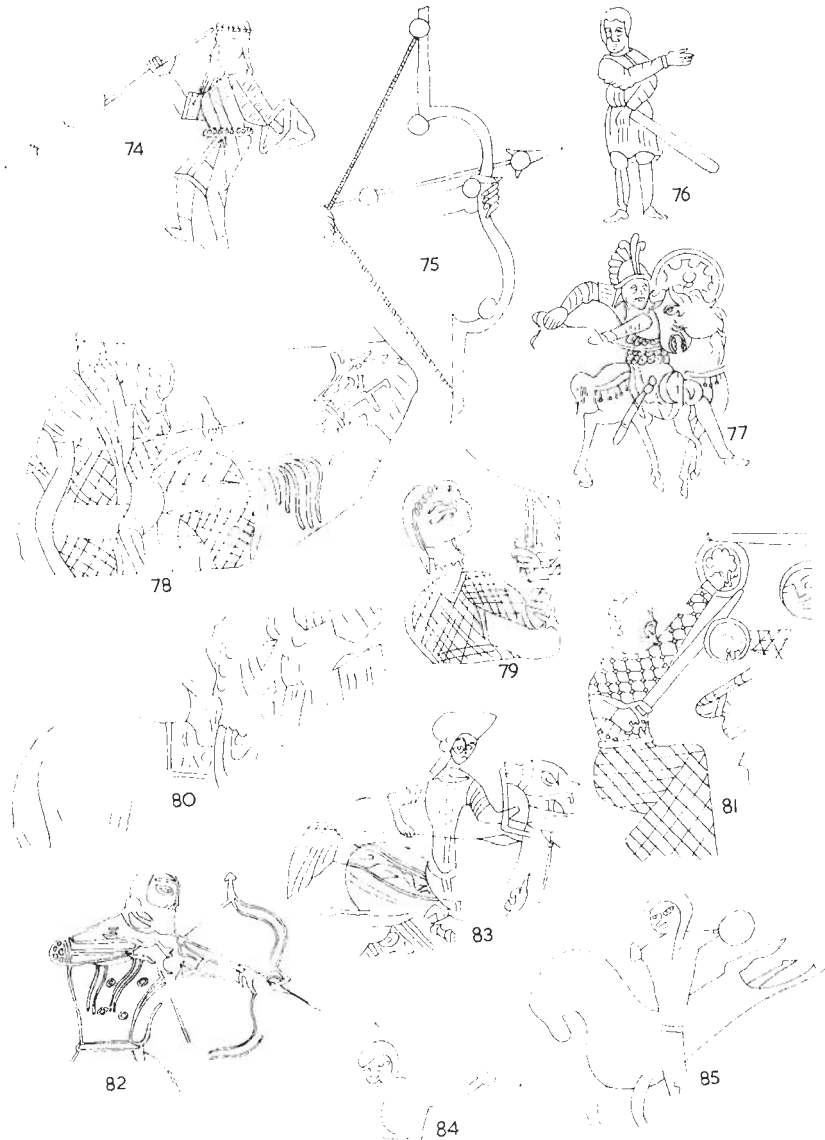
61. «Hispano-Arabs in Crete» (f. 39v, *as above*).  
62-63. (*as above*).  
64-65. Painted figures on an ivory box, Sicily, 12th century (Museo Nazionale, Florence).  
66. Painted figure on an ivory box, Sicily, 12th century (Treasury, Cappella Palatina, Palermo).  
67. Painted figure on an ivory box, Sicily, 12th century (Musée de Cluny, Paris).  
68. Painted figure on an ivory box, Sicily, 12th century (formerly in the J. Brummer Coll., New York).  
69. «David beheads Goliath,» carved ivory box, Sicily or southern Italy, late 12th century (Palazio de Venezia Museum, Rome).  
70-71. «Diopuldo fights villagers,» Sicily or southern Italy, early 13th century (f. 130a, *Chronicle of Peter of Eboli*, Cod. 120/II, Burgerbib., Berne).  
72. «Constance flees Salerno,» (f. 119a, *as above*).  
73. «Traveller,» (f. 101a, *as above*).



Figs. 59-73

74. Carved figure on an ivory box, Sicily, 12th or early 13th century (Museum Dahlem, West Berlin).
75. «Sagittarius,» Sicily or southern Italy, 1220-1250 (Latin translation of Al Sūfī's *Book of Fixed Stars*, Ms. 1036, Bib. Arsenal, Paris).
76. «Pharoah's guard,» North Africa, 7th century (f. 50a, *Ashburnham Pentateuch*, Ms. Nouv. Acq. Latin 2334, Bib. Nat., Paris).
77. «Pharoah's army drowns» (f. 68a, *as above*).
78. Ceramic fragment, Tunisia, 10th-11th century (Inv. 11762, Benaki Museum, Athens).
79. Ceramic fragment, Tunisia, 10th-11th century (Inv. 11761, Benaki Museum, Athens).
80. Bas-relief of huntsmen, Morocco, 1050-1100 (Bardo Archaeological Museum, Algiers).
- 81-82. Ceramic plaques from the Palace of Sabra, Tunisia, mid-11th century (Bardo Museum, Tunis).
83. Ceramic fragment from Sabra, Tunisia, 11th century (Bardo Museum, Tunis).
- 84-85. Ceramic fragments from Sabra, Tunisia, 11th century (Provincial Museum, Qairouan).





Figs. 74-85

86. Fragments of a ceramic plate from Sabra, Tunisia, 11th century (Inv. 10, Museum of Islamic Arts, Dār Hussayn, Tunis).
87. «Perseus,» northern Morocco, 1224 (Al Sūfī, *Book of Fixed Stars*, Ms. Ross 1033, Vatican Lib., Rome).
88. «Bootes» (*as above*).
89. (*as above*).
90. «Cepheus» (*as above*).
91. «Sagittarius» (*as above*).
92. «Ares,» Coptic ivory figurine, 4th-5th century (Dumbarton Oaks Coll., Washington).
93. «Sacrifice of Jephtha's daughter,» fresco, 7th-8th century (*in situ*, Bema, St. Catherine's Monastery, Sinai).
94. «Midianite buys the boy Joseph,» Coptic textile, 7th century (Hermitage, Leningrad).
95. «St. Theodore,» carved wooden door panel, Coptic, 9th century (*in situ*, Church of Abu Sarga, Cairo).
96. «St. Theodore,» Coptic, 9th-10th century (f. 287v, *Homilies*, Ms. Copt. 66, Vatican Lib., Rome).
97. Ceramic fragment, Egypt or Iraq, late 9th-early 10th century (Inv. 227, Benaki Museum, Athens).
98. Papyrus fragment, Egypt, 10th century (Rainer Coll., Bib. Nat., Vienna).
99. Lustre-ceramic fragment, Egypt, 10th-11th century (Victoria and Albert Museum, London).
100. Original fragments in now-restored lustre bowl, Egypt, 10th-11th century (Museum of Islamic Art, Cairo).



Figs. 86-100

101. Painted paper fragment, Egypt, 10th century (Inv. I.8, Keir Coll., London).
102. Ceramic fragment, probably North African, 10th-11th century (Museum of Islamic Art, Cairo).
103. Ivory plaque, Egypt, 10th century (Louvre, Paris).
104. Painted paper fragment, Egypt, 11th (?) century (Keir Coll., London).
105. Painted paper fragment, Egypt or Iraq, 11th-12th century (Museum of Islamic Art, Cairo).
106. Painted paper fragment from Fusât, Egypt, 11th-12th century (Inv. 12801, Museum of Islamic Art, Cairo).
107. Painted paper fragment, Egypt, 11th-12th century (Louvre, Paris).
108. Painted paper fragment, Egypt, 11th-12th century (Museum of Islamic Art, Cairo).



Figs. 101-108

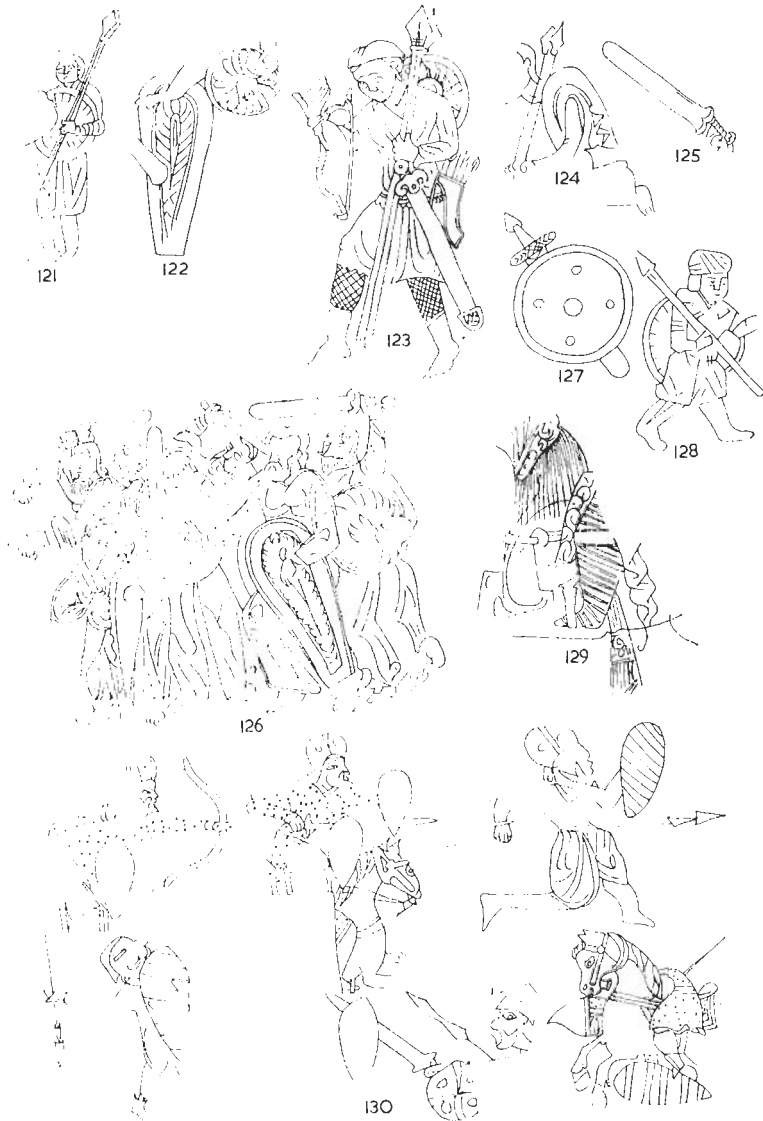
109. «St. Ptolomeus of Nikentori,» Coptic, 11th century (Ms. 581, Pierpont Morgan Lib., New York).
110. Carved ivory panel, Egypt, 11th century (Museum Dahlem, West Berlin).
111. Ceramic fragment from Fustât, Egypt, 11th century (Inv. I. 43/04 No. 100, Museum für Islamische Kunst, West Berlin).
112. Lustre ceramic fragment, Egypt, 11th century (Museum of Islamic Art, Cairo).
113. Figures from carved wooden panel from the Fāṭimid Palace, Egypt, 11th century (Museum of Islamic Art, Cairo).
114. Carved wooden panel, Egypt, 11th-12th century (Louvre, Paris).
115. Carved wooden panel from the church of Sitt Barbara, Coptic, 11th century (Coptic Museum, Cairo).
116. Carved wooden panel, Egypt, 11th century (Museum of Islamic Art, Cairo).
117. Carved stone reliefs, Egypt, c. 1087 (*in situ*, Bāb al Naṣr, Cairo).
118. Painted paper fragment from Fustât, Egypt, 12th century (Louvre, Paris).
119. Lustre ceramic plate from Fustât, Egypt, 12th century (Museum of Islamic Art, Cairo).
120. Ceramic plate from Fustât, Egypt, 12th century (Inv. 41.12, Freer Gallery of Art, Washington).



Figs. 109-120

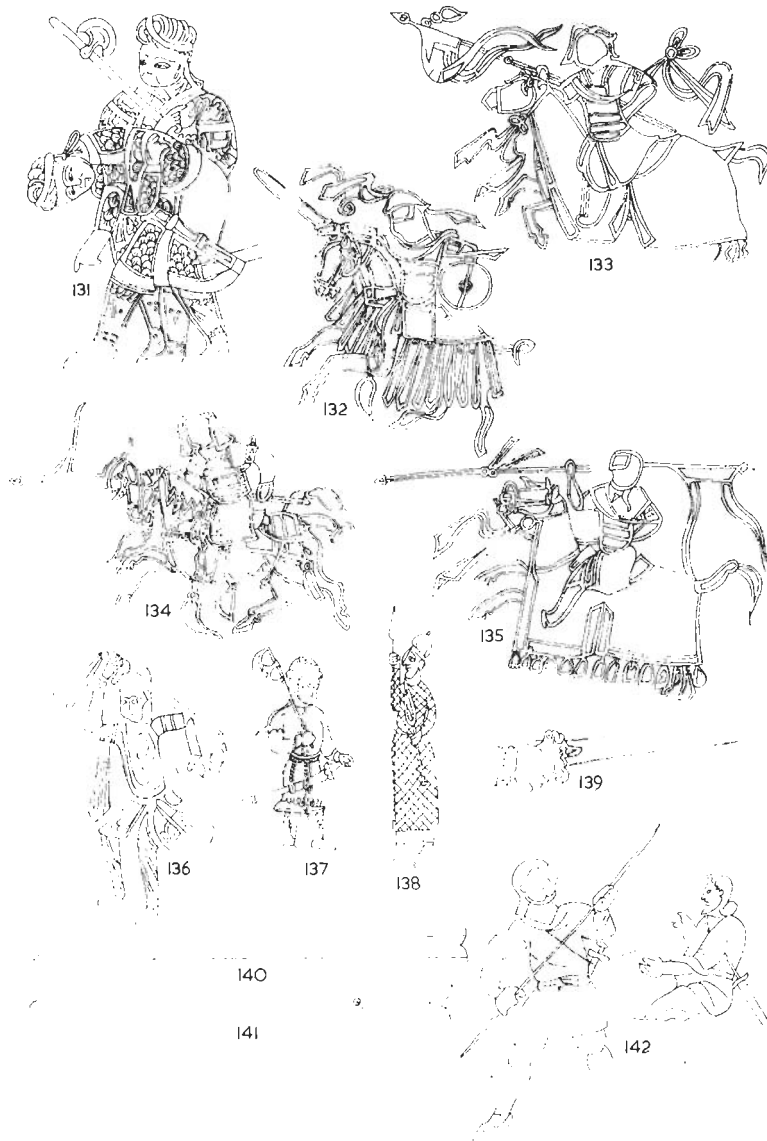
121. «Pilate's guard,» Coptic, 1179/80 (f. 82v, *Gospels*, Ms. Copte 13, Bib. Nat., Paris).
122. «Crucifixion» (f. 83v, *as above*).
123. «Joseph of Arimathea demands Jesus' body» (f. 131r, *as above*).
124. «Soldiers throw lots for Jesus' clothes» (f. 274v, *as above*).
125. «Beheading of John the Baptist» (f. 40v, *as above*).
126. «The Betrayal» (f. 79r, *as above*).
127. Carved stone panel over main gate, 1187 (*in situ*, Qalā'at Gindī, Sinai).
128. Figure on a carved ivory plaque, Egypt, 12th century (Inv. 5024, Museum of Islamic Art, Cairo).
129. Ceramic fragment, Egypt, 12th century (Inv. 391, Benaki Museum, Athens).
130. Painted paper from Fusāṭ, Egypt, 12th century (Dept. of Oriental Antiquities, British Museum, London).





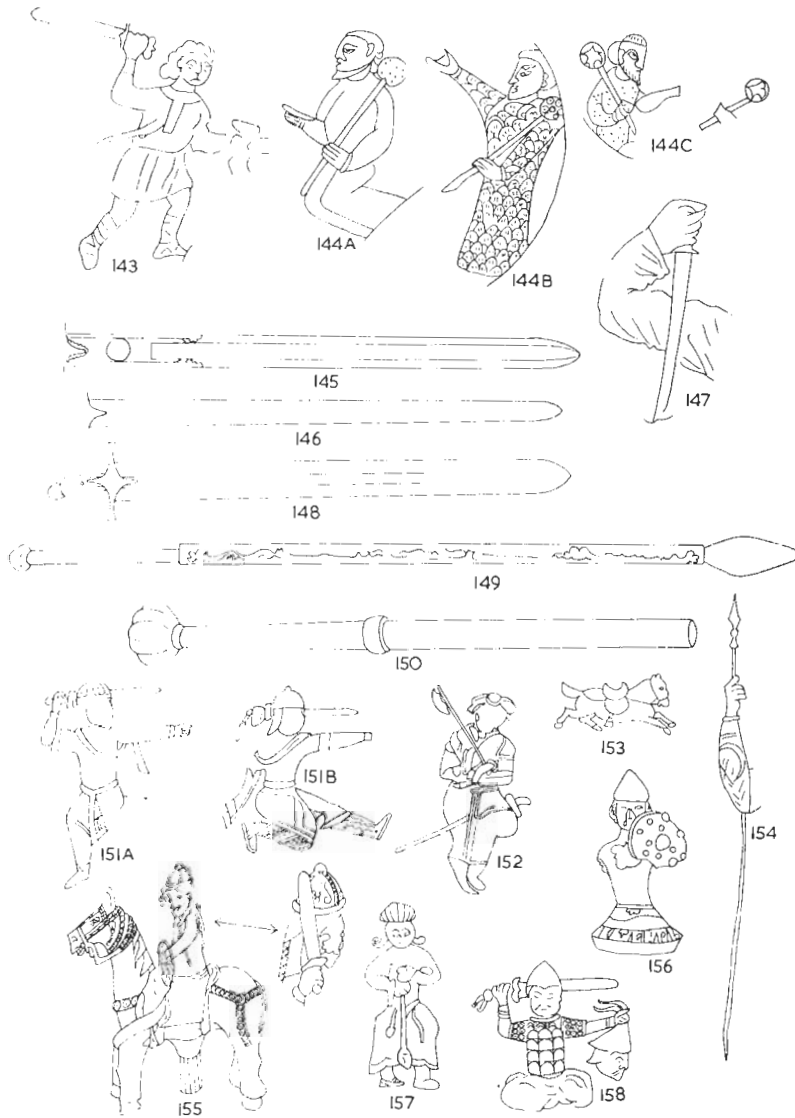
FIGS. 121-130

131. Figure on an inlaid metal basin, *Egypt*, c. 1300 (*Baptismal of St. Louis*, Louvre, Paris).
- 132-135. Figures on an inlaid metal candlestick-base, Ayyūbid Egypt or Syria, mid-13th century (Costa Coll., Rome).
136. Figure on an inlaid brass box made for al ‘Ādil, Ayyūbid Egypt or Syria, 1238-1240 (Inv. 8508-1863, Victoria and Albert Museum, London).
137. «Guard of *Dhū al Qarnayn*,» Mamlūk Egypt, early 14th century (*Kitāb Ma-naḥi al Hayawān*, Ms. Ar. AFD 140, Bib. Ambrosiana, Milan).
138. «Nativity Cycle,» fresco from north aisle of Faras Cathedral, Nubia, 10th century (National Museum, Khartoum).
139. «Mounted angel,» fresco from church of ‘Abd Allāh Nirqi, Nubia, 11th century (National Museum, Khartoum).
140. So-called «Sword of Caliph ‘Uṭhmān,» mid-7th century (?) (Islamic Reliquary, Topkapu Museum, Istanbul).
141. So-called «Sword of Caliph ‘umar,» mid-7th century (?) (Islamic Reliquary, Topkapu Museum, Istanbul).
142. «Crucifixion,» Syriac manuscript, Syria, 586 (f. 13r, *Rabula Gospels*, Ms. Plut. 1, Bib. Laurenziana, Florence).



Figs. 131-142

143. «Massacre of the Innocents» (f. 4v, *as above*).
- 144A. «Shepherd at Nativity,» silver dish from Syria or Palestine, 7th century (Hermitage, Leningrad).
- 144B. «Angles at Christ's Tomb» (*as above*).
- 144C. «Soldiers at the Crucifixion», (*as above*).
- 145-146. So-called «Swords of *Khālīd* ibn al *Walīd*,» mid-7th century (?) (Islamic Reliquary, Topkapu Museum, Istanbul).
147. «Hunting scene,» Umayyad fresco, c. 740 (*in situ*, Qusayr 'Amr, Jordan).
148. So-called «Sword of *Zayn* al 'Ābidīn,» early 8th century (?) (Islamic Reliquary, Topkapu Museum, Istanbul).
- 149-150. Mace-heads, Syria, 12th-13th century (?) (National Museum, Damascus).
151. Figures from inlaid steel mirror, Syria, late 13th century (Topkapu Museum, Istanbul).
152. Figure on inlaid metal ewer of *Nāsir* al *Dunya*, Mamlūk, early 14th century (Inv. 91.1.571, Moore Bequest, Met. Museum of Art, New York).
153. Carved stone relief, 1089/90 (*in situ*, wall-tower, Diyarbakr).
154. «St. George,» Syriac Gospel from the *Jazīra* region, 1054 (f. 351r, Patriarchal Library, Hims).
155. Ceramic statuette from *Raqqa*, *Jazīra* or Iran, 12th century (National Museum, Damascus).
156. Ceramic bottle-stopper from *Raqqa*, *Jazīra*, 12th century (Museum Dahlem, West Berlin).
157. Carved figure on stone arch from *Sinjar*, *Jazīra*, early 12th century (National Museum, Baghdad).
158. *Artūqid* coin from *Āmida*, late 12th-early 13th century (Cab. des Médailles, Bib. Nat., Paris).



Figs. 143-158

159. «St. Bahnām,» carved stone relief, c. 1164 (*in situ*, Convent of Mār Bahnām, nr. Mosul).
160. «Trial of Jesus,» Syriac Gospel from Jazīra region, 1216-1220 (Ms. Add. 7170, British Lib., London).
161. «Guard at Christ's Tomb» (f. 160r, *as above*).
162. «The Betrayal» (f. 143v, *as above*).
163. «The Betrayal» Syriac Gospel from Tur Abdīn, Jazīra, 1226 (formerly in the Bishop's Library, Midyat).
164. Figure on an inlaid metal writing-box, Jazīra, early 13th century (Franks Bequest, British Museum, London).
- 165-169. Figures on an inlaid metal bottle, Jazīra, early 13th century (Inv. 41.10, Freer Gallery of Art, Washington).
170. Figures on a carved gateway, 1233-1259 (recently collapsed, Bab al 'Āmādiya, 'Āmādiya).
171. Inlaid figure on a metal ewer, Jazīra, 1232 (*Blacas Ewer*, inv. 66.12-29.61, British Museum, London).
- 172-173. «Army of Yemen,» manuscript from Azarbāyjan, late 12th century (f. 37/35a, *Warka wa Gulshāb*, Ms. Hazine 841, Topkapu Library, Istanbul).
174. «Rabī wounds Warka» (f. 18/18b, *as above*).
- 175-176. «Rabī fights Warka's father» (f. 13/15a, *as above*).
177. «Rabī fights the Banū Shayba» (f. 12/13b, *as above*).
178. «Battle of Banū Zabba and Banū Shayba» (f. 10/12a, *as above*).
179. «Rabī's night attack» (f. 3/6a, *as above*).
180. «Yemenīs fight Bahrayn and Aden» f. 40/38b, *as above*).

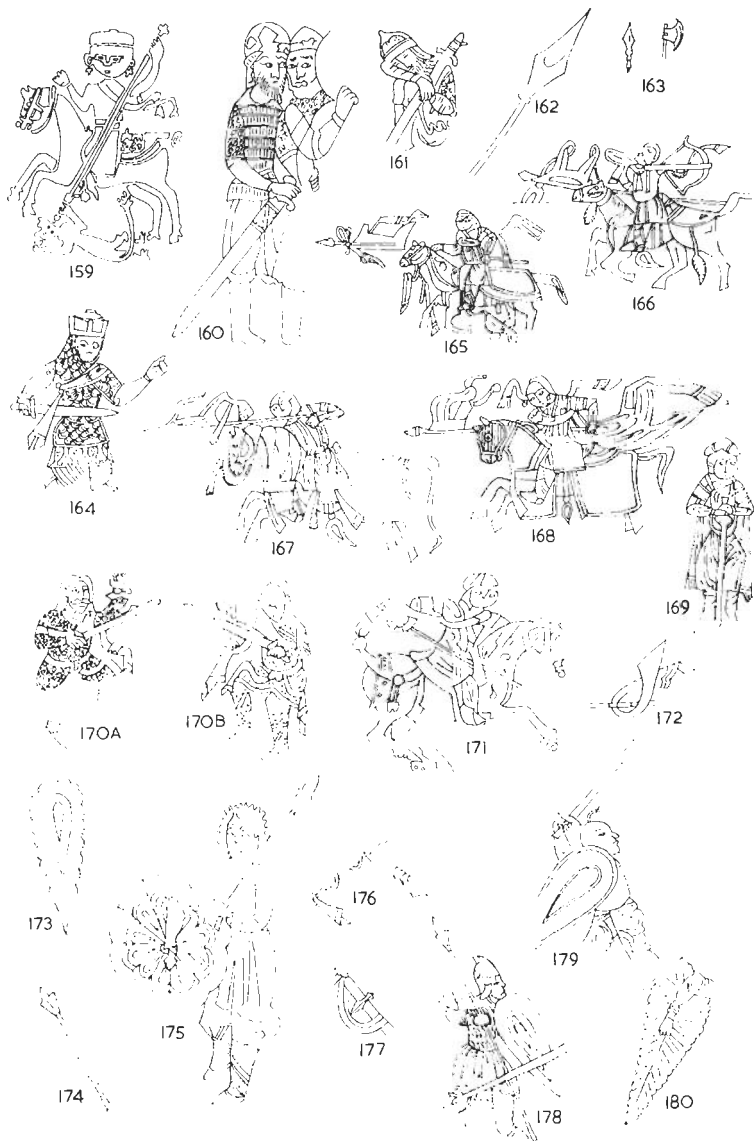
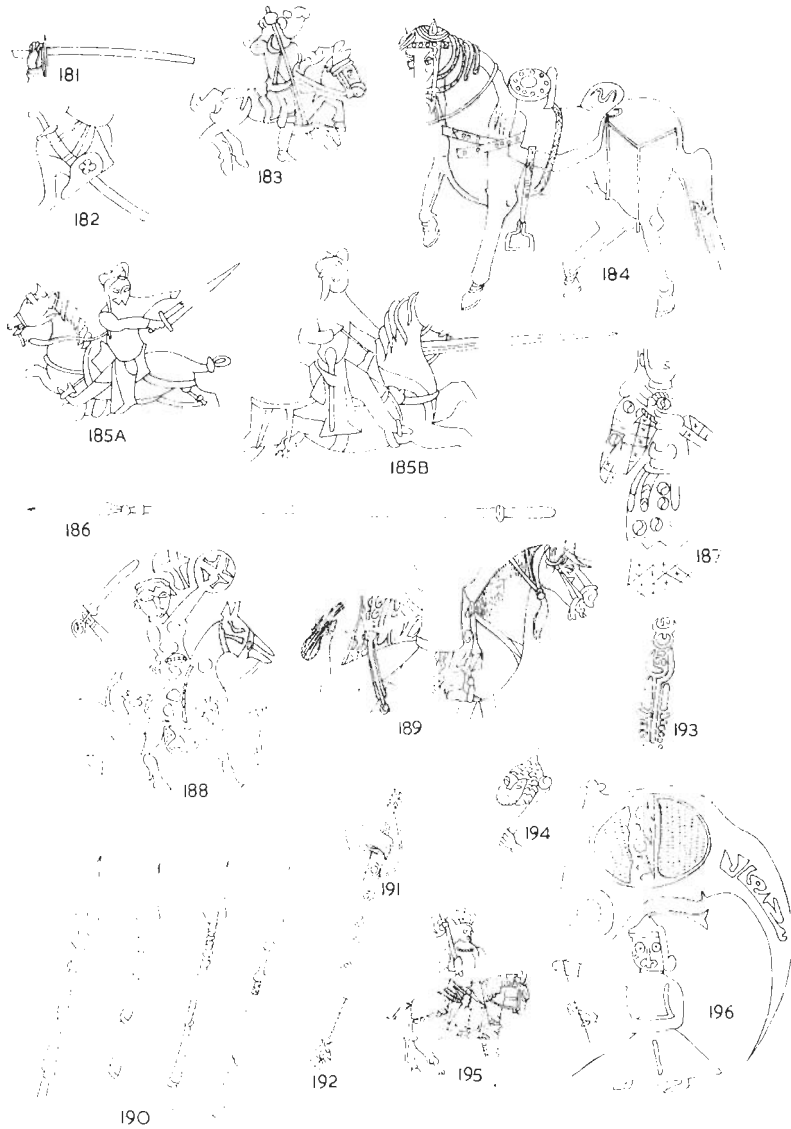


FIG. 159-180

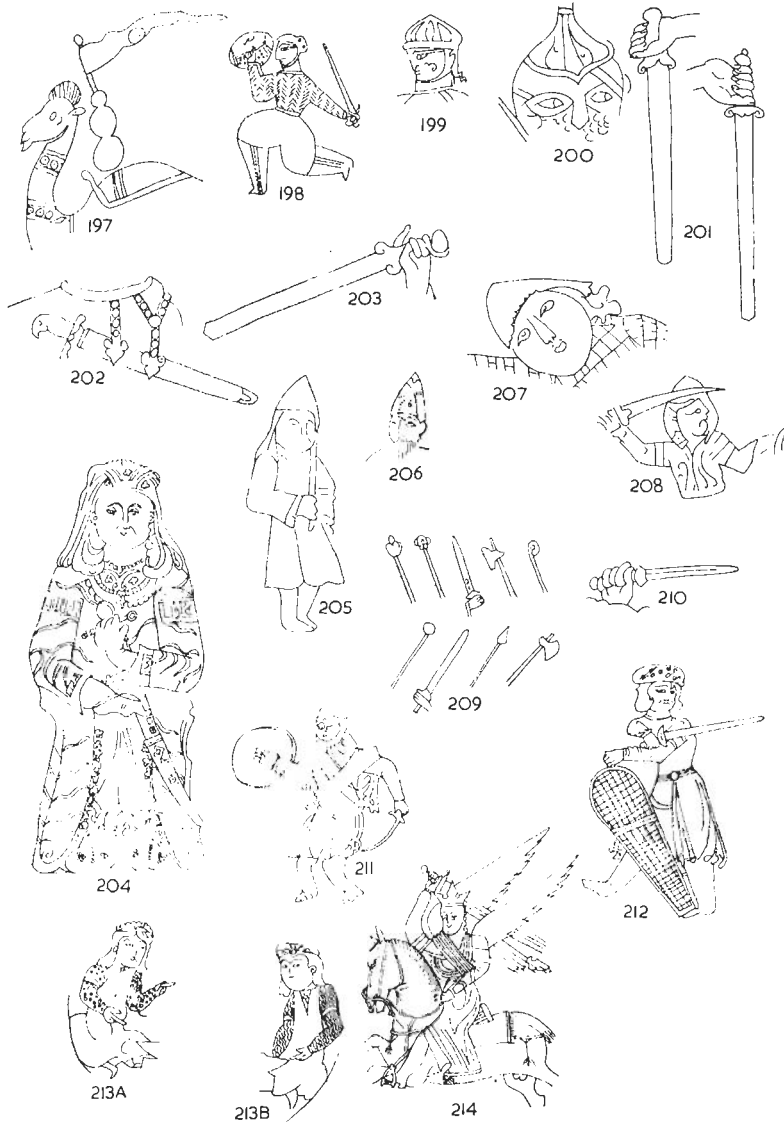
181. «Yemenīs defeat Bahrayn and Aden» (f. 41/39b, *as above*).
182. Figure on a carved relief from Kubachi, 13th century (?) (Hermitage, Leningrad).
183. *Danishmāndid* coin from Felitene, early 12th century (Cab. des Médailles, Bib. Nat., Paris).
184. «The Magi,» Christian fresco painted under Saljūq rule, 1150-1200 (*in situ*, Carikli Kilise, Cappadocia).
185. «Kilij Arslan II,» stucco relief, Saljūq, 1156-1188 (Museum of Turkish Art, Istanbul).
186. Javelin, Ottoman, 17th century (Museo Civico, Bologna).
187. Fresco fragment from Throne Room, Sāmarrā-Jawsaq, ‘Abbāsīd, 836-839 (Museum für Islamische Kunst, West Berlin).
188. Lustre dish, Iraq, 10th century (Keir Coll., London).
189. «Book of Antidotes,» Jazīra, 1199 (Ms. Arabe 2964, Bib. Nat., Paris).
190. «Bedū lances,» Iraq, 1230 (Ms. S.23, Oriental Institute, Leningrad).
191. «Sun and Moon gods,» east Iranian fresco, 7th-8th century (*in situ*, Ghorband Valley, Funduqistān).
192. Mace on an engraved silver dish from Kulagysh, east Iran, 7th-8th century (Hermitage, Leningrad).
193. Sassanian-style coin of Hajjāj ibn Yūsūf, Iran, early 8th century (Cab. des Médailles, Bib. Nat., Paris).
194. Figure on an engraved silver dish, *Kḥūrāsān* or Tuskistān, 9th-10th century (Hermitage, Leningrad).
195. Figure on a carved ivory chess-piece, Sind or eastern Iran, 9th century (Inv. 311, Cab. des Médailles, Bib. Nat., Paris).
196. Lustre bowl, ‘Abbāsīd, 9th-10th century (Louvre, Paris).





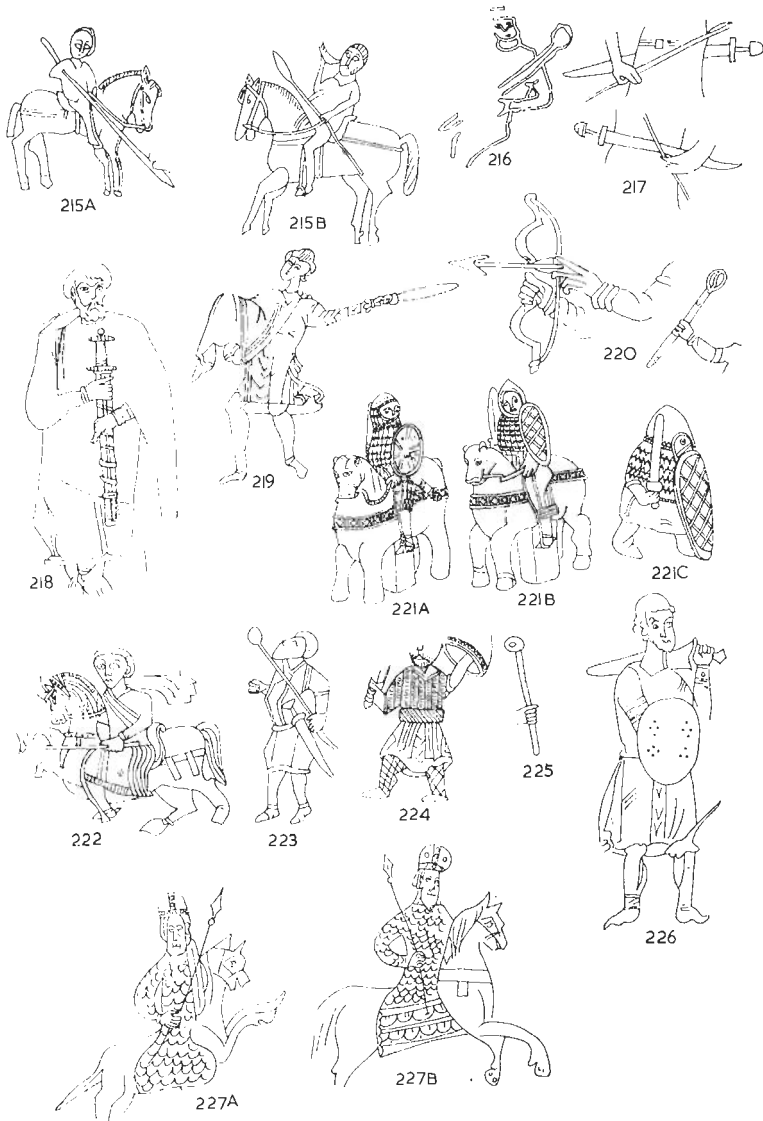
Figs. 181-196

197. Lustre bowl from Nīshāpūr, 10th century (City Art Museum, St. Louis).
198. Painted plate from Nīshāpūr, 10th century (Inv. 2629/3258, Museum of Oriental Art, Rome).
199. Painted plate from Nīshāpūr, 10th century (Motamed Coll., Frankfurt).
200. Fresco fragment from Sabz Pūshān, Nīshāpūr, 10th century (Met. Museum of Art, New York).
201. «Swords of Perseus,» al Sūfī manuscript, Iraq, Iran or Egypt, 1009 (ff. 110 and 111, *Book of Fixed Stars*, Ms. Marsh 144, Bodleian Lib., Oxford).
202. Al Sūfī, Iran, 1130 (f. 113v, *Book of Fixed Stars*, Ms. Ahmad III 3493, Sulaymaniye Lib., Istanbul).
203. (f. 62v, *as above*).
204. Stucco fragment from Rayy, 12th-13th century (Chestny Coll., New York?).
205. Stucco fragment, Iran, 12th century (Museum Dahlem, West Berlin).
206. Fresco fragment, Iran, 12th-13th century (Kevorkian Coll., New York).
207. Stucco panel probably from Rayy, 12th-13th century (Art Museum, Seattle).
208. Figure on bronze lamp-stand, eastern Iran or *Afghnīstān*, 12th century (Archaeological Museum, Kabul).
209. Weapons on an engraved astrolabe, Iran (?), 12th-13th century (Museum of Science, Oxford).
210. Sgraffito bowl, Iran, 12th century (Inv. 61.21, Freer Gallery of Art, Washington).
211. Ceramic plate from Sāva, Iran, 12th-13th century (Hermitage, Leningrad).
212. Lustre plate, Iran, 12th century (Inv. 151, Keir Coll., London).
213. Figures on a ceramic plate, Iran, late 12th-early 13th century (Edward Drummond Libbey Gift, Toledo Museum of Art, Ohio).
214. «The Angel *Šamhūrāsāh*,» Saljūq Anatolia or Iran, 1272 (Ms. Anc. Fonds Pers. 174, Bib. Nat., Paris).



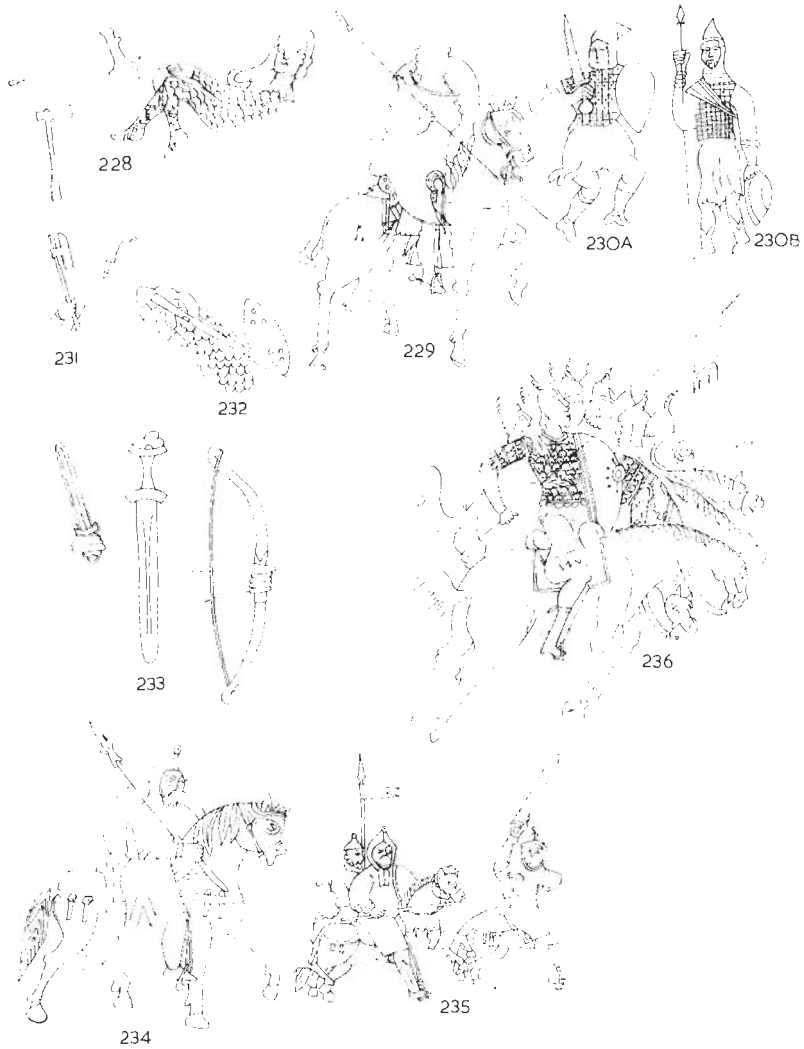
Figs. 197-214

215. Relief carving, Lombard, 8th-9th century (*in situ*, Cathedral, Civita Castellana).
216. «King Arthur,» Italo-Byzantine mosaic, 9th-10th century (*in situ*, Church of the Pantocrator, Otranto).
217. «Crucifixion,» Italo-Byzantine, 9th-10th century (*Exultet Roll*, Ms. 2, John Rylands Lib., Manchester).
218. «Donor figure,» fresco, early 9th century (*in situ*, Church of San Benedetto, Malles, Trento).
219. Manuscript, southern Italy, 10th century (*Avatea*, Ms. 3, Library, Monte Cassino).
220. Carved altar panels, southern Italy, 11th-12th century (*in situ*, Santa Maria in Valle Porclaneta).
221. Ivory chess-pieces, southern Italy, 11th century (Cab. des Médailles, Bib. Nat., Paris).
222. Figure on a carved ivory oliphant from Amalfi, mid-11th century (Cab. des Médailles, Bib. Nat., Paris).
223. «Crucifixion,» figure on a carved ivory box from Farfa, c. 1071-1072 (Treasury, S. Paolo fuori le Mura, Rome).
224. Figure on a carved ivory oliphant, Sicily or southern Italy, late 11th century (Private loan to the Victoria and Albert Museum, London).
225. «Centaur,» figure on a carved ivory oliphant from Salerno, 11th century (Inv. 57,58L, Museum of Fine Arts, Boston).
226. Manuscript from Benevento, 11th century (f. 192, *Leges Langobardorum*, Cod. 4, Archives, Badia della Santissima Trinita, Cava).
227. «Pharoah's army draws,» manuscript from Gaeta, 11th century (*Exultet Roll* No. 2, Cathedral Archives, Gaeta).



Figs. 215-227

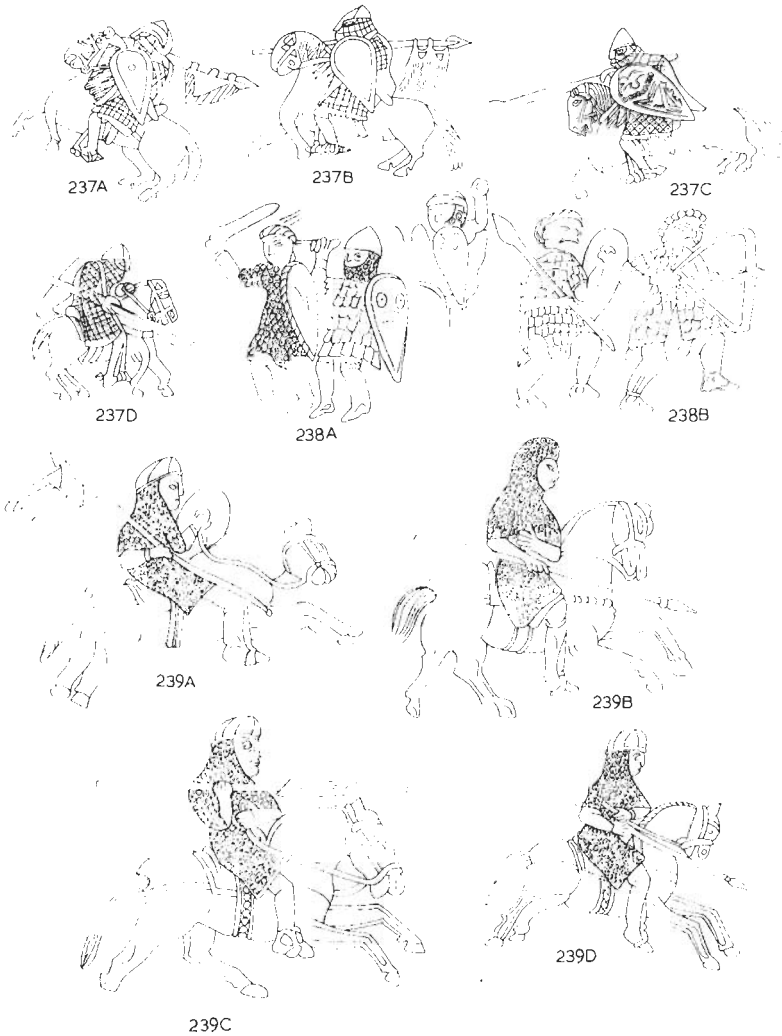
228. «Aesop,» Italo-Byzantine, 11th century (ff. 23r and 24r, *Vita et Fabulae*, Ms. 397, Pierpont Morgan Library, New York).
229. «St. Benedict frees a prisoner,» manuscript from Monte Cassino, c. 1070 (f. 72, Ms. Lat. 1202, Vatican Library, Rome).
230. «Dedication to Duke and Emperor,» southern Italy, 11th century (*Exultet Roll*, Museo Civico, Pisa).
231. «The Betrayal,» manuscript from Monte Cassino, 1099-1105 (*Breviarium Casinense*, Cod. 364, Bib. Mazarine, Paris).
232. «Guards at Christ's Tomb,» manuscript from Monte Cassino, 11th century (*Exultet Roll*, Cathedral Archives, Capua).
233. «Labarintus,» «De Repositorii» and «De Jus Gentium,» southern Italy, 1023 (ff. 348, 363 and 387, *Encyclopedia of Maurus Hrabanas*, Ms. 132, Library, Monte Cassino).
234. «De Paganis» (f. 383, *as above*).
235. «De Bellis» (f. 474, *as above*).
236. «Pharoah's army drowns,» manuscript from Monte Cassino, c. 1075 (*Exultet Roll*, Ms. Add. 30337, British Library, London).



Figs. 228-236

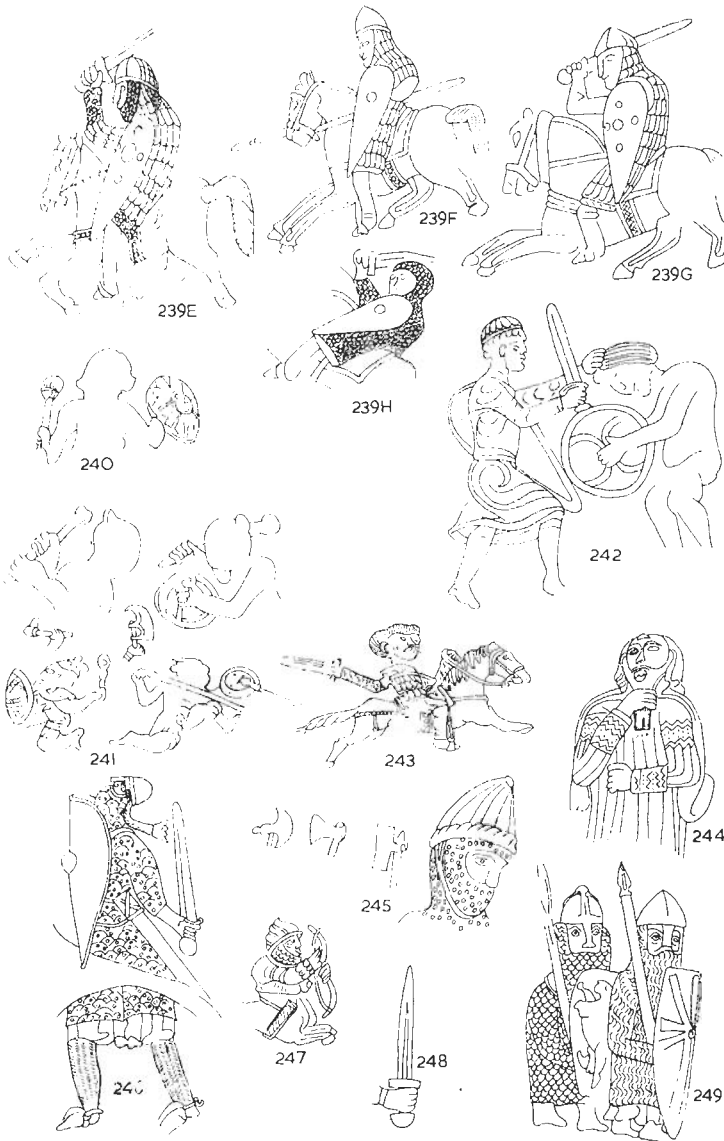
237. «Legend of King Arthur,» carved relief, 1099-1106 (*in situ*, Porta di Pescheria, Cathedral, Modena).
- 238A-B. «Defenders of Jerusalem?,» carved relief of the First Crusade (?), early 12th century (*in situ*, north door, Church of San Nicola, Bari).
- 239A-D. «Attackers of Jerusalem?» (*as above*).





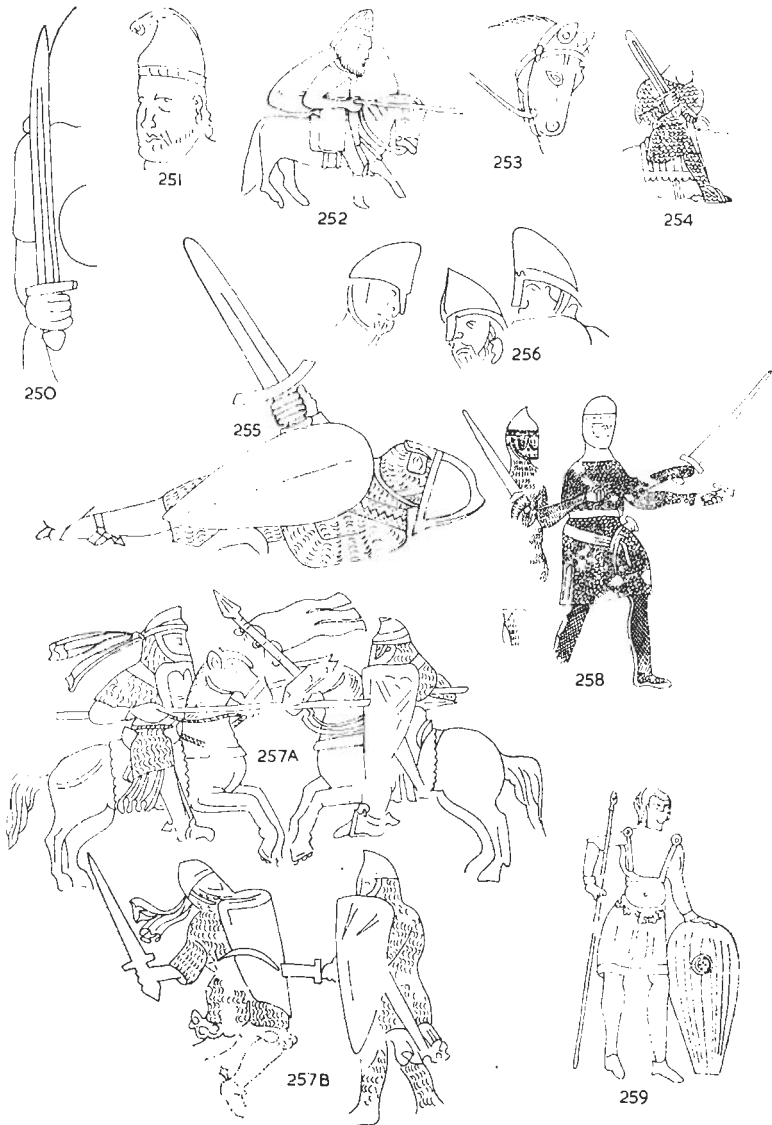
Figs. 238-239D

240. «Merman,» carved relief, 1175-1200 (*in situ*, Cathedral nave, Bitonto).
241. «Demons,» carved reliefs, late 12th century (*in situ*, exterior of the Cathedral, Barletta).
242. Carved relief, early 12th century (*in situ*, west front, Church of San Nicola, Bari).
243. «Pharoah in the Red Sea?» (*as above*).
244. Carved capital, early 13th century (*in situ*, Cathedral, Matera).
245. Carved reliefs on stone candelabrum, central Italy, c. 1170 (San Paolo fuori le Mura, Rome).



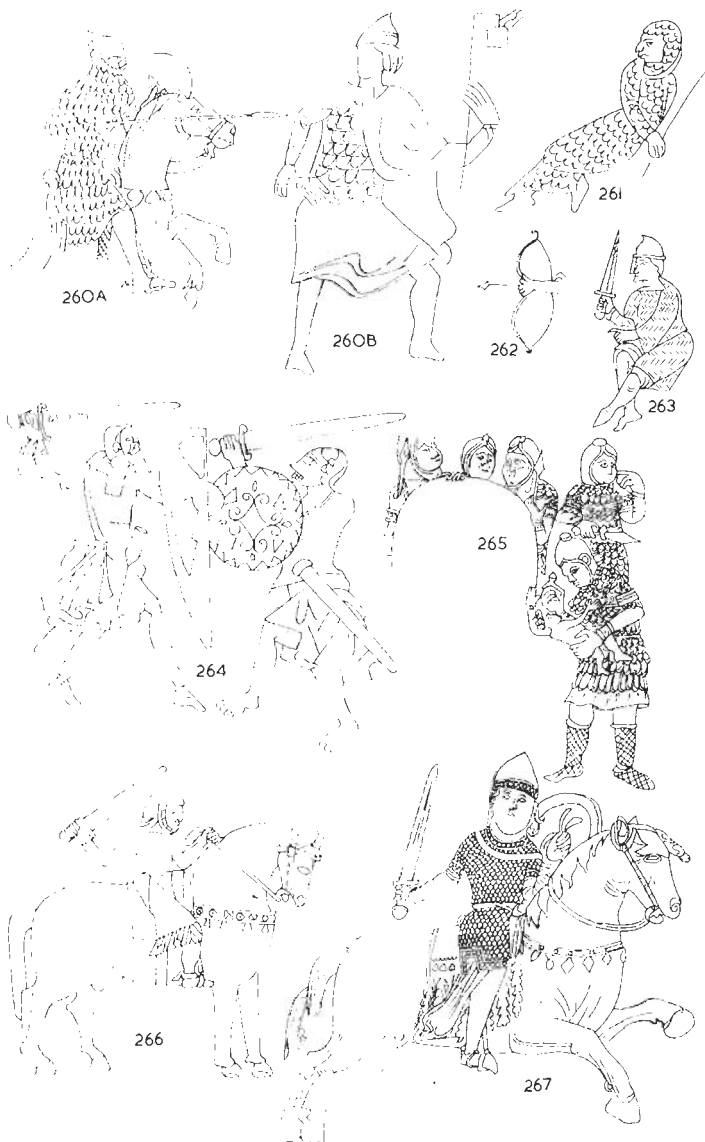
Figs. 239E-249

258. «Murder of Becket,» fresco, late 12th century (*in situ*, Church of Santi Giovanni e Paolo, Spoleto).
259. «Crucifixion,» fresco, 12th century (*in situ*, San Paolo fuori le Mura, Rome).



Figs. 250-259

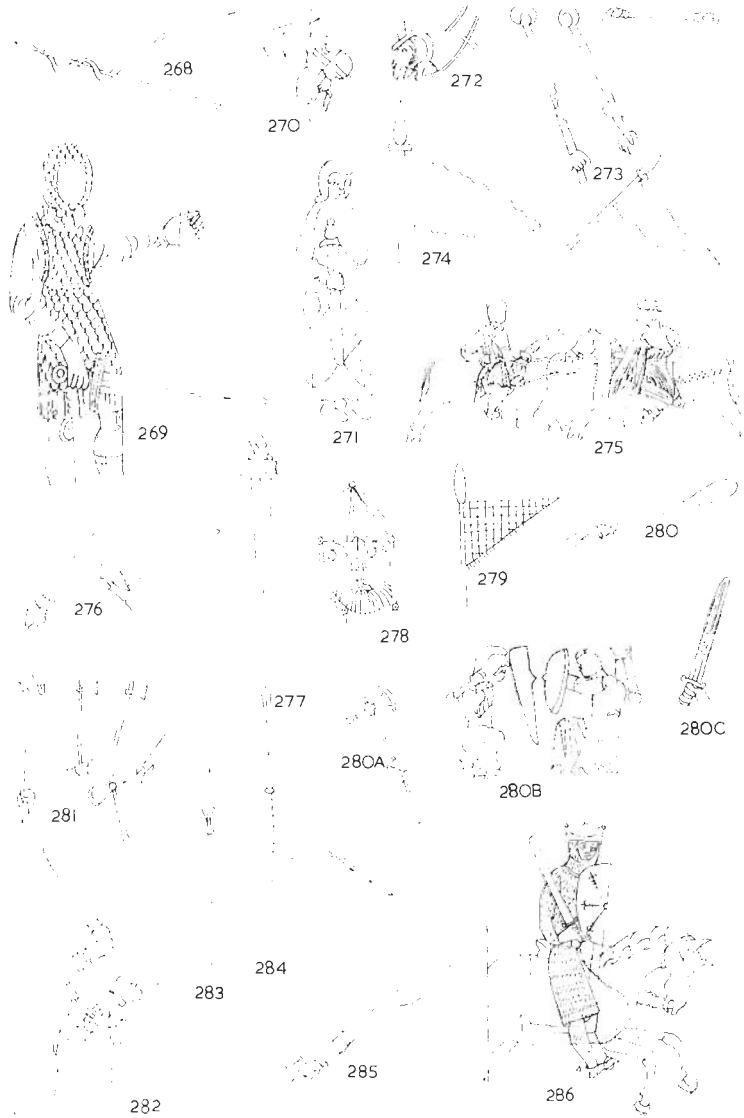
- 260A. «Pharoah's army drowns,» manuscript from Fondi, early 12th century (*Exultet Roll*, Ms. Nouv. Acq. 710, Bib. Nat., Paris).
- 260B. «The Betrayal» (*as above*).
261. «Guards at Christ's Tomb,» manuscript from Troia, 12th century (*Exultet Roll* No. 3, Cathedral Archives, Troia).
262. «Petri Lombardi Sententiae,» southern Italy, 12th century (Ms. 42, Bib. Guarnieriana, San Daniele del Friuli).
263. Bible from Florence, 1125-1150 (Museo Diocesano, Trento).
264. «Fell and the Christian Warrior,» mosaic, northern Italy, c. 1148 (Museo Leone, Vercelli).
265. «Massacre of the Innocents,» carved ivory altar-back, southern Italy, 1100-1150 (Cathedral Museum, Salerno).
266. Wooden carving on episcopal throne, southern Italy, 12th century (Church, Montevirgine).
267. «St. George,» carved relief, 1135 (*in situ*, west front, Cathedral, Ferrara).



Figs. 260-267

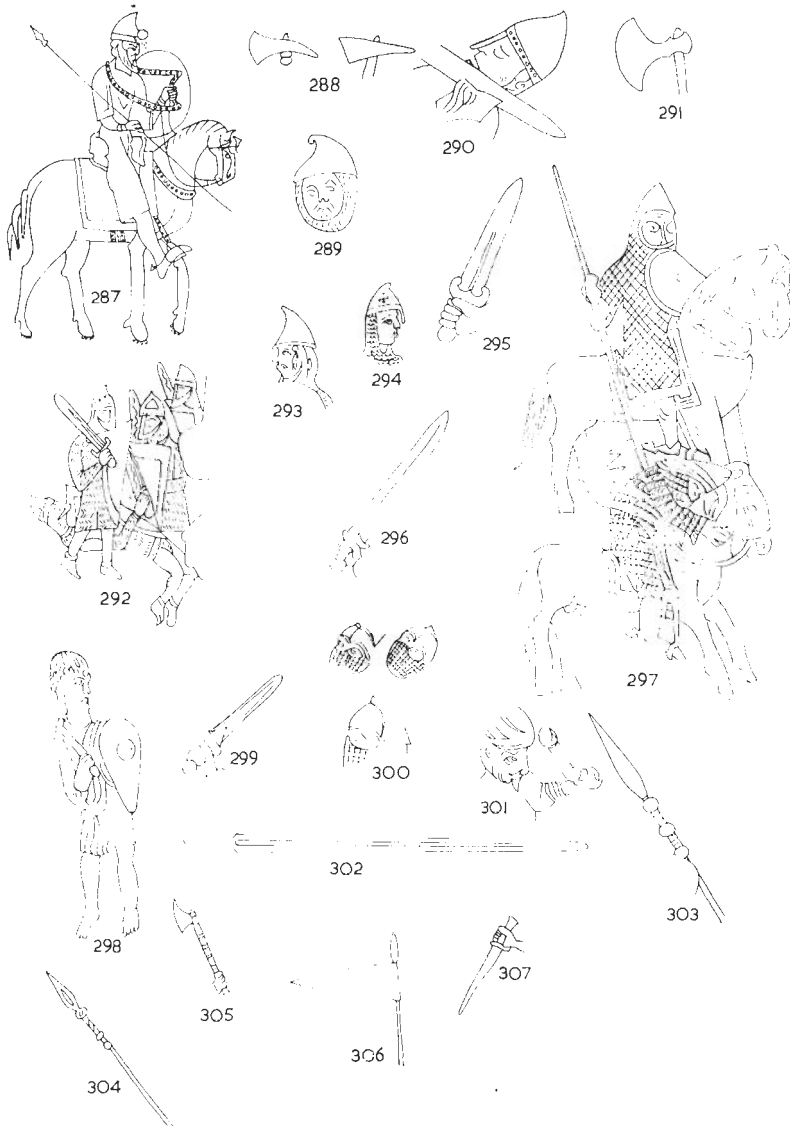
268. Fresco, early 13th century (*in situ*, Cathedral Crypt, Aquileia).
269. «Massacre of the Innocents,» early 13th century (*in situ*, Church of Santa Maria Ronzano, Castel Castagna).
270. Painted plate from Loja de Elvira, Andalusia, late 10th century (Archaeological Museum, Granada).
271. Figure on a carved ivory box made for Ziyād ibn Aflah, Andalusia, 969-970 (Victoria and Albert Museum, London).
272. «Herod's army,» Mozarab manuscript from Tavera, 975 (f. 25, *Beatus Commentaries*, Cathedral Museum, Gerona).
273. «The taking of the Beast,» and «Siege of Jerusalem,» Mozarab manuscript, 922-959 (f. 211 and 240, *Beatus Commentaries*, Ms. 644, Pierpont Morgan Lib., New York).
274. Mozarab manuscript, 10th century (*Beatus Commentaries*, Cathedral Library, Seo de Urgel).
275. Carved relief on an ablution basin, Andalusia, early 11th century (*Pila*, Archaeological Museum, Játiva).
276. Figures on carved ivory box made for 'Abd al Malik al Muẓaffar, Andalusia, 1005 (Cathedral Treasury, Pamplona).
277. «Nebuchadnezzar's sword,» Mozarab manuscript, 1091-1109 (f. 232, *Beatus Commentaries*, Ms. Add. 11695, British Library, London).
278. «Goliath» (f. 194, *as above*).
279. «Army of Nebuchadnezzar» (*as above*).
280. Mozarab manuscript from Leon, 1047 (f. AA 104, *Beatus Commentaries*, Ms. B.31, Bib. Nac., Madrid).
- 280A. «Crucifixion,» engraved altar-back, Spain, 1075 (*Arca Santa*, Camera Santa, Oviedo).
- 280B. Carved relief, early 12th century (*in situ*, west front, Church of Santiago, Carrión de los Condes).
- 280C. «Balaam and the Angel,» carved capital, mid-11th century (*in situ*, Cathedral, Jaca).
281. Catalan manuscript, 11th century (*Roda Bible*, Ms. Lat. 6, Bib. Nat., Paris).
282. «Pharaoh's guard,» Catalan manuscript from Ripoll, 11th century (f. 6v, *Farfa Bible*, Cod. Lat. 5729, Vatican Lib., Rome).
283. «Castor and Pollux,» Catalan manuscript from Ripoll, 11th century (f. 177, *Astrological Treatise*, Ms. Reg. Lat. 123, Vatican Lib., Rome).
284. «Nebuchadnezzar's army,» Mozarab manuscript, 11th century (*Beatus Commentaries of Sancho the Brave*, Bib. Nac., Madrid).
285. «Moses kills an Egyptian,» Navarrese manuscript, 1197 (f. 40r, *Illustrated Bible of King Sancho*, Ms. 108, Bib. Munic., Amiens).
286. «Lot and the Sodomites» (f. 6v, *as above*).





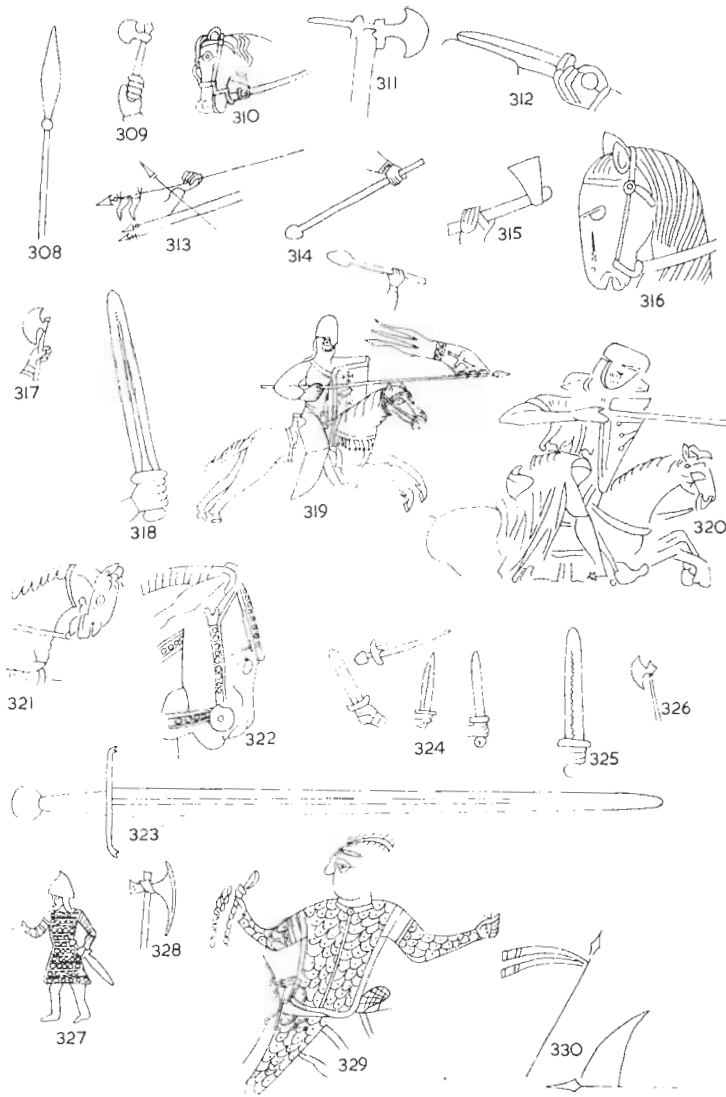
Figs. 268-286

287. «Goliath» (f. 85v, *as above*).
288. «The Betrayal» (f. 184r, *as above*).
289. «Guards at Christ's Tomb» (f. 193v, *as above*).
290. «David beheads Goliath» (f. 86v, *as above*).
291. «Execution of Shen and Enoch.» Spain, 12th century (*Beatus Commentaries*, Archaeological Museum, Madrid).
292. «Guards at Christ's Tomb.» Mozarab manuscript, 12th-13th century (*Avila Bible*, Ms. ER8, Bib. Nac., Madrid).
293. «Goliath.» Spain, 1162 (*Biblia Segunda de San Isidoro de León*, Real Colegiata, Basílica de San Isidoro, León).
294. «Charlemagne's army.» Spain, late 12th century (f. 162v, *Codex Calixtinus*, Cathedral Archives, Santiago de Compostela).
295. «St. James.» carved relief, 12th century (*in situ*, west front, Church of Santiago, Betanzos).
296. «Farragut.» carved capital, late 12th century (*in situ*, Old Cathedral, Salamanca).
297. «Battle against Amalekites.» carved relief, c. 1150 (*in situ*, Portal de Santa María, Ripoll).
298. Carved capital, Spain, c. 1200 (*in situ*, Monastery of Las Huelgas, Burgos).
299. Carved capital, Spain, mid-12th century (*in situ*, Cloisters of San Pedro, Soria).
300. «Guards at Christ's Tomb.» carved relief, 12th century (*in situ*, Cloisters, Monastery of Santo Domingo de Silos).
301. «Massacre of the Innocents.» carved relief, 12th century (Sarcophagus, Monastery of Nuestra Señora de Irache, Estella).
302. «La Tizona del Cid.» sword-blade, Spain, early 12th century (Inv. G.180, Real Armería, Madrid).
303. «Moors - Canto LXIII.» Spain, late 13th century (*Cantigas of Alfonso X*, Library, Escorial).
304. «Sultan's bodyguard - Canto XXVII» (*as above*).
305. «Arrest of St. James.» fresco, early 13th century (*in situ*, Ermita Santa Juan, Uncastillo).
306. «Army of Nebuchadnezzar.» Spain, c. 1220 (*Beatus Commentaries*, Ms. 429, Pierpont-Morgan Library, New York).
307. Figure on ivory plaque, Mudejar Spain, c. 1200 (Museo Nazionale, Ravenna).



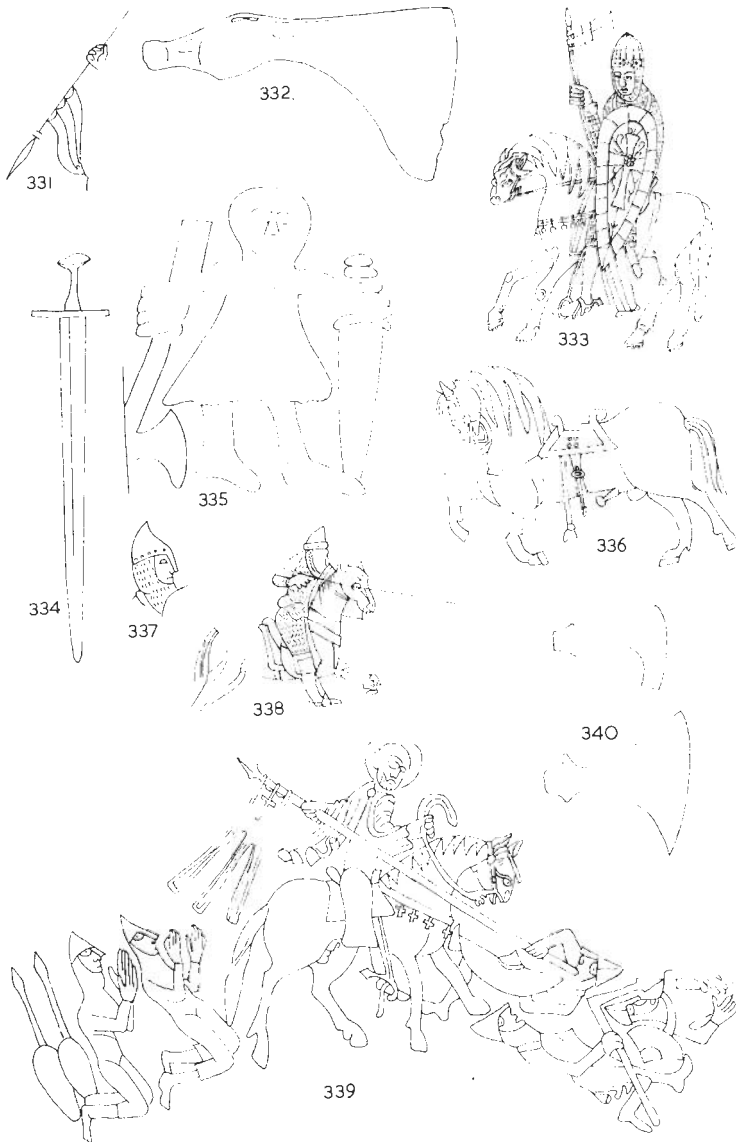
FIGS. 287-307

308. «Triumph,» carved ivory plaque, France, 9th century (Bargello, Florence).
309. «Guards at Christ's Tomb,» carved capital, France, late 11th-early 12th century (*in situ*, Church, St. Nectaire).
310. «Horsemen of the Apocalypse» (*as above*).
311. «The Betrayal,» (*as above*).
312. Carved capital, southern France, 1087-1119 (*in situ*, Cloisters of Ste. Foy, Conques).
313. «Illustrated Bible,» northern France, early 11th century (Bib. Munic., Arras).
314. «Expulsion of Moses' mother,» southern France, late 11th century (f. 27r, *Atlantic Bible*, Ms. Edili 125-126, Bib. Laurenziana, Florence).
315. «Cutting Sampson's hair,» carved capital from Cathedral of Notre Dame des Doms, Avignon, 12th century (Inv. 1922.132, Fogg Art Museum, Boston).
316. «Abime slain by Turpin,» carved relief, early 12th century (*in situ*, lintel of west door, Cathedral, Angouleme).
317. «Entry into Jerusalem,» carved capital, 1100-1150 (*in situ*, Cloisters of La Daurade).
318. «Generosity,» carved capital, c. 1155 (*in situ*, Notre Dame du Port, Clermont-Ferrand).
319. «Templer,» fresco, mid-12th century (*in situ*, Templer Church, Cressac).
320. «Roland,» stained glass window, 12th century (*in situ*, Cathedral, Chartres).
321. «Fleeing Moors» (*as above*).
322. Ivory chess-piece, southern France, 12th century (Bargello, Florence).
323. Sword, France, 1130-1170 (Private Coll., London).
324. «Siege of Carcassonne,» carved relief, early 13th century (*in situ*, Church of St. Nazaire, Carcassonne).
325. «Massacre of the Innocents,» carved pillar, 12th century (*in situ*, eastern section of the Cloisters, St. Trophime, Arles).
326. «Judas Macchabeus,» Syriac Bible perhaps from Antioch, late 12th century (f. 208v, Ms. 01.02, University Library, Cambridge).
327. Coin of Baldwin II of Edessa, Crusader States, 1100-1118 (Cab. des Médailles, Bib. Nat., Paris).
328. «The Betrayal,» manuscript from Acre, 1131-1143 (f. 7v, *Queen Milisende's Psalter*, Ms. Egerton 1139, British Library, London).
329. Ceramic fragment from Al Mina, Crusader States, early 13th century (Archaeological Museum, Antioch).
330. «Amazons fight Alexander,» manuscript from Acre, late 13th century (f. 86v, *Universal History of William of Tyre*, Ms. 562, Bib. Munic., Dijon).



Figs. 308-330

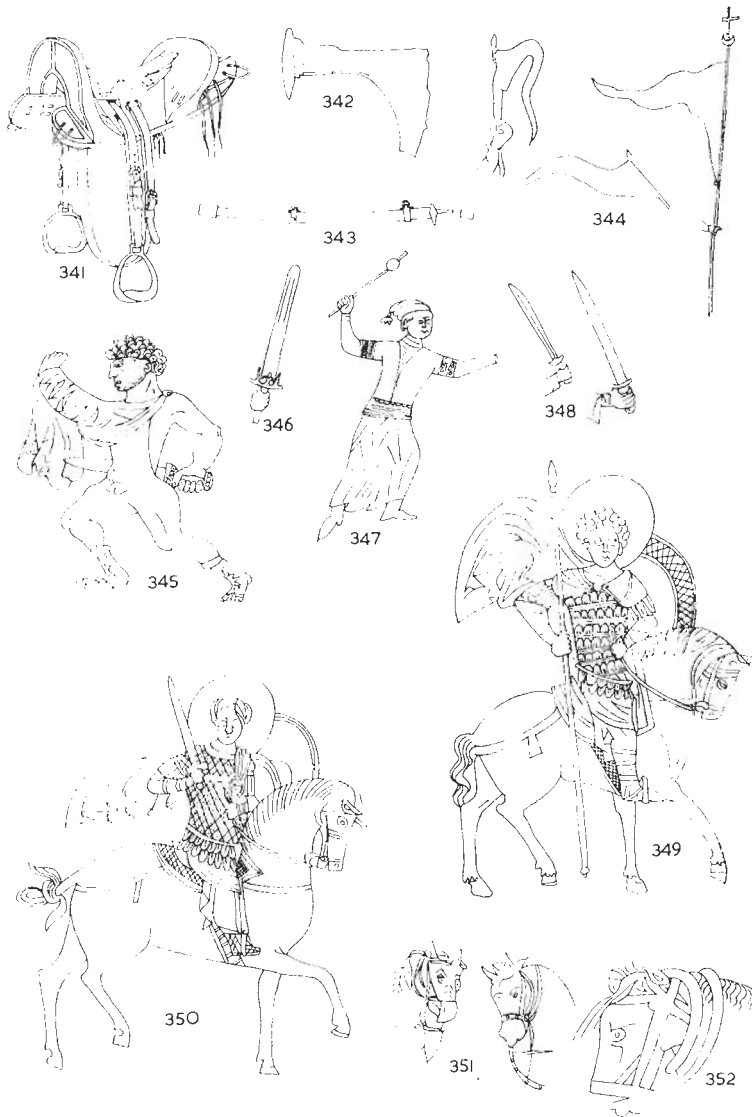
331. Ottonian manuscript from St. Gallen, early 10th century (f. 22a, Ms. Periz. F.17, University Lib., Leiden).
332. War-axe, probably made in the Rhineland, early 11th century (Center for the Archaeology of Central Poland, Lodz).
333. Engraved metal chest, southern Germany (?), mid-12th century (*Casket of the children of St. Sigismond*, Abbey of St. Maurice, Switzerland).
334. Sword, Germany, c. 1200 (Wallace Collection, London).
335. Viking carving on a ree-used Anglian Cross, 10th century (Weston Hall, Yorkshire).
336. «Horse of Duke William's messenger,» embroidered textile, England, late 11th century (*Bayeux Tapestry*, Tapestry Museum, Bayeux).
337. Manuscript from Winchester, 1150-1175 (*Life of David*, Ms. 619, Pierpont-Morgan Lib., New York).
338. «St. Edmund defeats the Danes,» England, 1125-1150 (*Life of St. Edmund*, Ms. 736, Pierpont-Morgan Lib., New York).
339. «St. George at Antioch,» carved relief, early 12th century (*in situ*, Church of St. George, Fordington).
340. Viking axe-heads, Scandinavia, 9th-10th century (Statens Historiska Museum, Stockholm).



Figs. 331-340

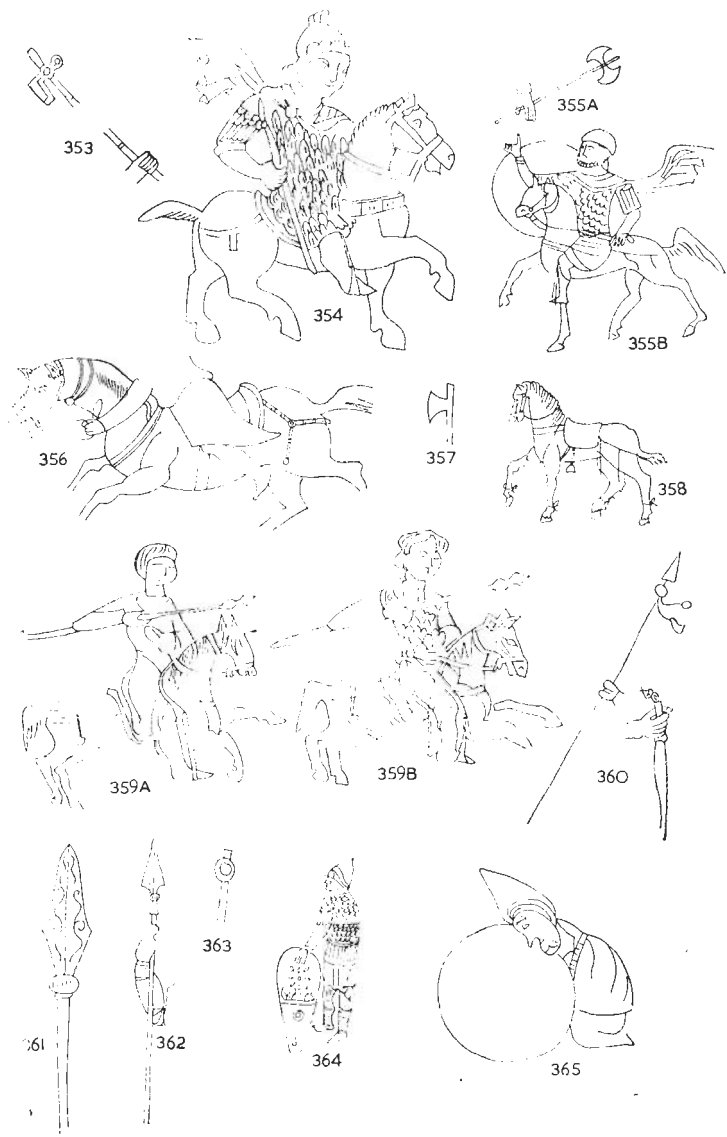
341. Woman's saddle of bone, from Soltszentimre, Hungary, 9th century (Archaeological Museum, Budapest).
342. War-axe from Lutomiensk, probably Polish, early 11th century (Centre for the Archaeology of Central Poland, Lodz).
343. Sword from Kursk region, Ukraine, 9th-13th century (Historical Museum, Kiev).
344. «Battle-flags,» Russian manuscript, c. 1175 (*Radzivilovskaya Manuscript*, present location unknown).
345. «Hercules,» engraved silver vase from Concesti, Byzantium, c. 400 (Hermitage, Leningrad).
346. «Massacre of the Innocents,» Byzantium, c. 880 (f. 137r, *St. Gregory of Nazianze*, Ms. Grec. 510, Bib. Nat., Paris).
347. «Hermes,» Byzantium, 10th century (*Pseudo-Oppian*, Ms. Gr. 479, Bib. Marciana, Venice).
348. «Massacre of the Innocents,» fresco, Byzantium, 963-969 (*in situ*, Dovecote Church, Çavuşin, Cappadocia).
349. «St. George,» carved relief icon, Byzantium, 11th-12th century (Bargello, Florence).
350. «St. Dimitri,» carved relief icon, Byzantium, 11th century (Oruzhanaya Palace, USSR).
351. «St. George,» fresco, Byzantium, c. 1070 (*in situ*, Serpent Church, Göreme, Cappadocia).
352. «Horse of St. Procopius,» fresco, Byzantium, c. 1070 (*in situ*, Sakli Kilise, Göreme, Cappadocia).





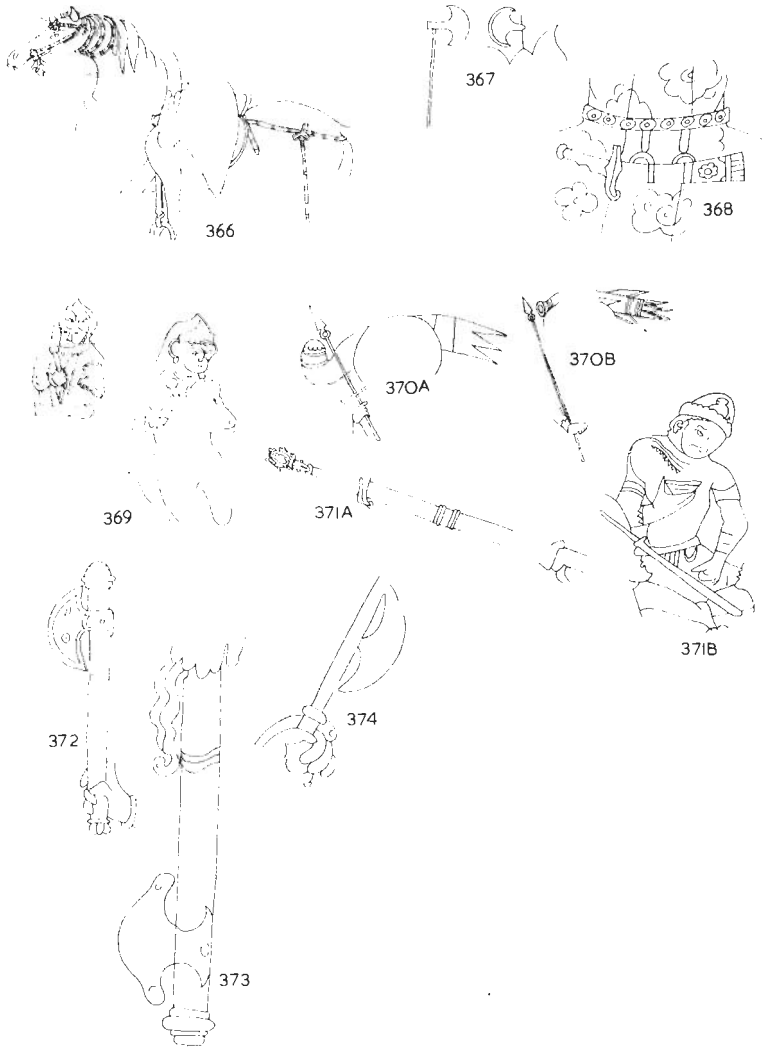
Figs. 341-352

353. «The Betrayal,» fresco, Byzantium, 11th-12th century (*in situ*, Balik Kilise, Cappadocia).
354. Figure on carved ivory chest, Byzantium, 11th century (Bargello, Florence).
355. Manuscript illustrations, Byzantium, 1066 (ff. 41 and 74, *Studite Psalter*, Ms. Add. 19352, British Museum, London).
356. «Lion hunt,» manuscript illustration, Byzantium, 11th century (Vatican Lib., Rome).
357. «The Betrayal,» fresco, Cyprus, c. 1200 (*in situ*, Naos, Hermitage of St. Neophytos, Enkleistra).
358. «Joasaph's horse,» Byzantium, late 12th-early 13th century (f. 14, *Barlaam and Joasaph*, Ms. 463, Iviron Monastery, Mt. Athos).
359. Figures on an engraved silver dish found at Chernigov, Byzantium, 12th century (Hermitage, Leningrad).
360. Manuscript illustrations, Armenia, 9th-10th century (*Concordance Table*, Ms. 697, Library of the Mekhitharistes Fathers, Vienna).
361. «St. George,» engraved silver icon from Bochorma, Georgia, early 11th century (National Museum, Tbilisi).
362. «St. George,» engraved silver icon, Georgia, 1010-1020 (Hermitage, Leningrad).
363. «The Betrayal,» Armenia, 1057 (Ms. 362.G, Patriarchal Lib., Etchmiadzin).
364. «Guard of the king of Nineveh,» Armenia, 11th-12th century (f. 283, Ms. 608, Vatopedi Monastery, Mt. Athos).
365. «Guard at Christ's Tomb,» Armenia, 1038 (Ms. 6201, Matenaderan Lib., Yerevan).



FIGS. 353-365

366. «St. Theodore,» fresco, Georgia, 1096 (*in situ*, Church, Iprari).
367. «Judgement of Pilate» and «Guards at Christ's Tomb,» Armenia, c. 1270 (ff. 184 and 194, *Four Gospels*, Ms. 32-18, Freer Gallery of Art, Washington).
368. «Hindu deity,» fresco fragment from Hu-Kuo convent, Khotan, 7th-10th century (British Museum, London).
369. Pottery figurines from Afrāsiyāb-Kafir Kala region, Turkistān, 7th-8th century (Hermitage, Leningrad).
370. «Hindu deities,» fresco, Turkistān, 8th-9th century (*in situ*, Cave 19, Kumtara, Sinkiang).
371. Frescoes, India, late 5th century (*in situ*, Cave 1, Ajanta).
372. «Ganesa,» statue, eastern India, 11th century (Inv. 1872.7-1.61, British Museum, London).
373. «Ganesa,» statue, eastern India, 11th century (Inv. 1872.7-1.54, British Museum, London).
374. «Durga slaying Mahisha,» statue, central Java, 10th century (Inv. 17.1014, Museum of Fine Arts., Boston).



Figs. 366-374