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ARMS AND ARMOUR ANALYSIS OF A JUDAS MACCABEUS' MINIATURE IN THE PŁOCK BIBLE

Iconography is one of the main sources of knowledge about our past (Janowski 2009, p. 111). In studies on arms and armour the most often used categories of iconography are numismatic and sigillographic sources, together with works of art, e.g., paintings, sculptures and illuminated codices (Ibid., p. 111). This category of sources lets us observe different kinds of arms and armour together, often also with their owners (Nadolski 1994a, p. 23; Glinianowicz 2008, p. 61). Using iconography, however, is not free of danger. For many reasons such sources have various reliability (Kajzer 1976, p. 8; Glinianowicz 2008, p. 61). Furthermore, they pose problems with identification of materials used to produce weapons (*Ibid.*, p. 40). That is why we have to study them with caution (Nadolski 1994a, p. 23).

These remarks also concern *The Plock Bible*. This important early medieval codex is now in possession of the Diocesan Museum in Płock. The *Bible* had not been studied in detail until 1993, when a dissertation by Rev. Ryszard Knapiński was completed (Knapiński 1993, p. 22–27). The codex was written in the second quarter of the 12th century and came to Płock probably thanks to Bishop of Płock Alexander of Mallone (1129–1159) (*Ibid*, pp. 12–13). The place where the *Bible* was written is unclear. R. Knapiński considers the text, the main initials and some illuminations as a product of the Meuse region. The rest of miniatures, especially those which show characters might have been painted in Płock (*Ibid*., pp. 237–248). Among many of them there is one

which presents Judas Maccabeus together with his arms and armour.

Before we start to analyze his weapons, a short note about who he was must be made. Judas was one of the sons of Mathattas (a Jewish priest). He was also one of the leaders in the war against the Syrian Seleucids in 165–160 BC (Krawczyk 2008, p. 23). Later on his name was passed along the entire dynasty which ruled Judea between 166 and 37 BC (Ibid.). The word Maccabeus was his soubriquet which he received for his bravery in the conflict (Ibid.). There are several theories explaining a meaning of his soubriquet. One of them says that the word Maccabeus came from a Hebrew term magqaba – hammer (conqueror of the enemies) (Knapinski 1993, p. 222; Krawczyk 2008, p. 23). According to another one the word Maccabeus was related to another Hebrew word magab – to nominate. Maggabjahu could therefore be translated as chosen by God (Krawczyk 2008, p. 23). It is not surprising to see Judas as a knight/warrior in medieval iconography, because he was always seen as a miles christianus – defender of faith (Knapiński 1993, p. 223).

His image in *The Plock Bible* is placed in the right upper corner of chart f.181r (Fig. 1). The character stands between two columns of a simple arcade. As mentioned above, he has a rich set of arms and armour (Fig. 2). His body is covered with long scale armour with a hood and sleeves. There is a helmet on his head. Judas holds a spear in his right hand and a kite-shaped shield in his left hand. A sword in a scabbard hangs at his left side.

We start our analysis with his armour. It is considerably long and reaches the knees of Judas. It resembles a long tunic. It also has long sleeves and

¹ I render thanks to Rev. S. Cegłowski, Director of the Diocesan Museum in Płock for making *The Płock Bible* available for my study.



Fig. 1. The Plock Bible. Chart f.181r. (Photo: Diocesan Museum in Plock)

an added coif which covers Judas' head. The entire tunic is covered with small scales (Figs. 2, 3). This kind of armour was always made of small scales riveted (but only from one side) to a leather or fabric base.² Scales were arranged in such a way that a free end of an upper one overlapped the two below. (Blair 1959, p. 16; Kirpičnikov 1971, p. 17; Nadolski 1994b, p. 67). This type of defensive equipment was known since the Bronze Age (1500–1200 BC) in

ancient Syria and the Middle East (Żygulski 1975, p. 36; Kwaśniewicz 1990, p. 168; LaRocca 2004, p. 43). In Europe it appeared during the Roman Period (Stefańska 1964, p. 99; Bruhn-Hoffmeyer 1982, pp. 125–126). It was in use in Eastern Europe until the late 17th century (Stefańska 1964, p. 99; Bruhn-Hoffmeyer 1982, pp.125–126; Kwaśniewicz 1990, p.168; LaRocca 2004, p. 43). Some scholars have assumed the eastern origin of scale armour which came to Europe probably via Byzantium (Nadolski 1994b, p. 67; Bruhn-Hoffmeyer 1982, pp.125–126).

Unfortunately not many medieval types of armour survived until present (Kajzer 1976, p. 39). The same concerns early medieval scale armours. We know hardly any examples of such armours. Few singular scales were discovered in early medieval Rus' (Kirpičnikov 1971, p. 17). One, probably an early

² Based on the discussed miniature one cannot say for sure that Judas in *the Plock Bible* wore scale armour. It is worth to note that in the early medieval iconography mail armour was shown in the same way (see Ashdown 1909, pp. 67–80). A hood or a coif worn by an armed man under a helmet or attached to it suggests that this is rather a chain mail armour. However, in the case of the coif the use of scale armour seems to be possible.



Fig. 2. *The Plock Bible.* Image of Juda Machabeus (Photo: Diocesan Museum in Płock)

medieval scale armour, is displayed at the Museum of Alava in Vitoria, Spain (Bruhn-Hoffmeyer 1982, p. 126). Fortunately iconographic sources are more helpful. Among them we can find many fine examples of scale armour. The earliest depiction of the early medieval scale armour comes from the 10th–11th century. Among them are, e.g.,: *Goliath* (?), *Smyrna Octateuch*, Byzantium – 10th–11th c.; *Herod's Guards* in the *Golden Gospel of Echternach*, Lower Lorraine – c. 1040; *Pharaoh's Army* in the *Exulted Roll* from Gaeta, southern Italy – 11th c.; *Count Guy* in *The Bayeux Tapestry* – the late 11th c., chart f.88v in *The Atlantic Bible*, southern France – late 11th c. (Nicolle 1999, pp. 51, 114, 169, 254, fig. 288g, 416, 674a,b; *Idem* 2002, p. 315, fig. 41a, 43).

Scale armour can also be found in 12th–13th c. sources, e. g.,: *Defenders* in the *Siege of a city*, carved reliefs in the Church of S. Nicola, Bari, Italy – the early 12th; a relief carving in the Church of St Gilles, St Gilles du Gard, France – c. 1145; *Egyptians flee into Asqalon* and *Defeat of Turks outside Antakya* – eighteen century drawings of lost early or mid–12th



Fig. 3. *The Plock Bible*. Helmet and scale coif which covers Judas' head (Photo: Diocesan Museum in Płock)

century stained glass windows illustrating the First Crusade – St Denis, Paris, France; a carved relief from Porta Romana, Milan, Italy - 1167; a seal of Bogusław I Duke of Pomerania-Szczecin – 1170; a coin of Bolesław I the Tall, Duke of Silesia – c. 1190; the Tapestry from Baldishol, Norway – c. 1200; relief carvings from the Church of St Trophime, Arles, France – the early 13th century; soldiers from the facade of the Reims Cathedral – the first quarter of the 13th century; a seal of Henryk I the Bearded, Duke of Silesia – 1230–34; Abraham, a wall-painting in a crypt of the Cathedral in Anagni, Italy – c. 1250–55; The arrest of Jesus, in an Armenian manuscript – c. 1270 (Laking 1920, p. 42, fig. 50; Kajzer 1976, p. 88; Wawrzonowska 1976, p. 16, Plate I:8; Wybranowski 1987, p.156; From Viking... 1992, p. 195, fig. 5; Piech 1993, fig. 37; Nicolle 1996, p 137; Idem 1999, pp. 27, 117, 208, 219, 229, 256, 335, 345, fig. 298a, 557, 578g, 613a, 680d-e, 930, 953; Świątkiewicz 2002, p. 98, pl. XXIII:5; Marrucchi, Belcari 2010, p. 302, fig. 6).

Among these examples, the closest analogies to the scale armour of Judas Maccabeus are the depictions found in *The Atlantic Bible*, the Carved Relief from *Porta Romana*, the seal of Bogusław I Duke of Pomerania-Szczecin, the Tapestry from Baldishol and the seal of Henryk I the Bearded. Their chronology falls between the late 11th and the first half of the 13th century. These analogies confirm the opinion of students of arms and armour that the armour in the shape



Fig. 4. *The Plock Bible*. Judas' kite-shaped shield (Photo: Diocesan Museum in Płock)

of a long tunic was mostly worn in the 12th century. Such armours with coifs were also in use in the 13th century (Blair 1959, p. 27; Kajzer 1976, p. 89).

Apart from his armour, Judas also wears a conical helmet (Fig. 3). Its construction is complex. Based on the miniature, we can say that it was made of four segments (2 are visible). Those parts are probably fully bounded with a circular rim and a few bands. The helmet is also equipped with a schematically depicted nasal. This type of helmet is very often called frame- or segmental helmet (Nicolle 1995, pp. 85-86; *Idem* 1999, p. 147). According to A. N. Kirpičnikov (1996, p. 23), conical helmets were pan-European weapons. Their frame/segmental variants came to Western Europe from Byzantium (Vogt 2006, passim). Helmets built up of segments and bands are known from the late-Roman and Migration Periods and they are in use until the 14th century (Laking 1920, pp. 45–54; Blair 1959, p. 25; Żygulski 1975, p. 33; The Bayeux... 2004, p. 222; Vogt 2006, pp. 46-63). As it was in the case of scale armour, we also have scarce archaeological evidence for such kind of helmet. Among them it is worth to mention a conical helmet built up from segments, which was found in Northern France (the 12th–13th century) (Laking 1920, p. 45, fig. 59:a-b). More evidence for



Fig. 5. *The Plock Bible*. One simple mount – a holder – on the visible part of the shield (Photo: Diocesan Museum in Płock)

the use of such kind of helmets is again known from iconographic sources. Among many of them the finest examples are: The Bayeux Tapestry – the late 11th c.; David and Goliath from a German manuscript – 1148; the carved Relief from *Porta Romana*, Milan, Italy – 1167; the seal of Bogusław I Duke of Pomerania-Szczecin – 1170; a seal of Kazimierz I Duke of Pomerania – c. 1180; a stained glass window from the Cathedral in Canterbury, England – the late 12th c.; Guards at the Holy Sepulchre – a wall painting from the Hermitage of San Baudelio de Berlanga, Spain - the late 12th c.; an armed man in the *Release of St.* Peter scene from the Płock Door – c. 1152–1154; a seal of Leszek I the White, Duke of Poland – 1229; the seal of Henryk I the Bearded, Duke of Silesia - 1230-34 (Walicki 1971, p. 638, fig. 1144; Kajzer 1976, p. 139, fig. 1:3, 27:a; Wawrzonowska 1976, p. 19, pl. II:5; Poppe 1983, p. 31, 47; Wybranowski 1987, p. 156; Piech 1993, fig. 37; Nicolle 1999, pp. 51 – 54, 66, 150, 174, 219, fig. 97af, 149c, 374, 435, 578g; Świątkiewicz 2002, p. 98, Plate XXIII:5, 7; *The Bayeux*... 2004, pl. 18, 21, 22, 23; Świechowski 2006, pp. 199-311; Marrucchi, Belcari 2010, p. 302, fig. 6). This short survey demonstrates that conical and segmented helmets were still popular in the 12th century.

To finish the discussion of Judas' defensive equipment we must also discuss his shield. The kite-shaped shield (Fig. 4) is depicted from its rear side. This is why we do not know whether there is a shield-boss on the front side or not. There is one simple mount – a holder – on the visible part of the shield (Fig. 5). The shield is painted blue, which might suggest that the artist depicted a weapon coated in coloured canvas.

Kite-shaped shields came into use at the beginning of the 11th (or even the late 10th century) and lasted until the 13th century, when their shape evolved into different forms. The earliest images of such shields are known from France, Spain and Italy (Dziewanowski 1935, p. 73; Nadolski 1954, p. 76; Żygulski 1975, p. 42; Nadolski 1994b, p. 62; Nicolle 1995 p. 83; The Bayeux... 2004, p. 224; Janowski 2009, p. 127). This type of shield was quite large, being 1 - 1.2 meter high (Nadolski 1954, p. 76). It is very difficult to find kite-shaped shields which survived until present. They were made of organic materials which do not preserve well (*Ibid.*, p. 79). The author knows only one preserved kite-shaped shield. It was found in the early medieval stronghold in Szczecin, Poland. It is dated to between the end of the 12th and the beginning of 13th century (Uciechowska-Gawroń 2003, p. 188, fig. 6). As opposed to archaeological finds, early medieval iconography is abundant in depictions of kite-shaped shields. There is no room to mention them all, so we limited the list of analogies to some selected examples. Kite-shaped shields were represented in early medieval sources since the end of the 10^{th} – the beginning of the 11^{th} century, e. g., in: Gospel, Duchy of Brittany - the late 10th – the beginning of the 11th c.; the *Utrecht* Psalter, Wessex – the early 11th c.; Herod and Mas*sacre of Innocents* from the *Evangelistarium – Codex* aureus Pultoviensis – the 2nd half of the 11th c.; coins of Bolesław II the Generous, King of Poland – the 3rd quarter of the 11th c.; The Bayeux Tapestry, southern England – the late 11th c. (Suchodolski 1962, p. 126; Walicki 1971, pp. 258, 533, fig. 786; Nicolle 1999, pp. 22, 51–54, fig. 1, 97, 98:d; The Bayeux... 2004, pl. 8; Świechowski 2006, p. 287).³

Most of them are, however, noticeable in iconography of the 12th and the beginning of the 13th

century, e. g. in: David and Goliath from a German manuscript - 1148; the Gebhard Bible, Hungary or Germany – the mid–12th c., the Release of St. Peter scene from the Płock Door - 1152-1154; Three Marys at the Grave and the Capture of Christ from the Evangelistarium, Kruszwica, Poland – 1160–1170; a carved relief from the *Porta Romana*, Lombardy - 1167; the Royal Chalice from Trzemeszno, Poland - 1180; Scene X from the Gniezno Door - the 2nd half of the 12th c.; The Baldishol Tapestry, Norway - c. 1200; coins of Henryk I the Bearded, Duke of Silesia – c. 1200; Knights in quest of the Holy Grail from the painted frieze of knights, the Skibet Church, Denmark, c. 1200; seals of Leszek the White, Duke of Sandomierz and Duke of Poland - 1210 and 1229 (Drzwi Gnieźnieńskie... 1956, p. 48; Walicki 1971, pp. 180, 549, 638, 648, fig. 851, 1144, 1175; Kajzer 1976, p. 139, fig. 27:a, cat Nos. 3 and 4; Wawrzonowska 1976, p. 22, pl. I:13-14; Poppe 1983, pp. 31, 47; Dobrzeniecki 1991; From Viking... 1992, pp. 195, 214, fig. 5, 7; Nicolle 1999, pp. 174, 219–220, 313, 345, fig. 435, 578, 581:d,k, 835:a-h, 953; Augustyniak 2000, pp. 29, 83, 97; Świechowski 2006, pp. 199–325, 334).⁴

As it was demonstrated above, kite-shaped shields may have appeared in the late 10th century but their occurrence was mostly visible in the 11th and especially in the 12th century. In the 13th century this type of shield commenced to disappear.

Offensive weapons of Judas consist of a spear (Figs. 6–8) and a sword (Fig. 9). The spear is held in the right hand of the hero. We can see the whole construction of the weapon. It has a massive spearhead in the shape of a cone with a circular base (Fig. 7). The author does not know any similar spearheads in the archaeological material. Iconography is not

³ Furthermore, it is worth to note that kite-shaped shields were also represented it other early medieval iconographic sources dated to the 11th century, e. g., Herod's Guards from the Golden Gospel of Echternach, Lower Lorraine – c. 1040; Pharaoh's army from the Exultet Roll from Monte Cassino, Italy – 1075; St Michael, a carved relief from the tympanum of Minster, Southwell, England - the 11th c.; the Farfa Bible, Catalonia, Spain – the 11th c.; the Roda Bible, Catalonia, Spain - the 11th c.; the Beatus Commentaries on the Apocalypse - the late 11th c.; The Atlantic Bible, southern France - the late 11th c.; carved capitals in the Church of Ste Foy, Conques, France - 1087-1119; carved capitals from the church in St Nectaire, France – the late 11th – the beginning of the 12th c.; the Martyrdom of St Felix of Aquileia, a decorated front of a portable metal altar, Abdinghof, Germany - c. 1100 (Nicolle 1999, pp. 51, 113-114, 128-129, 147, 169, 170, 255, fig. 96, 286, 288–289, 321–322, 363, 416, 421, 678).

⁴ Other iconographic sources shown kite-shaped shields dated to the 12th–13th century are: *Herod's guards*, wall-paintings from the Church of St Botolph, Hardham, England – 1100–1110, the ivory cover of the Queen Melisende's Psalter, Palestine - the early 12th c.; Siege of a city from carved reliefs from the Church of St. Nicola, Italy – the early 12th c.; a fragment of a copper-alloy pyx, England – the early 12th c.; the Reliquary of Children of St Sigismund, the Abbey of St Maurice, Valais, Switzerland – c. 1130; carved reliefs from the Abbey church, Andlau, France - c. 1130-1140; carved capitals from the Cathedral in Parma, Italy - 1150-1170; Virtues from the Troves Casket, England (?) – 1170; a stained glass window from the Cathedral in Canterbury, England – the late 12th c., a carved doorway from San Miguel de Uncastillo, Spain - the 12th c.; the *Bible of King Sancho*, Navarre, Spain – 1197; the Book of Matins from Santo Domingo de Silos, Spain – the 12th c. (Nicolle 1999, pp. 60, 62–63, 66, 130, 133, 153, 172, 209, 220, 277, 256, fig. 127, 133, 137b, 149:c, 326:b, 337:c, 386:a-b, 429c, 560, 581:d,k, 680:a-c,l, 729).

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Fig. 7. *The Plock Bible*. Massive spearhead in the shape of a cone (Photo: Diocesan Museum in Płock)



Fig. 8. *The Plock Bible*. Ferrule of Judas' spears (Photo: Diocesan Museum in Plock)



Fig. 9. *The Plock Bible*. Scabbard finished with a yellow chape (photo: Diocesan Museum in Plock)

Fig. 6. *The Plock Bible*. Judas' spear (Photo: Diocesan Museum in Plock)

of much help in this case, either. Only three similar depictions of spearheads were identified. They came from: the *Beatus Commentaries on the Apocalypse*, Spain – 1091–1109; the *Arca Santa*; a decorated metal plaque form Asturia, Spain – 1175; a carved sarcophagus in the Monastery of Nuestra Senora de Irache, Estella, Spain – the late 12th – the early 13th c. (Nicole 1999, pp. 146–148, 152, fig. 360h, k, 665c, 680g). In the light of such a small number of analogies we can also regard the spearhead from *The Plock Bible* as a figment of the artist.

The spearhead is mounted on the top of a long wooden shaft, which is of the same size as Judas. On the other end of the shaft there is a ferrule (Fig. 8). Metal ferrules of spears are well represented in Polish archaeological sources. They were discovered i. a. in: Lake Lednica (3 specimens), Strzeszewo-Kuliski, Dziekanowice, Młodzikowo, Pokrzywnica Wielka and Ostrów Lednicki. They are dated to the 10th-the 12th century (Tokarski 2000, p. 87, Plate VII:7, 8; Górecki 2001, p. 136; Rutkowski 1906, p. 40;

Wrzesiński 1989, p. 126; Leciejewicz, Łosiński 1960, p. 111; Rauhut, Długopolska 1971, p. 322; Wrzosek 1961, p. 259). Some examples are also known from iconography, e.g.,: the *Beatus Commentaries on the Apocalypse*, Spain – 1091–1109; the *Homilies from Santo Domingo de Silos*, Spain, the 11th c., *Crucifixion* from the *Exultet Roll*, Benevento, Italy – the 12th c. (Nicolle 1999, pp. 146–147, 263, fig. 360e-h,l, 362, 699e). As it can be seen, the depiction of metal ferrules of spears in the 12th c. is confirmed by both archaeological and iconographical sources.

The sword is not completely visible (Fig. 9). Its hilt is beneath the shield and its blade is inside the scabbard. The only thing we can say is that the blade is quite broad. The scabbard is painted brown which can suggest that this element was made of or covered with leather. The end of the scabbard is finished with a yellow chape. Its colour may mean that this element was cast of copper alloy. Early medieval scabbards were made mostly of organic materials and they usually did not survive until present. Sometimes scab-

bards ended with metal chapes (Nadolski 1954, p. 34; Janowski, Kurasiński 2009, p. 83–84). The main function of the scabbard was to protect the sword blade against corrosion and other damages (*Ibid.*, p. 74). Scabbard-chapes made of copper alloys are well represented in archaeological materials. Over a few hundreds of them dated to between the 10th and the 13th century were found in Central, Northern and Eastern Europe. Some examples were also noted in southern parts of Europe (Ibid., p. 84). Very few scabbard-chapes are known from the iconography of the 11th and the 12th century (*Ibidem*, p. 85). Just a few of them look similar to the one depicted in The Płock Bible. They are known from: the Army of Hai in the *Maciejowski Bible*, Paris, France – c. 1250; an ivory jewellery case form Köln, Lower Lorraine - the late 12th c.; ivory chessmen, southern Italy or Sicily – the 11th c. (Nicolle 1999, pp. 35, 174, 251, fig. 49g, 433b, 667b). Both archaeological and iconographical analogies confirm the existence of similar

chapes in the 12th c. It is worth saying that chapes which are similar to that on Judas' scabbard were also dated to the 12th c. by A. Geibig (Geibig 1991, p. 109, fig. 29:20).

As we can see, the miniature with Judas Maccabeus offers an interesting set of arms and armour. But what are the conclusions of this analysis? The first idea which comes to mind is that we have another source which contributes to our knowledge about early medieval arms and armour. It is particularly valuable, as we do not have many preserved early medieval armours, helmets and shields. Of course, in some cases, such as the spearhead, it was hard to classify it and we must be aware of possible stylistic conventions and invention of the artist. Offered analogies demonstrate that both defensive and offensive weapons correspond to those used in the 12th century. This means that we can successfully use the miniature from The Płock Bible as a comparative material in studies of arms and armour from this period.

BIBLIOGRAPHY

Ashdown C. H.

1909 British and Foreign Arms and Armour, London. Augustyniak J.

2000 Najstarsze skarby chrześcijańskiego dziedzictwa Polski. Katalog wystawy, Łódź.

Blair C.

1959 European Armour circa 1066 to circa 1700, London.

Bruhn-Hoffmeyer A.

1982 Arms & Armour in Spain II. A short survey, Madrid.

Dobrzeniecki T.

1991 Królewski kielich koronacyjny z Trzemeszna, (in:) D. Gowinowa et al. (ed.), Kultura średniowieczna i staropolska. Studia ofiarowane Aleksandrowi Gieysztorowi w pięćdziesięciolecie pracy naukowej, Warszawa 1991, pp. 241–250.

Drzwi Gnieźnieńskie...

1956 Drzwi Gnieźnieńskie. Dokumentacja fotograficzna, eds. M. Walicki, T. Adamowicz, Wrocław.

Dziewanowski W.

1935 *Zarys dziejów uzbrojenia w Polsce,* Warszawa. From Viking...

1992 From Viking to Crusader. The Scandinavians and Europe 800–1200, eds. E. Roesdahl, D. M. Wilson, Uddevalla.

Geibig A.

1991 Beiträge zur morphologischen Entwicklung des Schwertes im Mittelalter. Eine Analyse des Fundmaterials vom ausgehenden 8. bis zum 12. Jahrhundert aus Sammlungen der Bundesrepublik Deutschland, Offa-Bücher, Vol. 71, Neumünster.

Glinianowicz M.

2008 Elementy uzbrojenia na późnośredniowiecznych malowidłach z kościoła w Haczowie, Acta Militaria Mediaevalia, Vol. IV, pp. 61–85.

Górecki J.

2001 Gród na Ostrowie Lednickim na tle wybranych ośrodkow grodowych pierwszej monarchii piastowskiej, Biblioteka Studiów Lednickich, Vol. VII, Lednica.

Janowski A.

2009 Grawerowane misy brązowe – zapomniane źródła ikonograficzne do dziejów uzbrojenia w średniowieczu, Acta Militaria Mediaevalia, Vol. V, pp. 111–136.

Janowski A., Kurasiński T.

2009 Miecz i pochwa – razem i osobno. Wstęp do problematyki, (in:) P. Pudło, G. Żabiński, P. Kucypera (eds.), Arma et Medium Aevum. Studia na uzbrojeniem średniowiecznym, Toruń, pp. 74–116.

Kajzer L.

1976 Uzbrojenie i ubiór rycerski w średniowiecznej Małopolsce w świetle źródeł ikonograficznych, Wrocław – Warszawa – Kraków – Gdańsk.

Kirpičnikov A. N.

1971 Drevnorusskoe oružie, Dospeh, kompleks boevyh sredstv IX – XIII vv, Archeologia SSSR, Vol. El –36, Leningrad.

Knapiński R.

1993 Iluminacje romańskiej Biblii Płockiej, Lublin.

Krawczyk R.

2008 Machabeusze. Walka o tożsamość narodową i religijna w dobie hellenizacji, (in:) J. Gmitruk, W. Włodarkiewicz (eds.), Z dziejów wojskowości pol-

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skiej. Księga jubileuszowa profesora Kazimierza Pindla w 70 rocznicę urodzin, Warszawa – Siedlce, pp. 23 – 32.

Kwaśniewicz W.

1990 1000 słów o broni białej i uzbrojeniu ochronnym, Warszawa

Laking G. F.

1920 A record of European Armour and Arms through seven centuries, London.

LaRocca D.

2004 Scale armour, (in:) S. W. Pyhrr, D. J. LaRocca, M. Ogawa (eds.), Arms and Armor. Notable acquisitions 1991–1992, New York, pp. 41–43.

Leciejewicz L., Łosiński W.

1960 Wczesnośredniwieczne cmentarzysko w Młodzikowie, w pow. średzkim, Fontes Archaeologici Posnanienses, Vol. 11, pp. 104–165.

Marrucchi G., Belcari R.

2010 Sztuka przedromańska i romańska, Warszawa.

Nadolski A.

1954 Studia nad uzbrojeniem polskim w X, XI i XII wieku, Acta Archaeologica Universitas Lodziensis, No. 3, Łódź.

1994a *Wstęp*, (in:) A. Nadolski (ed.), Polska technika wojskowa do 1500 r., Warszawa, pp. 11–30.

1994b *Lądowa technika wojskowa od połowy X do połowy XII w.*, (in:) A. Nadolski (ed.), Polska technika wojskowa do 1500 r., Warszawa, pp. 31–107.

Nicolle D.

1995 Medieval Warfare Source Book. Volume I: Warfare in Western Christendom, London.

1996 Medieval Warfare Source Book. Volume 2: Christian Europe and its Neighbours, London.

1999 Arms and Armour of the Crusading Era, 1050–1350.

Western Europe and the Crusader States, London.

Piech Z.

1993 Ikonografia pieczęci Piastów, Kraków.

Poppe A.

1983 Z nowszych badań nad Drzwiami Płockimi, (in:)
 A. Gieysztor (ed.), Romańskie Drzwi Płockie 1154
 – ok.1430 – 1982, Płock, pp. 30–49.

Rauhut L., Długopolska L.

1971 Wczesnośredniowieczne cmentarzysko w obudowie kamiennej w Pokrzywnicy Wielkiej, pow. Nidzica, Wiadomości Archeologiczne, Vol. 18, pp. 323–344.

Rutkowski L.

1906 *Cmentarzyska rzędowe w Rostkowie, Strzeszewie, Wierzbicy, Żochowie, Blichowie i Rogowie,* Światowit, Vol. 7, pp. 39–43.

Stefańska Z.

1964 *Pancerze w Polsce średniowiecznej,* Muzealnictwo Wojskowe, Vol. II, pp. 73–140.

Suchodolski S.

1962 Numizmatyczny przyczynek do dziejów uzbrojenia w Polsce w XI i XII w., Archeologia Polski, Vol. VII, pp. 12–134.

Świątkiewicz P.

2002 Uzbrojenie wczesnośredniowieczne z Pomorza Zachodniego, Acta Archaeologica Lodziensia, No. 48, Łódź

Świechowski Z.

2006 Sztuka Polska. Romanizm, Warszawa.

The Bayeux...

2004 The Bayeux Tapestry. The Complete Tapestry in Colour wits Introduction, Description and Commentary by David M. Wilson, London.

Tokarski W.

2000 Militaria – broń miotająca, obuchowa i drzewcowa, oraz elementy rzędu końskiego i oporządzenia jeździeckiego, (in:) Z. Kurnatowska (ed.), Wczesnośredniowieczne mosty przy Ostrowie Lednickim. Tom I. Mosty traktu gnieźnieńskiego, Lednica –Toruń, pp. 77–104.

Uciechowska-Gawroń A.

2003 Obwałowania wczesnośredniowiecznego podgrodzia w Szczecinie w badaniach Pracowni Archeologicznej Zamku Książąt Pomorskich, (in:) H. Paner, M. Fudziński (eds.), XIII Sesja Pomorzoznawcza, Vol. 2, Gdańsk, pp. 179–191.

Vogt M.

2006 Spangenhelme. Baldenheim und Verwandte Typen, Kataloge Vor- und Frühgeschichtlicher Altertümer, Vol. 39, Mainz.

Walicki M.

1971 Wyposażenie artystyczne dworu i kościoła, (in:) M. Walicki (ed.), Sztuka polska przedromańska i romańska do schyłku XIII wieku, Warszawa, pp. 249–304.

Wawrzonowska Z.

1976 Uzbrojenie i ubiór rycerski Piastów Śląskich od XII do XIV wieku, Acta Archaeologica Lodziensia, No.

Wrzesiński J.

1989 Cmentarzysko szkieletowe w Dziekanowicach, gm. Łubowo, St. 2, Studia Lednickie, Vol. I, pp. 103-146

Wrzosek A.

1961 Zabytki wczesnośredniowieczne z Ostrowa Lednickiego, pow. Gniezno, Fontes Archaeologici Posnanienses, Vol. 12, pp. 242–280.

Wybranowski D.

1987 Uzbrojenie i wyposażenie rycerskie na pieczęciach Gryfitów z lat 1170–1523, Przegląd Zachodniopomorski, Vol. II (XXXI).

Żygulski Z. jun.

1975 Broń w dawnej Polsce na tle uzbrojenia Europy i Bliskiego Wschodu, Warszawa.

Piotr Pudło, Ph.D. University of Łódź Institute of Archaeology 3 Uniwersytecka St. 90–137 Łódź, Poland telawel@o2.pl