## **SUMMARY**

Medieval infantry weapons, according to a common view, were used by villains, felons and mercenaries, people without honor who were usually in opposition to the bold and knightly nobility. This distinction is also well entrenched in the literature on arms and armor, where one can find weapons described as "plebeian" or "knightly" weapons. This study departs from the conventional view of this discrimination. The collected archeological, iconographic and historical data, reveals the difficulty in drawing a sharp, well defined borderline between late-medieval plebeian and knightly arms and armor. Neither the origin of weapons nor their users can be treated as a base for the division. Moreover ideological reasons never overruled the practical aspects in the choice of arms. For example Frederick I Barbarossa, in the 12th cent. was especially concerned to limit the freedom of bearing arms to the nobility. In 1152 he forbade peasants to use spears and swords and in 1186 he had to remind them not to copy knights in this respect. This situation discloses that the king's orders were highly ineffective. The famous 13th cent. Silesian Book of the Henryków Monastery, mentions that the monks were taking care of a handicapped Polish peasant called Kwiecik, who had his hand terribly wounded by a sword. This account suggests that the peasants of Silesia were well accustomed at that time with the traditionally noble art of war. It's worth mentioning, that at the turn of the 16th cent., many representatives of nobility served as common soldiers in the ranks of German mercenary infantry - the so called landsknechts.

Therefore the adjectives "plebeian" or "knightly" referring to the investigated arms was regarded as inadequate for the title of this dissertation. The term "arms" is also imprecise because it requires an additional study on projectile weapons, which is beyond the scope of this work. Eventually, a term which does not have it's precise and professional counterpart in English was chosen for the title. Literarily it may be translated as "cold weapons" (it is parallel in mean-

ing to the German *Blankwaffen* and Czech – *Chladne Zbrane*). These include the arms used for hand-to-hand-combat by knight or man at arms from the 14<sup>th</sup>-16<sup>th</sup> cent. like edged, blunt and staff- weapons.

The analyses of medieval and renaissance artifacts from Silesia increasingly convinced the author, that many aspects of military technology seen in this region have their origins in remote Western-European areas. The investigation of Silesian late-medieval and renaissance weapons, if limited only to regional studies, would produce simply a catalogue of archeological finds and iconography, which was not the main objective of this work. Therefore numerous references to the Western-European studies, included in this dissertation, in my opinion, were absolutely essential to explain many problems tackled in this paper. Multiethnic and multicultural background of Silesia is fully confirmed by archeological, historical and iconographical data.

Novelties in the development of arms and armor in the region pervaded from centers of authority such as ducal courts, where foreign guests brought their own weapons, often peculiar to the natives. In the late mediaeval period, influences from Bohemia are recognizable in Silesian arms and armor of the 13<sup>th</sup> cent. This can be explained partially by the political dependence of the Vratislavian duke Henry the Just on his mighty liege lord Przemysł Otokar II.

In the 13<sup>th</sup> and 14<sup>th</sup> cent., which was the period of great foreign colonization of Silesia, the Flemish and German settlers brought their native traditions in weapon manufacture. The newcomers were obliged by location contracts and special charters to serve the duke and defend the newly inhabited land in case of war or hostile raids. The medieval accounts confirm that they served their lords well. The author of the 14<sup>th</sup> cent. *Chronica principum Poloniae* mentions about Flemish settlers from the Silesian Wierzbno and Janikowo villages, who defeated enemy knights raiding the land of their sovereign – duke Bolesław.

The temporary use of a national medieval weapon of the Flemish, probably known as the goedendag - was recorded in the course of this research. This characteristic weapon consisted of a club-like wooden shaft with a spike on the top, encircled by a stabilizing ferrule. Iconographic evidence for the use of this Flemish arm presented in this work (Fig. 186e), proves that Silesia, at the turn of the 14th cent., was not an isolated or countrified region, absorbing the most upto-date trends in military technology. It is noteworthy that in this period infantry armies, using distinctive and in most cases decisive tactics won numerous victories over knightly cavalry. The constancy of infantry victories in the 1. half of the 14th cent. as stressed by the superb scholar on medieval warfare - K. de Vries - may surprise someone, but no less surprising should be the uniformity in tactics used by infantry armies of the time all across western Europe.

Probably, during the same period, halberds were introduced in Silesia. It was a weapon which originated in Switzerland from a long-shafted battle axe. Although there are some scholars which are convinced that it evolved from a gardening implement used for cutting branches; this point of view was rejected during research. Thorough investigation on medieval and renaissance works of art convinced the author, that despite a wide spread view, the overwhelming evidence indicates that they are quite reliable in depicting the development of halberds throughout the centuries.

Both Silesian scholars - J. Neugebauer (1876, s. 4) and A. Igert (1939, s. 8) provide information on the earliest account about the use of halberds in Silesia: in 1337 during the visit of John of Luxembourg, king of Bohemia in Wrocław, the townsmen equipped with halberds, securing the king's arrival, were obliged to guard the streets. This assertion appeared in the work Historia incendiorum.... from 1737 by a known traveler and amateur-researcher D. Gomolcke, for the first time. However, this account wasn't based on any medieval documents, which makes it less reliable than other sources. Information about the use of halberds in Wrocław at so early date can't be totally rejected though, because it concerns John of Luxenbourg, who, led by his own experience, could even demand a guard consisted of halberdiers. In 1330 Luxembourg was a mediator in the conflict between Emperor Ludwig IV of Bavaria and Duke Otto of Austria. The emperor assembled an army of Swiss mercenaries from Canton Glarus for the coming war. John of Luxembourg saw their ranks at the emperor's camp near Colmar. A medieval chronicle provides us with a detailed description of this event and the impression that halberds made on

the Bohemian king, when he saw them for the first time. The account reads:

Rex Boemus (...), vidisque eorum instrumenta bellica et vasa interfectionis gesa, dicta vulgari helnbarton, a[d]mirans ait: "o quam terribilis aspectus est istius cunei eum suis instrumentis horribilibus et non modicum metuendis!" (Gessler 1927, s. 71).

The earliest archeological find of a halberd fragment from Silesia, is dated to the 2. half of the 15<sup>th</sup> cent. A general conclusion on the collected archeological and historical data from Silesia is that halberds, like elsewhere, developed from simple fighting weapons with a trapezoid head and two sockets through serviceable forms with heads consisting up to 10 iron and steel elements welded together in the 2. half of the 15<sup>th</sup> cent. towards purely ornamental and heraldic pieces, not belligerent ones. These were usually arms for bodyguards of civil and ecclesiastic nobility, later on used as the insignia of lower rank officers in infantry. In a degenerated form, from the 16<sup>th</sup> cent. onwards, the halberd became a mere thrusting weapon.

Interesting, decorative, skillfully etched examples dated to 1609, which once belonged to the Breslau-Tanners' guild are still kept in the castle museum of Pszczyna.

Numerous infantry weapons which originated in the 14th cent. had gone through a similar fate as the halberds. The constant evolution of the two-handed sword resembles the development of halberd. Initially the weapon was suitable for combat. In the second half of the 16th cent. the hilts of two-handers became monstrous in size, fantastic, ornamental and cumbersome. A characteristic, purely decorative flame-shaped blade called flamberg also appeared in this period. In the 16th cent. Styrian town armory inventories listed such arms, which lacked any of the grace of the fighting weapon as Symbolische Schlachtschwerter (Symbolic battle swords). The term appears also in castle armory inventories from Silesia in the 16th- 17th cent., such as the one which lists the arms and armor of duke Ludwig IV of Legnica.

The wide spread use of fire-arms in the mid 16<sup>th</sup> cent. consequently eliminated some kinds of heavy and awkward staff-weapons and two-handers from the ranks of infantry. Exceptionally, during a very short period of time in the 17<sup>th</sup> cent., a renaissance of battle halberds can be observed in Switzerland. Popular halberds of the 17th cent., usually called the Zurich variant of the Sempach type, are often mistaken in the literature for medieval 15<sup>th</sup> cent. specimens.

The only category of weapons, which developed in a constant and undisturbed evolution, from 14th to

16th cent. were side arms, as swords, rapiers, falchions and daggers. Comparative analyses of works of art and archeological artifacts proved that there were no significant differences between swords, rapiers and daggers used by the nobility, and those of the plebeian infantry.

Side-arms are the most common archeological finds. This phenomenon could be easily explained by the real flourishing of these weapons among all casts of the late medieval society. They were worn by knights, men at arms, but also townsmen, laborers and peasants on every day occasions.

Cumbersome staff weapons and two-handed swords, in turn, were stored usually in town armories or houses. Seldom used, these arms were engaged primarily in case of war. Therefore they are rare among archeological artifacts.

A great variety of daggers and fighting knives from Silesia was recorded during research (Fig. 1-32). Among original specimens and ikonographical sources from the 14<sup>th</sup>-15<sup>th</sup> cent. one can find forms analogous to the Western-European dagger and fighting knife – types (Fig. 4a,c). The presence of such finds in the Silesian region could be a consequence of trade relations between Wrocław, the German Hansa, the towns of Flanders, or of etnical relations of the newcoming settlers to their native, remote regions of Europe.

Renaissance sandstone-grave-slabs of Silesian noblemen are especially valuable for studies on the development of daggers and fighting knives of the 16<sup>th</sup> cent. Distinguishable, individual features of these weapons depicted on them, can be easily found in the existing artifacts, which proves that grave effigies from the 16<sup>th</sup> cent. are a reliable source of information in the matter.

The undertaken analysis suggests that the daggers from the grave-slabs are those, which were once private side-arms of the sitters. While investigating these effigies one needs precaution though. The date on the slab does not necessarily corespond with it's true chronology, which was confirmed in a course of further research.

With respect to the absence of a strict distinction between plebeian and knightly arms in the discussed period, finding the, so called, landsknecht daggers, characteristic for German infantry on the grave slabs of the Silesian nobility (Fig. 25a), was not a great surprise. Among these depictions of landsknecht daggers there is a group characteristic for Germany and Silesia dated to the last quarter of the 16th cent. (Fig. 30a). Daggers of this distinctive type, existing in Italian collections, are regarded as Silesian in the Western-European-literature. At the end of the 16th cent. another form gained its popularity – the

so called left hand dagger. It was an adjunct to the sword, an auxiliary weapon for the left hand used to deflect both cuts and thrusts of the opponent's sword.

General conclusion, drawn from investigations of 16<sup>th</sup> cent. works of art and archeological weapon finds, is that many aspects of military technology were strongly influenced by developments in German arms and armor. The main reason for that could be the stronger political dependence of Silesia on the Habsburg Empire from 1526 onwards.

The diffusion of most recent developments in weapons was also facilitated by conflicts. This phenomenon is especially well documented in Silesia during the Hussite Wars in the 1. half of the 15<sup>th</sup> cent. Numerous forms are either imports from the territory of Bohemia or directly inspired by the Bohemian achievements in the field of arms and armor of this time.

Brass plated hand-hammers and axes are especially noteworthy in this respect (Fig. 189-191).

The characteristic decoration would be vulnerable to wear if the axe was used as a handy-craft tool. This determines its main role – as a weapon or insignia. In Poland the Silesian region, with very few exceptions, is a strictly isolated area of brassplated hammer and axe finds. The constant feature of these artifacts is the decoration of brass bands, sometimes ornamented with geometrical patterns. Morphological diversity within this group is of secondary significance to the assessment of their origin. Their appearance in Silesia in relation to the Hussite Wars can be proved by several facts:

Primarily, analogous finds to the artifacts from Silesia (Legnica, Trzebnica (2 specimens), Namysłów, Wasosz, Wrocław) were recorded almost exclusively in Bohemia (Veltava near Palacki Bridge in Prague, Prague-Podskali). Secondly, more than half of the archeological find places for the brass plated axes from Silesia is confirmed by written accounts as regions of intensive military activity during the Hussite Wars. Therefore dating of these artifacts to the 1. half of the 15th cent. is highly probable. One of the axes, identified by the author as being found in Trzebnica in the 19th cent., is especially worth of attention. In a cross section it is asymmetrically flattened on one side, which is a common characteristic of carpenter's axes. On the other hand, the decoration of the convex side with brass inlay excludes the possibility that it could be used as a handicraft-tool.

To author's opinion the rich embellishment of the axes can not be treated as a distinctive characteristic of knightly weapons, in spite the conclusions of former German scholars, who analyzed some of these Silesian finds. The fascinating aspect of late medieval blunt and staff- weapon decoration is the appearance of magical symbols, which were already well known by the Greeks and Romans in Antiquity (Figs 183-185). These letters, described in the ancient accounts as *characteres* later on, were used by the Jews in Kabala practices. The ornament resembling this kind of magical alphabet on late-medieval axe and spear-heads could be initially influenced by the gnostic tradition brought to Europe by the Katars and similar movements.

Another category of Silesian arms, which can be regarded as Bohemian in origin are the so-called awl spears. They had a long spike round in cross-section, sometimes ended with an acute point (Fig.139-140) or a broad short leaf shape blade (Fig. 141). The latter resembled early Germanic spears called ango and, therefore are very often mistaken in the literature for their early medieval predecessors. All of the finds from Czech Republic, Slovakia and Poland were encountered in late medieval contexts, usually castles. A collection of 11 spear-heads of this type was excavated in castle Sokolec near Jelenia Góra. Numerous analogies from Bohemia, and written sources referring to the history of this castle, confirm the 15th cent. chronology of the infantry spear heads from Sokolec.

Probably the wide spread use of falchions in Silesia dates also to the Hussite times, although as proved by works of art, the weapon was already known in this region at the end of the 14<sup>th</sup> cent.

It is difficult to provide any date earlier than the 1 half of the 15<sup>th</sup> to falchion-finds from Silesia.

Most probably the excavated falchions and fighting knives from Górzec near Męcinka, Muszkowice and Niemcza (the mighty stronghold of the Hussites in Silesia) are directly related to the Hussite Wars.

Bohemian influences in Silesia are noticeable also in some distinctive forms of falchions, which are encountered almost exclusively among finds from Slovakia and the Czech Republic. The so called Moravian type falchion found in Gorzów Śląski, pow. oleski is a representative of this group (Fig. 61).

The investigations of Silesian falchion forms, their construction and manufacture technique leads to a conclusion that at the beginning of the 15<sup>th</sup> cent. there is a noticeable predominance of forms with narrow – thrusting blades. Later on, broad blades with less acute points become more popular. At the turn of the 16<sup>th</sup> cent. bill shaped pommels, which enabled delivering better and more accurate cutting

blows and disabled thrusting techniques, became increasingly popular. The fact that fighting techniques with the use of falchion are the mere consequence of the falchions construction is confirmed by late medieval fencing manuals. The method of falchion combat by H. Talhoffer from 1459 r., where thrusting techniques are engaged, requires different weapons than the one based on cuts, presented by the same author in a manual published 8 years later (Figs 65,66). In the decoration of falchions and the form their side guards (Fig. 47 d-k) one can find numerous motifs characteristic for the knightly culture, such as the pilgrim's shell of St. James - the patron of crusading knights (Matamoros - the one who defeats the Moorish), the lily and star (Stella Maris) – symbols that stand for Virgin Mary.

Tedious analysis convinced the author that the common definition of the falchion as a single edged weapon has to be corrected. In the course of research, numerous double edged falchions from Poland were encountered (Fig. 41). One was excavated in Wrocław (Fig. 63-64). Probably these specimens were manufactured by sword-makers which is confirmed by sword-maker-marks on double edged blades (Fig. 41e, f). Single edged weapons were rather produced by cutlers.

Iconographic sources proved to be reliable and precise in reflecting development of the falchion-construction through centuries. The weapons which are depicted on Silesian gothic altar pieces are strikingly analogous to excavated examples found across the region (Fig. 63; Fig. 76). Even maker-marks identical to those, which appear in art, had been recorded on archeological finds (Fig. 58b, c).

There is but one main conclusion to this study: The investigated weapons bear the trace of the most up to date multicultural and multiethnic influences in arms and armor production of Western and Central Europe. Therefore it is difficult to distinguish a novelty that seems to have been Silesian in origin and to have been used almost exclusively there. The presence of Western-European trends of military technology in Silesia resulted from: far distance trade relations of the towns, military conflicts, contacts with the new-coming settlers during the colonization movement, political dependence of the region and eventually the role of elites in proliferation of new ideas. The development of weapons in Silesia is similar in many aspects to the general evolution of arms and armor characteristic for Central Europe.