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LATE MEDIEVAL WEAPONRY FINDS FROM KOSTRZYN NAD ODRA. CULTURAL AND HISTORICAL CONTEXTS

Abstract:

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Kostrzyn nad Odrą (Küstrin) – a town situated in the north-western part of today's Lubuskie Voivodeship, in the confluence of the Warta River into the Odra River – was in the Middle Ages an important part of the defensive system of the eastern frontiers of Brandenburg. A catastrophic drought from 2015, and thus the record low level of the Odra River and the moats surrounding the Kostrzyn Fortress, enabled the employees of the Kostrzyn Fortress Museum to discover three extremely intriguing medieval military artefacts: an axe, a spear and a falchion. Their form and characteristic decoration allow to date them to the 15th century. These finds have numerous analogies in artefacts known from Silesia, Bohemia and Moravia, which suggest the southern origin of the analysed finds of weaponry.

Keywords: weapon, 15th century, star symbol, falchion, spear, axe, Kostrzyn

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Introduction

Kostrzyn nad Odrą (Germ. Küstrin) – a town situated in the north-western part of today's Lubuskie Voivodeship, in the confluence of the Warta River into the Odra River – was in the Middle Ages an important part of the defensive system of the eastern frontiers of Brandenburg. The real heart of this urban centre was the Old Town, located on the right bank of the Odra River and occupying one of the higher "islands" formed by river sediments at the bottom of the ice-marginal valley. More stable and permanent settlement appeared here about the 10th century (Hołowińska 1980). Later on, German settlers set up a town in this area – it was first mentioned in 1232 (Lat. "Cozsterine" – see Dobosz 1991, 80). However, a separate settlement of Slavic fishermen and shepherds – Chyża (Kietz) – still existed in the neighbourhood of the town. In the Middle Ages, a characteristic communication system with a tract cutting through the proglacial stream valley was formed. It was placed on numerous dikes connected with bridges. It is possible that even in the 13th, and certainly in the 14th century, a castle was built at the crossing over the Odra River.

Unfortunately, sources about the history of 15th century Kostrzyn bring little information. At the time of acquisition of the pledge of the Neumark in 1402, Kostrzyn was still in the hands of Jan von Wartenberg, but he soon decided to transfer the town to the Teutonic Knights for 1.300 three-scores of Groschen. The Neumark, located on the communication route connecting the Order's State with the Empire, was a valuable acquisition for the Order, securing constant communication with the West. It also had strategic, military and political significance, especially in the face of the war with Poland, because in this way the Teutonic Knights flanked the Polish state also from the north-west. From the very beginning the Teutonic Order tried to rebuild material foundations of state power. They recognised the newly acquired Kostrzyn as an important centre of their authority on the *terra trans Oderam*. Presumably, one of the seats of the Teutonic authority in the Neumark was also located here (ibidem, 88). An important element of consolidation of the Order's authority was the creation of new Teutonic tower houses and the extension of existing castles in these areas. This process also took place in Kostrzyn, which,



Fig. 1. Kostrzyn nad Odrą. 1 – plan depicting hypothetical layout of the Old Town in Kostrzyn nad Odrą before 1535: I – castle, II – church, III – customs station (after Fredrich 1913, Fig. 4); 2 – geodetic map of the Old Town with location of analysed weaponry (stars): A – falchion, B – spearhead, C – axehead. Elaborated by K. Socha.

Ryc. 1. Kostrzyn nad Odrą. 1 – plan przedstawiający hipotetyczne rozplanowanie Starego Miasta w Kostrzynie nad Odrą przed 1535 r.: I – zamek, II – kościół, III – stacja celna (wg Fredrich 1913, ryc. 4); 2 – mapa geodezyjna Starego Miasta z lokalizacją znalezisk omawianej broni (gwiazdki): A – kord, B – grot kopii, C – żełżece topora. Oprac. Krzysztof Socha.

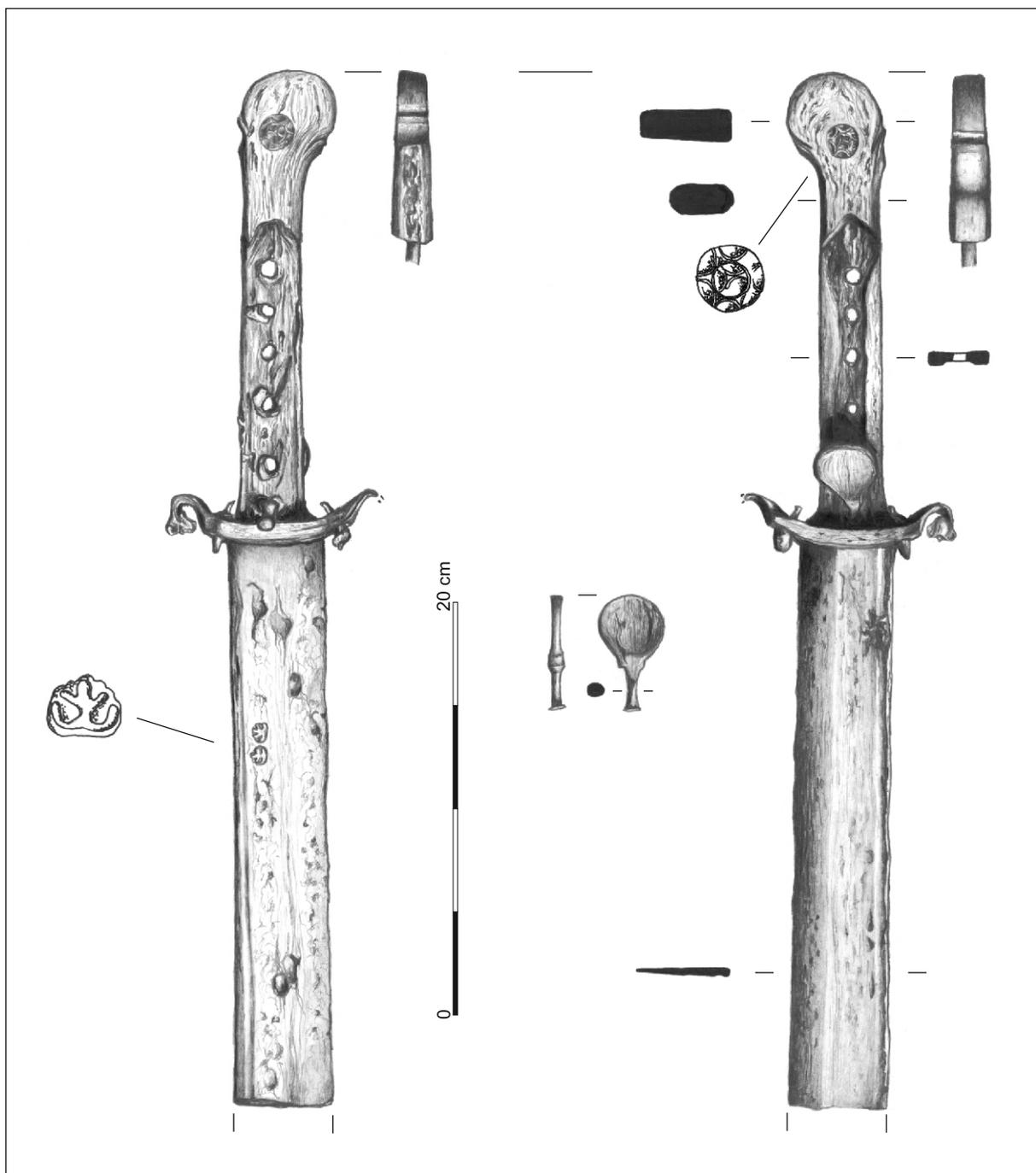
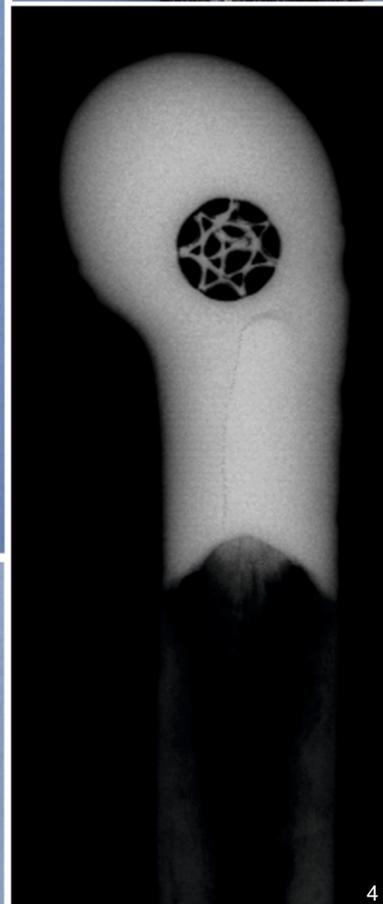


Fig. 2. Kostrzyn nad Odrą. Falchion found within the Odra riverfront in the Old Town. *Drawing by J. Sójkowska-Socha.*

Ryc. 2. Kostrzyn nad Odrą. Kord odkryty na nadbrzeżu Odry w obrębie Starego Miasta. *Rys. J. Sójkowska-Socha.*

despite considerable economic difficulties, led in the next period to the growth in importance of the castle in the history of the town as an administrative and military centre. The role of Kostrzyn and the castle operating within it can be perfectly seen in the surviving inventories of the castle armoury. These inventories were written down in the period when the town upon the Odra was in the possession of the Teutonic Knights. The inventories

are a testimony of attempts at consolidating the strength and military significance of the Kostrzyn castle, as well as of the reception of military novelties by the Teutonic military. Records bring us information about arms and armour stored in the Kostrzyn arsenal (Michalak 2019, 13). In 1428 and 1430 two bascinets were kept in Kostrzyn (*Das grosse Ämterbuch* 1921, 768-771). Four mail hauberks, coming out of use in the 15th century,



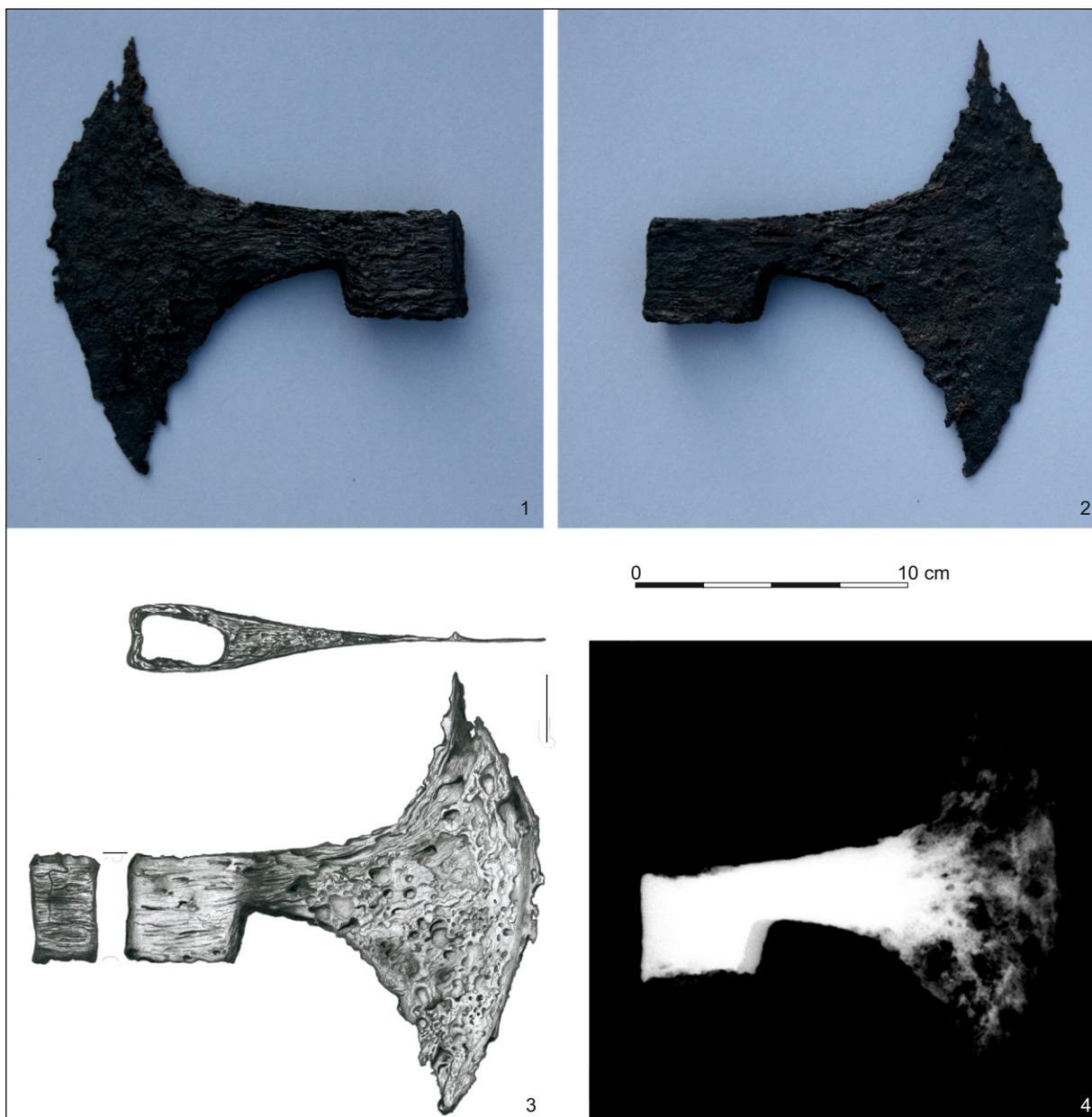


Fig. 4. Kostrzyn nad Odrą. Axehead found within the Odra riverfront in the Old Town. *Drawing by J. Sójkowska-Socha; photo by A. Michalak.*

Ryc. 4. Kostrzyn nad Odrą. Żelazce topora odkryte na nadbrzeżu Odry w obrębie Starego Miasta. *Ryc. J. Sójkowska-Socha; fot. A. Michalak.*

were also accumulated there. They were stored in this place only to the 1430s. In 1413, 1428 and 1430 a mail coif was also held in the armoury. Coats of plates, which replaced the mail, but were becoming obsolete in the 15th century, were kept in Kostrzyn between 1428 and 1430, but only in one specimen. In 1413, the scribe listing the inventory of the castle arsenal in Kostrzyn mentioned three one-piece breastplates (“bruste”). Individual defences

were supplemented by shields. In 1428 and 1430 two large assault pavises (“stormtarczen”) were kept in the Kostrzyn castle. As for offensive arms, the crossbow was the basic weapon of the garrison of the Kostrzyn fortress. In 1410, 20 crossbows were kept in the armoury, while seven were stored in 1413-1417, in 1428 and in 1430. On the other hand, there were 53 crossbows in 1443, and another 30 were stored in the town arsenal. Stores of

◁ Fig. 3. Kostrzyn nad Odrą. Falchion found within the Odra riverfront in the Old Town. *Photo by A. Michalak.*

◁ Ryc. 3. Kostrzyn nad Odrą. Kord odkryty na nadbrzeżu Odry w obrębie Starego Miasta. *Fot. A. Michalak.*

crossbows were supplemented with crossbow bolt supplies. In the armoury of the Kostrzyn Castle in 1410, one barrel of bolts was stored, and in 1413 two barrels were recorded. There were 9000 bolt heads in 1430, and the same number was mentioned in 1443. Additionally, another 1800 bolt heads were kept in the town arsenal. In the Kostrzyn castle armoury there were also resources of firearms, which were to become the dominant weapon of 15th century battlefields. In 1443 four cannons that launched stone projectiles were kept in Kostrzyn. Additionally, in the records from 1410 and 1413 there were also four “lotbuchsen” – firearms of smaller calibre for lead projectiles. In 1443, six guns of this kind were stored in the municipal arsenal and in the castle one there were even 18 (ibidem, 768-771). On the basis of the inventory of the Kostrzyn castle armoury we can presume that gunpowder – a propellant used in firearms for launching projectiles – was produced there. In the resources of the armoury in 1443 all components of its recipe were kept, that is, two barrels of saltpetre (“saltpeter”) and one barrel of sulphur (“swebel”). Beside that, in 1410 a half of a barrel and in 1413 one whole barrel of ready gunpowder were also stored in the armoury (ibidem, 765-774).

While analysing data from this source, one should obviously remember about their limitations (Żabiński 2013). These records, regrettably, do not bring any information about individual weapons of combatants. Fortunately, archaeological data offers help, although it must be objectively stated that archaeological finds have been scarce so far (Socha 2012). Until now, only a dozen or so finds of weaponry have been discovered in the area of the town, and these are rather of inferior quality (Michalak 2019, catalogue). However, can these artefacts be related to the castle’s garrison?

Circumstances of discovery

A catastrophic drought from 2015, and thus the record low level of the Odra River and the moats surrounding the Kostrzyn Fortress, enabled the employees of the Kostrzyn Fortress Museum and the volunteers cooperating with them to reach places which were previously inaccessible. After all approvals and permits had been obtained, exploration with the use of metal detectors was started. It was not necessary to wait long for their effects. The first brief passage through the dried up bank of the Odra brought the discovery of a dozen unexploded ordnance. Due to intense military actions conducted in February and March 1945, 70% of the discovered items were related to World War II fights around Kostrzyn.

On the dried up embankment of the Odra River, an 18th century twelve-pound grenade, a bayonet of the Mosin-Nagant Soviet rifle, Spent cartridge cases, a German mess-tin and a very large amount of ceramics and glass from the Modern Period were also unveiled. The most interesting artefacts are however those dating from the Middle Ages, that is, the axe, the spear and the falchion. They were discovered during metal-detector survey on the inter-river field of the Odra River in the 614.6th km (Fig. 1:2). These items were located quite close to each other. The area in which the finds were discovered is historically connected with the course of the medieval bridge crossing, located in the immediate vicinity of the Kostrzyn castle. Incidentally, during the archaeological works, we documented several dozen wooden piles, whose upper parts did not protrude from the river silt. It seems, however, that they are related to the Modern Period reconstruction of the Kostrzyn fortress.

Description and analysis of the finds

The discovered falchion, whose preserved overall length is 52.2 cm, was made of ferrous metal. It has a broad blade with a parallel course of the cutting edge and the back, The blade is preserved to the length of 29.7 cm, it is 4.7 cm wide while the back’s thickness is 0.5 cm (Fig. 2). The blade is provided with a 0.3 cm wide fuller, placed near the back and running along the entire length of blade. On the blade, 10.5 cm from the base, a repeated maker’s mark was stamped (Fig. 3:6). This falchion’s hilt is 3.0 cm wide and 0.83 cm thick. A recess in the centre of the hilt tang was formed, in which six holes for 0.7 × 0.7 cm tubular rivets were punched. In the one closest to the blade, an oval side guard with a four-sided base was attached for the sake of knuckle protection (Fig. 3:5). The height of the whole side guard is 5.8 cm, its width is 3.2 cm, the fixing tang is 2.1 cm long and the entire guard weights 28 g. At the base, the side guard is clearly thickened to the width of the mounting tang (0.6 cm), and then it narrows to 0.3 cm. Eventually, it reaches 0.5 cm in the top part. The falchion is provided with a boat-like cross-guard with ends bend toward the blade. Its preserved length is 10.4 cm, while its width is 1.8 cm in the central part and 0.4 cm in its triangular ends. The cross-guard was originally mounted on two perpendicularly embedded 2.4 cm long rivets. The falchion at the top of the hilt was provided with a pommel with a semicircular upper edge, with a slightly marked cut-out from the inside. The pommel’s dimensions are 8.5 × 4.6 cm. Its thickness at the base clearly decreases

towards the top (from 2.0 to 1.35 cm). In the centre of the pommel there is an openwork iron rosette with dimensions of 1.8 × 1.8 cm, and its internal diameter is 0.9 cm. Its centre was made in the form of a smaller steel three-pointed star in a circle made of steel plate. The seven arms of the actual star were also formed of iron sheet (Fig. 3:3-4). The weight of the entire falchion after conservation is now 824 g.

Falchions with such blades were classified as Type II by Lech Marek (2008), who was the first author to propose a comprehensive typology of this kind of weapons. Semicircular pommels were grouped as Type B in the classification of this scholar. In his opinion, this type was popular in Silesia in the 15th century. Petr Žákovský (2014), who discussed falchions from Moravia and had a more diversified source basis, proposed a more extensive classification, including the analysis of all parts of falchions: blades, pommels, cross-guards and side guards. In the typology of this scholar the discussed falchion should be classified as B₂ (blade), F₁ or F₂ (pommel), 4c (cross-guard) and 5 (side guard). According to Žákovský, blades of this type are characteristic for the 15th century. The layout of the rivets on the hilt corresponds to Type „a” in the classification of this scholar. This type was extremely popular in Moravia, but was also common in the case of finds from Switzerland (Schneider 1980, cat. 587) and Poland (Marek 2008, Figs. 54:b, 61:b). The closest analogy, identical in every or almost every respect, is the falchion from Janoslavice, Šumperk District. This artefact is dated to the second half of the 15th century (Michna 1997; Žákovský 2014, cat. 55). It is however a stray find which lacks any stratigraphical context. The pommels which are similar to that on the discussed artefact and which were discovered in the archaeological context are known from the tower house in an abandoned settlement in Mštenice, Třebíč District in Moravia, which can be dated to the 15th century (Žákovský 2014, cat. 55) and Gajary, Malacky District in Slovakia (Polla 1962, obr. 5:5). A falchion with an analogous cross-guard was discovered in the Lithuanian cemetery in Karmélava, Kaunas District. The cemetery is dated to the 15th-16th century on the basis of coins of Vytautas, Casimir IV, Alexander the Jagiellonian, and Sigismund I the Old, (Rickevičiūtė 2012, 175). Therefore, in the light of the arms and armour analysis, the artefact from Kostrzyn should be dated to the 15th century, most probably to its second half.

Falchions with straight blades and analogous pommels, but different cross-guards, appear in the European iconography in the period between the

mid-15th and mid-16th century (Žákovský 2014, obr. 257). In the borderland of Silesia, Brandenburg, Lusatia and Poland, falchions with this kind of pommels are depicted on paintings from the end of the 15th – the first decades of the 16th century (Michalak 2013, Fig. 13:2; 2019, tabl. 12).

The repeated craftsman's mark stamped on the falchion blade has the form of a three-petal lily connected in the lower part with a crescent symbol (Fig. 3:6). The location of the maker's mark on the blade is characteristic for Moravian falchions (Žákovský 2014, 188). Unfortunately, our knowledge of their production and places of their manufacture is relatively poor. We know that they were made by both sword-makers and cutlers, who were grouped in guilds in Polish and Czech towns, and in this context there were often disputes over competences between these groups of artisans (Szymczak 1989, 51-53; Grabarczyk, Ławrynowicz 2013; Žákovský 2014, 195-196). Unfortunately, a relatively small percentage of known falchion blades are stamped with craftsman's marks. Suffice it to say that only 7% of Moravian falchions, out of almost 180 specimens, are signed with craftsman's marks (Žákovský 2014, 188). An equally small percentage of falchions from the Polish and Swiss lands are marked with maker's symbols (Schneider 1980, cat. 566, 568, 577, 579-580, 586, 589, 591, 597-602; Marek 2008, Figs. 41:e-f, 58:b, 61:d, 64:c, 72:b). Among these artefacts, there is no specimen which would be analogous to the discussed one. There is however no doubt that the mark on the Kostrzyn falchion is evidently related to the sign on the blade of a falchion from the collection of Moravské Zemské Museum in Brno (Czech Republic), although this sign has a base pointing downwards (Žákovský 2014, cat. 123, obr. 147:e). A similar mark also appears on one of knives discovered during excavations in London (Cowgill, de Neergaard, Griffiths 2003, cat. 148).

X-ray examinations revealed that the cutting edge was undoubtedly made of metal with a different structure than that in the back. The connection between both parts of the blade was probably in the form of a wedge, thus the changes visible to the naked eye have different widths. This technique was also used in other examined falchions from the territory of Bohemia, Moravia and Poland (Hošek 2006, Fig. 38; Žákovský 2014, 180, obr. 135; Michalak 2019, tabl. 50-53). X-ray examination also demonstrated that the falchion pommel was fixed on a straight tang protruding from the hilt (Fig. 3:4). It finds its analogies in artefacts from today's Poland: Gorzów Śląski, Olesno District, Wrocław-Widawa, Wrocław District

and Warta, Sieradz District (Marek 2008, Figs. 61:c, 64:a; Marek, Michalak 2008, 474; Ławrynowicz, Rychter 2012, Fig. 6).

The ornament on the surface of this type of pommels may also be of significance for the weapon's chronology. Their decoration with rosettes or stars was quite popular throughout the entire 15th century. P. Žákovský (2012, Obr. 1) mentions at least 14 falchions with hilts decorated with this motif, to which we must add one more specimen from an unknown place in Switzerland (Wegeli 1929, cat. 1022) and an artefact discovered in the Lithuanian cemetery in Karmėlava, dated to the 15th-16th century (Rickevičiūtė 2012, 174). The inspiration for this type of openwork ornaments were most likely tracery rosettes characteristic for Gothic architecture. This can also be seen in the case of other kinds of weaponry (Marek 2007, 220; Michalak et al. 2017, 170). The custom of decorating weapons with six-armed stars may be much earlier (Nicolle 2002, 157, Fig. 5:7D). This motif was extremely popular among weapon makers and it was used not only for weapons' hilt embellishment but also for their scabbards (Schnack 1998, Abb. 21:3-4). Such decoration was also made on the sword donated in 1495 by the future Emperor Maximilian I to Eberhard V of Württemberg on the occasion of giving him the title of prince (Laking 1920, 337, Fig. 715). The largest number of falchions ornamented in this manner is known from Bohemia and Moravia (seven artefacts) (Žákovský 2008, Figs. 8:b-e; 2012, 695). However, there are also specimens from Silesia (three), Lithuania, Lusatia and Switzerland. For some of these, however, the exact find place is unknown (Wegeli 1929, cat. 1022; Głosek 1992; Marek 2006, 47-48, Fig. 2:e; 2008, 63-64). The hilts of these falchions were usually decorated with several (two to four) brass or steel stars. This decorative element has between five and seven arms. However there are only few falchions, where the pommel was decorated with a single centrally placed rosette. We must mention here L. Marek's Type E artefacts from the German collection of the Stadtmuseum in Bautzen. According to a tradition these weapons belonged to the mayor of Bautzen. Other examples include those in the Landeszeughaus in Graz, or the Deutsches Historisches Museum in Berlin. These are dated to the first half of the 15th century, the second half of the 15th century and the beginning of the 16th century (Marek 2008, 63, Fig. 75:c-d; Krenn 2001, Abb. 4; Marek, Michalak 2008, Fig. 5:c; Quaas 2002, cat. 3). So far, there has been an isolated find of remains of a falchion pommel. It was excavated from Layer 8 in Trench I,

during the research of the tower house in Witków, Żagań District in Northern Silesia. Its stratigraphic position allows to date it to the first half of the 15th century (Marek, Michalak 2008, 470; Michalak 2019, tabl. 49:8). Let us note that the decoration of most of the finds discussed above is made of copper alloy tape. Placing the image of a star on a weapon may have resulted from a medieval belief in the influence of stars on the human fate (Rambaldi 1921, 130). The star depicted on the surface of the weapon would thus act as an amulet that would protect the owner from danger. The symbolism of the star may also refer to the content that was usual for the chivalric culture, being a manifestation of the Marian cult which was widespread among the knights. It would be an allegorical representation of Mother of Christ as the Sea Star, the Morning Star ("Stella Maris") – a guide of souls, pointing the way to Christ, a symbol of hope for Christians (see Zieliński 1960, 292-293; Kobielus 2000, 168-169). This term, known at least since the 9th century, gained extraordinary popularity during the Middle Ages (Michalak, Wawrzyniak 2012, 162-163). A shining morning star (according to Syr 50,6) was related to the Mother of God and Jesus (Seibert 2007, 117). Perhaps the depictions of a few-petal rosettes, signed in the centre with the IHS monogram (as it can be seen in the Witków paintings – see Gumiński, Olszewski 1963, 313), also referred to this meaning. The stars were also portrayed on the forehead of Saint Dominic and on the chest of Saint Thomas Aquinas and Saint Nicholas of Tolento (ibidem, 117).

The motif of the star/rosette was also extremely popular in the later period as a decoration of hunting cutlasses. This issue was thoroughly investigated by P. Žákovský (2012, 695). In the light of his observations, medieval finds decorated on the pommel with such an emblem had mainly boat-shaped cross-guards (Type 4 according to Žákovský). According to this researcher, these cross-guards, due to their form and construction (made of thin pieces of metal) and the manner of fixing them to the tang were not an effective protection of the hand and for this reason their rather non-combat function should be taken into consideration (ibidem, 693). A confirmation of his hypothesis could be provided by the lack of artefacts with this kind of guards in the iconography in an unambiguously combat context. According to Žákovský, both above-mentioned premises seem to indicate a connection of the falchions decorated with a star/rosette with hunting only. Although tempting, this interpretation has several shortcomings. It must be noted that falchions of this type are generally rarely presented in iconography.

Beside the depiction from the Karlsruhe Passion by Hans Hirtz (1440-1450) which was mentioned by Žákovský and where a falchion of this type can be seen at the belt of the executioner of Christ (Franzen 2002, obr. 6), two specimens with parallel cross-guards, but with curved blade and Type E pommels appear in the scene of “The Martyrdom of Saint Ursula” from the altar in Bruneck (today in Tiroler Landesmuseum Ferdinandeum in Innsbruck; inv. 4), dated to 1448 (Naredi-Rainer, Madersbacher 2007, 519f). These falchions are in the hands of villains and one of them was portrayed while delivering a powerful cut. It seems that the cross-guards in falchions were designed for a different purpose than those on swords, which also resulted in a different fighting technique. This is also shown in fencing treatises, e.g., Lecküchner’s from 1482 (Bayerische Staatsbibliothek München, Cgm. 582), or anonymous “Gladiatoria” from the Jagiellonian Library (Ms. germ. quart. 16), where blows are deflected outside with the help of the blade. Let us note that, from today’s point of view, a side guard seems to be a weak protection of the knuckles, however it perfectly fulfilled its role during the fight.

The next artefact in question, an axe, was also made of ferrous metal. Its preserved overall length is 15.2 cm. It has a crescent-shaped blade which is 16.1 cm wide. Its rectangular separated shaft hole (eye) is 4.2 cm long, 3.8 cm high and 2.2 cm thick (Fig. 4:1-2). After conservation the artefact weighs 273 g. In the top view, the axe head is clearly asymmetrical (Fig. 4:3).

Similar axes with crescent-shaped blades are classified as Type XIV in the continuation of the typology of M. Głosek (Liwoch 2005). Artefacts of this form from the territory of Poland were discovered in Słupsk, Słupsk District in Central Pomerania (Janocha 2004, fig. 31), Warszawa-Gocławek in Mazovia (Głosik 1969) and Zembrzyce, Sucha District in Lesser Poland (Liwoch 2005). Unfortunately, these are finds without a context that would allow for their precise dating. Similarly, the axe discovered in the hoard of artefacts during the construction of a tunnel in Cologne has no archaeological dating (Steuer 1993, Fig. 8:4). Similar artefacts are known from accidental discoveries in Rajecké Teplice, Žilina District and Levoča, Levoča District in Slovakia (Moravčík 1981, 178, obr. 103; Petřík et al. 2003, 221). Other available analogies from the former territory of the Kingdom of Hungary are known from Vác, Kom. Pest and Východná, Liptovský Mikuláš District. These finds can be archaeologically dated to the 15th century (Vörös 1986, 13. kép.; Pieta, Giertlerová 1999, Fig.



Fig. 5. A detail from the Polyptych from Pruszcz, Antwerp, ca. 1500. Photo by A. Michalak.

Ryc. 5. Fragment polptyku z Pruszcza, Antwerpia, około 1500 r. Fot. A. Michalak.

111:16). Artefacts of a similar form from Bohemia are dated to the 15th-16th centuries (Žákovský 2010, 201).

To determine the presence of craftsman’s marks or a three-leaf rosette with a stem (as noted on finds from Zembrzyce, Rajecké Teplice and

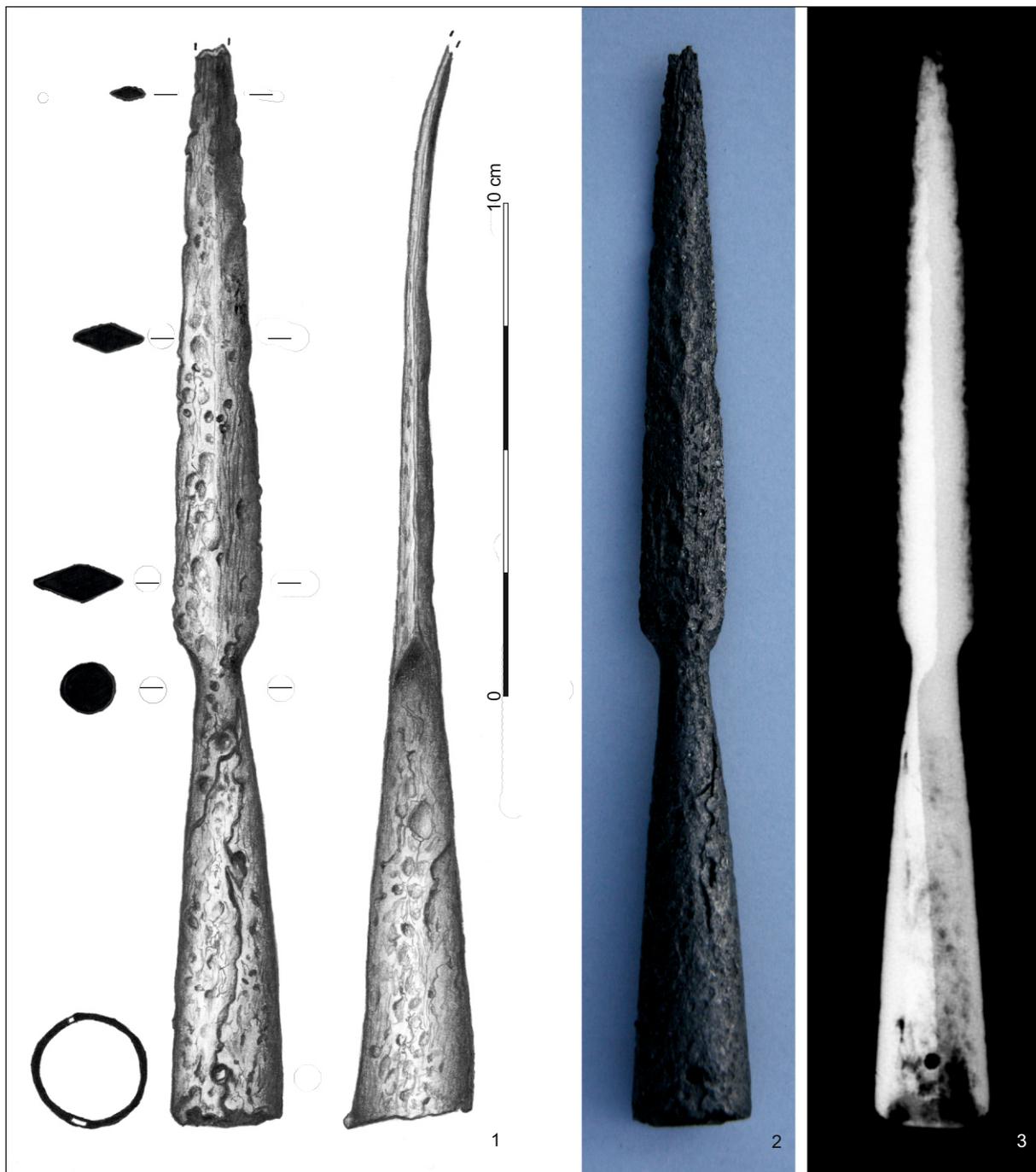


Fig. 6. Kostrzyn nad Odrą. Spearhead found within the Odra riverfront in the Old Town. *Drawing by J. Sójkowska-Socha; photo by A. Michalak.*

Ryc. 6. Kostrzyn nad Odrą. Grot włóczni odkryty na nadbrzeżu Odry w obrębie Starego Miasta. *Rys. J. Sójkowska-Socha; fot. A. Michalak.*

Východná), X-ray examinations of the axe head from Kostrzyn were carried out. They revealed however the lack of such marks on the analysed weapon. The X-ray confirmed the separate forging of the axe and the axe blade from Kostrzyn and their subsequent connection (Fig. 4:4). In the light of radiography, it cannot be ruled out that the blade was made of material with a higher carbon content than that of the shaft hole.

The slight asymmetry of the blade position may indicate that the analysed artefact was used in carpentry, but ultimately its combat use cannot be excluded. A fully analogous form of the blade can be seen in the case of a hammer-axe of one of the soldiers guarding the Holy Sepulchre from Strasbourg Cathedral, Musée de l'Oeuvre Notre-Dame, Strasbourg, France, which is dated to 1346-1348 (Kroesen 2000, 86). A similar shape of blade

of the axehead is also the case with a short shaft axe depicted on the Polyptych from Pruszcz, painted in Antwerp ca. 1500 (Fig. 5).

The discovered iron spearhead has a total length of 30.7 cm. Its narrow blade is lancet-like and is provided with a spine. The blade is 17.5 cm long, its width is 2.5 cm and its thickness is 1.0 cm (Fig. 6). It strongly narrows from the top of the socket, which has a round cross-section of 3.4×3.3 cm in diameter. About 1 cm from the bottom edge, a rivet hole with a diameter of 0.4 cm was punched in for the purpose of the shaft attachment. The socket was clearly formed around a steel rod, and traces of this blacksmithing operation are visible on it. After conservation treatment the spearhead weighs 270 g.

Due to a long period of use of various forms, spearheads are extremely difficult to date. Attempts at chronological stratification of individual complexes which are undertaken occasionally can hardly be considered successful. A similar artefact which was discovered accidentally in Gostchorze, Krosno Odrzańskie District (Michalak 2019, cat. 85, tabl. 64:1) is dated to the 15th century. This artefact finds its exact analogies in the specimens assigned by L. Marek to the group of spearheads of medium leaf length. Such finds are known in Silesia from Sokolec Castle on Góra Krzyżna, Jelenia Góra District (15th century) and Tlustoręby, Opole District and are dated to the 13th-15th centuries (Marek 2008, Figs. 131:b, 133:a-b). From a secondary deposit there comes a similar artefact that was discovered in Elbląg, Elbląg District in Northern Poland. This find is generally dated to the Medieval Period (Marek 2014, Fig. 34: c). A 14th-century find from the research of the stronghold in Bratislava-Devin, Bratislava District in Slovakia, can also be mentioned here (Ruttkay 1976, 134, Abb. 17:7). Some parallels can be also found in the artefact from the collection of the National Museum in Budapest. J. Kalmár (1971, 61. kép.) proposed a 16th century chronology for this weapon.

Cultural and historical contexts

The aforementioned parallels to the analysed artefacts allow to determine their chronology to the 15th century. A large part of the items proposed as analogies were manufactured in Silesia, Bohemia and Moravia, which raises questions about the southern origin of the discussed weapons. Today it is difficult to say unequivocally whether the above-mentioned artefacts were connected with some historical events and for more than 500 years they were covered by the Odra's mud.

The passage through the Odra was connected with the castle, and more so with the customs

station. Thus, it played an important role in the history of the town (Fig. 1:1). Already in 1390, we find the first mention of the bridge in written sources (these references are repeated in later years quite often). This bridge connected both banks of the Odra River and was located near the castle walls. It was the castle (initially, probably a small castle) that guarded the crossing over the Odra. Kostrzyn did not have any town fortifications in the 14th century. Beside the castle, which fulfilled the defensive functions, a moat was dug, and these premises provided the urban area with traits of an island defended by nature. Since the Teutonic period it probably came from the gate which was erected in the north-east of the town, and the second moat surrounding the city (Dobosz 1991, 103). In the first half In the 15th century, a customs station in Kostrzyn collected income from all the towns of the Neumark. On October 16, 1443, an agreement was made between the Brandenburg towns and members of the Teutonic Order. It concerned the position of the former in the Neumark. The Order promised not to create additional customs barriers in Kostrzyn. It can be concluded that the favorable location of Kostrzyn predestined it to hold an important role in trade between the east and the west (ibidem, 92). In 1455, Neumark and Kostrzyn went into the hands of the Hohenzollern dynasty. The new owners, Brandenburg margraves, gradually developed the town located at the confluence of the Warta River into the Odra. Eventually, they transformed it into the seat of their administration (ibidem, 89).

The presence of weaponry of Bohemian origin in the northern part of today's Lubuskie Voivodeship is interpreted in professional literature in various ways (Michalak 2018, 68-69). The main attention is drawn to the presence of Bohemian mercenaries in the armies entering the *terra trans Oderam*. In addition to private wars between individual knights, the Neumark experienced the invasion of knights from neighbouring countries, such as the lords of von Quitzow from Brandenburg. During the Polish-Teutonic struggle, the Polish and Pomeranian army entered the territory of the Neumark (Rymar 2015, 619-638). Kostrzyn was one of the places where the Teutonic Knights mobilised their forces (ibidem, 675). It is worth noting that in the 15th century the Teutonic Order also used soldiers of fortune from the Bohemian Kingdom (Kwiatkowski 2016, 140). Let us remember the devastation caused by the Polish-Bohemian expedition headed by Jan Čapek of Sány and the Voivode of Poznań, Sędziwój Ostroróg, who in 1433 reached the Baltic Sea via the Neumark. The mercenary Bohemian troops who

stayed in Lower Silesia during the war for the Głogów succession were often supporting various sides of this conflict. In August 1477, a corps of 1000 Bohemians arrived to Krosno, and participated on the side of the Margrave of Brandenburg in attempts at conquering the castles in Sulechów, Świebodzin and Zielona Góra (Techmańska 2001, 52).

Considering the circumstances, the context of deposition of the studied militaria in the river should also be taken into account. Large numbers of artefacts resting in water are often associated with bridges functioning there. However, it is also possible that they were deliberately sunk in water. Among the artefacts which are considered intentional water deposits are late medieval axes, spears and falchions. This phenomenon may have been related to a deliberate desacralisation of these objects (Michalak 2015).

However, it cannot be ruled out that the discovered weapons were part of the collection of the Frederick the Great Museum, established in 1901 in order to commemorate the stay of the prince in Kostrzyn. Originally, the museum used two rooms, located in the main castle tower. In the first chamber, where the later ruler of Prussia was imprisoned from September 4th to November 19th, 1730, there were furniture, weapons, maps and books from Frederick's time, as well as his marble bust. There was also a painting depicting Margrave John together with his wife and the accompanying Kostrzyn Mayor Boltzmann. A statue of Victoria, the goddess of victory, also stood in this room. In the other room, weapons and memorabilia associated with the Seven Years War, especially the battle of Sarbinowo (1758), were displayed. These were cannonballs, letters and personal memorabilia of

Frederick (Piątkowski 2007, 93-95). It also seems that the collections were successively enriched, and the museum itself was expanded to include more chambers. In the course of time, souvenirs and artefacts related to the history of Kostrzyn began to go there. This is evidenced by the collection of Lusatian culture and early medieval pottery obtained from rubble near the keep during archaeological excavations of 2012. This ceramics belonged probably to the museum collection. In the Frederick the Great Museum there are also numerous coins and so-called memorial nails adorning the banner of the Society of Insurgents and Warriors from Łomnica – an association gathering veterans of the Greater Poland Uprising (the banner was a war booty, most probably from 1939 and until 1945 it was exhibited in the museum). These items were also unearthed during the excavations in 2012 (Socha 2012, 120-122). Therefore, it cannot be ruled out that the discussed late medieval weapons were part of the museum's collection. As a result of the turmoil of war and intense hostilities from February and March 1945, they could be deposited in the Odra wharf, from where they were recovered during the archaeological excavations in 2015. This presumption must however remain a hypothesis for now.

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PÓŻNOŚREDNIOWIECZNE MILITARIA Z KOSTRZYNA NAD ODRA. KONTEKSTY KULTUROWE I HISTORYCZNE

Streszczenie

Kostrzyn nad Odrą – miasto położone w północno-zachodniej części obecnego woj. lubuskiego, u ujścia Warty do Odry, w średniowieczu stanowiło istotny element w systemie obronnym wschodnich rubieży Brandenburskiej. Prawdziwe serce tego ośrodka przez stulecia znajdowało się na Starym Mieście, ulokowanym na prawym brzegu Odry.

Niestety, źródła pisane o historii XV-wiecznego Kostrzyna dostarczają niewiele informacji. Wydaje się, że Krzyżacy, nabywając Kostrzyn w 1402 r., uznali go za ważny ośrodek swojego władztwa na *terra trans Oderam*. Położona na szlaku komunikacyjnym łączącym Państwo Zakonne z Rzeszą, Nowa Marchia stanowiła dla Zakonu cenny nabytek. Miała znaczenie strategiczno-militarne oraz polityczne, szczególnie ważne w obliczu wojny z Polską, gdyż w ten sposób Krzyżacy oskrzydłali państwo polskie również od północnego zachodu. Rolę Kostrzyna i funkcjonującego w jego obrębie zamku doskonale odzwierciedlają zachowane inwentarze zamkowej zbrojowni, sporządzone w okresie, kiedy miasto nad Odrą znajdowało się we władaniu krzyżackim. Szczęśliwie z pomocą przychodzą dane ze źródeł archeologicznych, choć obiektywnie trzeba stwierdzić, że były one dotychczas dość skąpe. Do tej pory udało się odkryć na terenie miasta jedynie kilkanaście elementów uzbrojenia i to późniejszego charakteru.

Sytuacja zmieniła się w 2015 r., kiedy katastrofalna susza, a – co za tym idzie – niski stan rzeki Odry oraz fos otaczających twierdzę Kostrzyn umożliwił pracownikom Muzeum Twierdzy Kostrzyn dotarcie do miejsc dotychczas niedostępnych. Na wyschniętym nabrzeżu Odry odsłonięto liczne przedmioty świadczące niezwykle bogatą historię Starego Miasta. Najbardziej interesujące zabytki pochodzą jednak z okre-

su średniowiecza. Są to topór, grot włóczni oraz kord. Zostały one odkryte w trakcie poszukiwań prowadzonych z użyciem detektorów. Obszar, na którym je odnaleziono, historycznie związany jest z przebiegiem średniowiecznej przeprawy mostowej, znajdującej się w bezpośrednim sąsiedztwie kostrzyńskiego zamku. Wszystkie trzy zabytki odkryte na nabrzeżu Odry, tj. kord, topór i grot włóczni, zostały szeroko omówione w tekście. Przedstawiono dla nich również liczne analogie. To właśnie analogie przytoczone do analizowanych zabytków pozwalają określić ich chronologię na XV w. Duża część z przywoływanych zabytków wytworzona została na terenie Śląska, Czech i Moraw, co wywołuje pytania o południową genezę analizowanych militariów z Kostrzyna nad Odrą.

Obecność militariów czeskich w północnej części dzisiejszego województwa lubuskiego bywa rozmaicie interpretowana w fachowej literaturze. Zwraca się głównie uwagę na obecność najemników czeskich w armiach wkraczających na *terra trans Oderana*. W okresie zmagania polsko-krzyżackich na tereny Nowej Marchii raz po raz wkraczały polskie i pomorskie wojska. Kostrzyn był jednym z miejsc, w którym Krzyżacy mobilizowali siły. Warto dodać, że Zakon w XV w. posługiwał się również oddziałami najemnymi z Czech.

Nie można również wykluczyć, że omawiane elementy późnośredniowiecznego uzbrojenia były prezentowane w pomieszczeniach muzeum Fryderyka Wielkiego mieszczącego się od 1901 r. w wieży zamkowej. W wyniku zawieruchy wojennej i intensywnych działań wojennych z lutego i marca 1945 r. mogły one zostać wtórnie zdeponowane w nabrzeżu Odry, skąd je ponownie pozyskano w trakcie prac archeologicznych w 2015 r. Domniemanie to póki co pozostać musi hipotezą