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KNIGHT TOURNEYS AT THE JAGIELLONIAN COURT AS A FIGHT SCHOOL FOR THE POLISH ENLISTED COMMANDERS OF THE 16TH CENTURY

„Court tournaments and courses once used to be dangerous knightly exercises of consequence, nowadays, however, they are only spectacles held for fun”. This inscription was placed over the frieze of 1534-1535 representing knight tournaments found in a hall of Wawel Castle. Did court tournaments really stop being a military exercise and become only a pastime and entertainment during the reign of the last Jagiellons? A few questions will have to be asked here. Did the above inscription reflect public opinion or was it just King Sigismund the Old's conviction or even wish (the King is known to have been characterized by a peaceful attitude and he was the initiator of the appearance of these friezes)? What did the military circles, especially the commanders of the enlisted forces, think about tournaments? The following paper will be devoted to the presentation of the opposite point of view, contradictory to the one expressed in the inscription. Therefore the aim of the present article is to prove that the knightly tourneys of the 16th century did not yet lose their instructive, as we would call it today, function.

It is known that the twenties of the 16th century proved to be the climax of tilt armour's development. At that time tilt armour flourished at Maximilian I's court. Different variations, the ones for individual and group horse tournaments included, were then introduced. Special armour types used for fighting with lances across the fence, half-armour for fighting with blunted lances and armour imitating archaic forms were designed. During the reign of the last rulers of the Jagiellon dynasty Polish royal and court armour was strongly influenced by Maximilian fashion. Royal armouries were full of field armour and equipment for hussar tournaments. As knight tourneys were called courses in Poland, tilt armour was referred to as armour for the course. A kind of armour used for fighting with weapons with points in „close helmets” was even distinguished¹. The material relics kept in mu-

seums make it easier for us to distinguish between the types of armour used in battle and the tilt or gala ones. The museum classification widened the gap, existing in our historical consciousness, between the two groups of arms. Their separate character may nowadays be much more rigorously stressed than it used to be perceived in 16th century reality. The iconographical sources and the descriptions of battles found in chronicles do not introduce such precise distinctions. No purely „tournament” elements can be seen in the above mentioned frieze made by Antonius of Wrocław at Wawel Castle. It represents group tournaments with lances and mounted lancemen's competitions. They are dressed in full armour, knight skirts and helmets decorated with ostrich feathers. The horses are in full bard. It must also be remembered that one's financial situation played an important part in this respect. It was only the richest knights that could afford two suits of armour: a suit of battle armour and a suit of tilt armour. Many ordinary courtiers who took part in numerous jousts and competitions would be dressed in their combat armour.

While discussing the issue of mounted lancemen, one should not leave out the presentation of plate armour, used by these warriors in the 16th century enlisted army. In this case Polish military historiography followed the path marked out by arms researchers. According to Władysław Dziewanowski, the decline of full armour started already in the middle of the 16th century, as this kind of armour, additionally strengthened to ensure protection against the improved fire-arms, appeared to be too heavy. Zdzisław Spieralski wrote that the number of lancemen in a Polish banner unit had been very small and they had exerted no influence on the troop's character. Jerzy Teodorczyk argued that mounted lancemen had started to disappear from banner review lists as early as in c. 1530. Nonetheless, according to Henryk Kotarski, it was already in the times of Sigismund Augustus that the lancemen stopped using full plate armour and wore only cuirasses. Therefore due to the development of fire-arms armour was no longer treated as a protection against death and started to change into a ceremonial

¹ Z. Żygulski Jr., *Broń w dawnej Polsce na tle uzbrojenia Europy i Bliskiego Wschodu*, Warsaw 1975, pp. 155, 193; A. Swaryczewski, *Platnerze krakowscy*, Warsaw-Cracow 1987, p. 31.

or decorative accessory, tin attire stressing the importance of its owner².

The actual importance of lancemen on the 16th century battlefield needs be given more consideration. It is known that the arrow shot from a crossbow could pierce even a heavy plate armoursuit. This fact, however, did not result in the disappearance of lancemen in the 16th century. At the beginning of the 16th century the percentage of infantry warriors armed with hand-guns amounted to 20-50 per cent of the total number of warriors. But the infantry was far from being perfect yet. The range of hand-guns was limited to 100-150 metres. Only the range of hand-cannons with hooks was bigger, but the number of these cannons was small. It was only during the wars in Livonia, in the First Nordic War of 1560-1570, that the Poles came across western muskets. The range of this weapon was as big as 300 metres. From a smaller distance their bullets could pierce each kind of plate armour³. The experience gained in the Swedish wars could result in the disappearance of lancemen from the Polish army only at the end of the 1560s. Until that moment the fire-arms range factor had not been seriously taken into consideration as far as the actual importance of lancemen's way of fighting was concerned.

The enemy and the place where battles were fought appeared to be decisive in respect of the armaments and tactics of the Polish army. It was already in the 15th century that the heavy mounted lancemen appeared to be useless when faced with the highly mobile eastern, Tartar, Moldavian and Turkish, enemy. Hence the introduction of the hussars, as a consequence of the Rac (Serbian) Reform of 1500, and the rapid numerical increase in this type of cavalry took place. On the vast steppes of Ukraine fighting in full plate armour was very difficult. Therefore a lighter type of defensive armour was frequently used by lancemen. The suit of armour consisted of a visor, a back-plate, a breast-plate or a chain mail.

The historian of military science Otton Laskowski committed a glaring mistake. While formulating his thesis about the so called „distinct individuality of Polish military science”, he limited himself to the south-eastern section of Polish military theatre⁴. However, the last war with the Teutonic Knights of 1519-

1521, the fights with the Swedes in Livonia in 1561-1568, the military conflicts with Moscow, the Order of the Brothers of the Sword, the Habsburgs, and finally rebellious Gdańsk must not be omitted. The part played by mounted lancemen in heavy armour in the battles with these enemies, frequently fought on urban areas, might have been quite different. The fundamental source material regarding the history of Polish cavalry arms and armour, namely the review registers kept in the Central Archives of Old Records in Warsaw, should now be referred to. Despite the Rac Reform the troops of lancemen remained part of the Polish cavalry. „Gravioris armatuare” may therefore be seen in the battle of Orsza, fought with the army of Moscow in 1514, and the Prussian war of 1519-1521. Especially the fights with the Teutonic Knights, the representatives of West-European military art, required the participation of lancemen in heavy armour. Nonetheless, the percentage of this kind of cavalry did not decrease even after the northern menace had been eliminated. This is also true in the case of the review registers of the mobile defence of the borderland troops, i.e. in the region of south-eastern borderland. The average percentage amounted to more than a dozen per cent and it rapidly increased in some periods. In 1538 during the Chocim expedition, for example, it was as high as 20 per cent and the highest percentage on record was observed in 1542 (27 per cent). At that time the number of lancemen was bigger than the number of bowmen and smaller only than the number of hussars. Moreover, in 1561 the number of lancemen in the reinforcement contingent of Polish enlisted warriors commanded by Florian Zbrzydowski sent to the war with Moscow is still bigger. There are 50 per cent of lancemen in the Hetman's banner, 36 per cent in Stanisław Leśniowski's one and they constitute 57 per cent of Marcin Zborowski's horsemen⁵.

On the basis of the above examples it might appear that the number of mounted lancemen in heavy armour was not falling but growing in the course of years. However, it was not so, as among the 16th century lancemen two categories of lancemen may be distinguished: the heavy-armed lancemen in full armour, their horses were in full bard too, and the medium-armed ones in cuirass (breastplates and backplates). In the mobile defence of the borderland troops the percentage of lancemen in full armour is falling in the course of years, while the number of horsemen in cuirass, the so called „coats of plates”, is growing. The latter, as opposed to the hussars of the 1560s, did not carry shields and replaced sabres with swords. Their lances and saddles were different too.

² W. D z i e w a n o w s k i, *Uzbrojenie w rozwoju dziejowym*, Lvov 1938, p. 56; Z. S p i e r a l s k i [in:] *Zarys dziejów wojskowości polskiej do roku 1864*, vol. I, Warsaw 1965, p. 308; J. T e o d o r c z y k [in:] *Polska w epoce Odrodzenia*, Warsaw 1970, p. 180; H. K o t a r s k i, *Wojsko polsko-litewskie podczas wojny inflanckiej 1576-1582*, part I, „Studia i Materiały do Historii Wojskowości”, vol. XVI, part II, Warsaw 1970, p. 93.

³ M. P l e w c z y ń s k i, *Armia Koronna 1506-1572. Zagadnienia struktury narodowościowej*, Warsaw 1991, pp. 101-102.

⁴ O. L a s k o w s k i, *Odrębność staropolskiej sztuki wojennej*, Warsaw 1935, p. 21.

⁵ Archiwum Główne Akt Dawnych w Warszawie (The Central Archives of Old Records in Warsaw), Akta Skarbowo-Wojskowe (Fiscal-Military Records), part 85, No. 15-49; W. S e m k o w i c z, *Popis wojska polskiego z lat 1561-1564 i wyobrażone na nim piętna końskie*, Cracow 1928-1929, pp. 6-12.

Those differences, however, had soon become blurred and consequently the lancemen and the hussars merged.

Therefore the following question must be asked: Where does the actuality of horsemen, transferred ready-made from tournament squares, the heirs of the military science of the Latin Middle Ages, which had lasted till the sixties of the 16th century, come from? The military tasks of Old Polish military science required that the head and the back (the main) detachments were bigger than the reinforcement ones and that the first lines consisted of mounted warriors in heavy armour. Jan Tarnowski, one of the most outstanding Polish hetmans, realized the significance of this array. He was afraid that the exaggerated elimination of heavy-armed cavalry from the Polish army would result in the annihilation of its striking and breaking force. Hence in „Pouczeniach podskarbiemu koronnemu” („Instructions for the Crown Treasurer”), written in 1528, he advised the commanders of banners to retain heavy-armed warriors („gravis armaturae”) and their large strong horses in their banners. They were to constitute 20 per cent of the total number of warriors⁶.

In order to understand the role of lancemen on the battlefield, the tactics and battle array of the Polish banner units of the first half of the 16th century, i. e. mixed banners, should briefly be discussed. Already the old army unit called «lance» consisted of a knight armed with a lance and two bowmen equipped with bows or cross-bows. In the companion system of forming enlisted banners («system towarzyski») — a companion, «towarzysz», commanded a small cavalry troop, «poczet»), as it is clearly seen in review registers, the companion fought in heavy armour with a lance and his horsemen, on the other hand, in bowmen's or hussars' lighter armour. The kind of horse did not always correspond to the horseman's armour. Similarly, the banner as a whole was mixed in character, too. It consisted of warriors representing all kinds of cavalry. It was only the proportion of hussars to bowmen and lancemen that determined the character of banners. The companions formed the first line of the banner's developed battle array, their horsemen the next ones. There was a tendency to increase the number of small troops in order to extend and shallow the banner's array. In this way a bigger number of lances was instantly used in battle. The banners were arranged in a couple of echelons forming a chessboard. The first echelon would be the first one to attack the enemy. The mounted lancemen and hussars broke the enemy's lines. The enemy was thus weakened and then defeated by constantly repeated attacks with side-arms. When the first attack appeared to be unsuccessful, the horsemen dodged and trotted back fast, through the gaps be-

tween the banners of the second echelon, while the latter attacked the enemy with great force⁷. The force of the hussars' very attack was a bit smaller than that of the lancemen, but the speed and violence of the attack were bigger. It was also easier to manoeuvre them. The fact that all banners were mixed in character allowed them to perform various tactical tasks. The presence of mounted hussars-bowmen with bows in a banner made it possible for this banner to shoot arrows at the enemy both before and during the charge.

Let us take into consideration a schematic composition of a 100-horse enlisted banner consisting of 20 small troops. It might have consisted of 20 lancemen, 40 hussars, 25 bowmen and 15 mounted warriors armed only with side-arms. Hence the first line was composed of the lancemen, the companions in the middle and some of the hussars at the sides, the hussars placed in the gaps between the horsemen of the first line constituted the second line, the third line was formed by the bowmen, the fourth one - by the warriors in light armour. Therefore the main burden of breaking the enemy's battle array with lances rested on the lancemen and hussars of the first line. In direct fighting the companion in full plate armour hit the enemy's breast with a lance, held under his arm, which resulted in breaking the enemy's breastplate. The horseman's task was only to level the lance and hold it in a horizontal position. The main part was played by the spurred, capering, running horse. The hussar, positioned at the flanks or sides of the line, slightly to the rear, was dressed in lighter armour and armed with a longer lance. He would hold it more slantly, „half the horse's ear”, loosely or supported against a notch in his shield. The only way to use a hussar's lance was to push it forward without letting it out from under the arm. In the counter-attack the lance broke but pierced the enemy's armour right through. Then the lanceman reached for a sword and the hussar took a sabre. When they failed to break the enemy's array and too many companions of the first line fell off their horses, the rest stopped their horses and retreated from the battlefield. Apart from the group attack, the first part of the encounter was a series of individual duels between first line companions and enemy warriors. Just like in tournaments, the striking force, the accuracy of hitting, the riding skill and, finally, the ability to wield weapons appeared to be decisive. Whereas the retreat after an unsuccessful attack resembles the circular turns made by the contestants on the arena, from which movements the word «tournament» (going round) derives. Therefore it appears that many of the much later elements of the cavalry's tactics might have had their origins in the knightly duels of the Middle Ages. The identity between numerous battle and tournament forms of fighting was so big that the importance of lancemen's

⁶ *Polskie ustawy i artykuły wojskowe od XV do XVIII w.*, ed. S. Kutrzeba, Cracow 1937, p. 38.

⁷ Teodorczyk, *op. cit.*, p. 181.

and hussars' courses had been maintained till the end of the 16th century.

The above discussed way of fighting required that the enlisted companions possessed great military skill. In order to train warriors in these skills and simultaneously mould the essential features of their character, both the individual and group forms of military training were needed. In the 16th century the problem was solved when the sons of noblemen joined the households of their fathers' suzerains and were brought up at the royal court or feudal lords' courts. Although they were trained in wielding weapons and riding a horse at home, it was the courts that played the role of „knight academies”. At some courts special preceptors, who had the knowledge of the art of war, taught the youth multifarious knightly functions. In the military upbringing a fundamental role was played by the commanders of private banners. Either the major-domo, heading the court, or the court hetman was in charge of the general course of military upbringing of the young noblemen sent to court. The King's courtiers who served in the court army were directly employed in military expeditions. The warriors of private court troops were recruited from among the yeomen, the middle nobility clientele and the lords' servants. Their knightly upbringing was modelled on the upbringing realized at the King's court. It must be remembered that from the middle of the 16th century onwards the number of warriors in the private armies had been bigger than the number of warriors serving in the mobile defence of the borderland troops. What were the tens and hundreds of young men staying at feudal lords' courts in peacetime engaged in? In order to solve this problem a number of further questions will have to be answered. Lack of sources constitutes an obvious obstacle in this respect. Nonetheless, the court's instructive and military function manifesting itself as military training, contests, games, tournaments and duels cannot be denied. If hetmans called general manouvers for the enlisted armies, the same demand must have been made with regard to their own private warriors, especially on the relentless eastern borderland. The famous „zagończyk” (a cavalry commander fighting against the Tartars) and commander of a banner Bernard Pretwicz's court in Bar, for instance, performed a typically military and educational function. According to his own words, in 1551 Bernard Pretwicz trained „80 young men for military service, having also knights' sons by his side”. Therefore the service at court remained an introductory step in one's military education. It played an important part in the enlisted commanders' lives and military careers⁸. It may be assumed that exercises in simulated fighting with some elements of games, competition and pageantry

meant to improve fighting competence were fairly widespread at that time.

The fencing exercises in wielding side-arms and shaft-arms took place in the yard or in suitable halls. In the course of many years' exercises the knight acquired remarkable skill and experience in wielding side-arms, sometimes bordering on Andrzej Modliszewski's perfection. Camerarius Andrzej Modliszewski, a functionary at Isabella Jagiellon, Queen of Hungary's court, was „a great man and an excellent swordsman, with such an accurate hand that he was able to cut a coin off a boy'd head without even touching the latter's hair”. This was also the case with shaft-weapons. „The proofs of excellence in breaking in the horse and wielding shaft-weapons were given in e.g. „tilting at the ring”. While galloping on a horse, the knight aimed his lance against a ring hung on a pole. The training of horses resampling the typical for tournaments circular turns was a popular form of entertainment. It was the so called „hussar expedition' or „close to earth”. The trained horses had to gallop for 30 metres and then turn back in circles, 30 metres in diameter, marked out at both ends of the track, so as not to put a hoof outside the circle. The exercises organized for the noble youth staying at court required that the horsemen remained saddle-fast, acquired the skills of wielding the lance and riding a horse. They also encouraged the youth to distinguish themselves in the field in the presence of the King and the lords. Certainly, the tournaments themselves, both the ones for the knights (the lancemen) and the ones for the hussars, were the most dangerous form of entertainment, both for the knight's health and his life. There were many accidents and contusions, as the contestants were hurt by the sharp splinters of their shattered lances. To fall off the horse on the hard dirt-floor of a castle's courtyard right under the horses' hooves was not a nice experience, either. It must be remembered that it was only in 1559 that Henry II, King of France, died while fighting the knight Montgomery. The accounts of the royal tourneys held to celebrate coronation ceremonies, royal weddings or lords' marriages are the only descriptions of tournaments that have been preserved up to our times. Hence the wrong supposition that they were rare. In reality this type of exercise was quite common, especially at the „lords of war's” courts, where a great number of young noblemen were gathered. The Tarnowski, the Sieniawski or the Mielecki families may be mentioned here.

Let us quote a few examples of the tourneys organized at the court of the last Jagiellon in which enlisted commanders took part. The courses held in the vicinity of Gdańsk in 1552 are among the most famous ones. Two lines of warriors, 30 young noblemen each, fought in the encounter. This number seems to correspond to the first line of a 150-horse banner composed of lancemen and hussars. Sigismund Augustus was one of the knights then. He was faced

⁸ M. Plewczyński, *Żołnierz jazdy obrony potocznej za czasów Zygmunta Augusta. Studia nad zawodem wojskowym w XVI w.*, Warsaw 1985, pp. 88-96.

with Marcin Herburt Dziedziłowski of Felsztyn, his own courtier and the commander of the opposite line. Dziedziłowski was a Podolian lord, bearing his own coat of arms. He was the „wojski” of Kamieniec (an official responsible for preserving peace and order in a district after the noblemen had departed for war) and the future Starost of Bar. Three years later he will enlist as a companion into the mobile defence of the borderland troops. In the years 1557-1558 he will be in command of a banner consisting of 150-200 horsemen fighting heavy battles during the conflict between the town of Międzybóž and the Crimean Tartars, the Nogay Tartars and the Tartars of Białogród, led by Khan Dewlet Girej's son, and engaged in the battle of Bar with Turkish-Tartar units. In 1569 he will still be the commander of a banner in Pdoia. According to Stanisław Orzechowski's description of the Gdańsk tournament, the King „chased Hrburt all over the plain and pluckily dislodged him into the open field not without knightly praise'. Whereas „after dinner a fencing school was taken out in front of the King's house, where enlisted warriors („jurgieltnicy”), infantry soldiers of the King's Guards („drabanci”) and court officials in charge of the King's wine cellar („trukasi”) showed their skills fighting the Germans. In 1553 at Sigismund Augustus and Katherine Habsburg's wedding tournaments were held in the presence of the King at the royal castle and in Main Market Place in Cracow. Stanisław Orzechowski wrote, „What they watched there was not a semblance of battle, but the battle itself. The contestants in pulled down visors and armour for the course sped against each other into danger and to inflict wounds... At first they had tilted in pairs and then, gathered in groups, attacked with shields and swords in their hands...”. Poles, Germans and Prussians took part in the fight and the first prize went to Prince Albrecht Hohenzollern's equerry. Among the participants of the tournament many companions and banner commanders may be seen. Zygmunt Wolski, who fought with weapons with points with Kieżgala, a Lithuanian nobleman, was one of them. „They fought a battle in heavy armour, in which contest Wolski was ranked above Kieżgala by the Poles, as he had knocked down Kieżgala and his horse. On the contrary, the Lithuanians praised Kieżgala, as he had shattered his lance up to the shaft by constant hitting and had jumped down over the horse's head”. The following competitors also took part in the tournament: the companion of the mobile defence of the borderland troops, the future voivod of Lublin and commander of a cavalry banner in the years 1564-1573 Mikołaj Maciejowski, bearing „Ciołek” in his coat of arms; the future commander of a cavalry banner in the years 1557-1563 Stanisław Myszkowski, bearing „Jastrzębiec in his coat of arms; the former commander of an infantry banner in the years 1520-1538 Kilian Łukowski, bearing „Jelita” in his coat of arms; the future commander of the artillery in the years

1557-1563 Stanisław Lipnicki, bearing „Hołobok” in his coat of arms; the future commander of a cavalry banner in the years 1572-1573 Mikołaj Ligęza, bearing „Półkozic” in his coat of arms; Maciej Włodek's son, Stanisław, who had commanded great banners in his young years” etc.. There was also the future crown field guard, the starost of Chmielnik and Kamieniec Mikołaj Potocki, bearing „Pilawa” in his coat of arms, who after he had tilted with the future commander of a cavalry banner in the years 1564-1580 and the starost of Sącz Stanisław Mężyk, bearing „Wieniawa” in his coat of arms, took part in the group encounters armed with a sword and a shield. The horse tournament was held at the castle and „the courses in chain-mail armour, in which contest everyone who behaved according to the articles nailed on the castle's door could participate and chase the opponent who was present in the square so that the second had to fight two or three contestants one after another before he reached the other side of the square”, were organized in Main Market Place. The Lithuanian banner commander Jan Hlebowicz and Mikołaj Wolski are known to have killed the horses they rode in the tournament held to celebrate the next royal wedding in 1562⁹. It was the wedding of Katherine Jagiellon, Queen of Sweden.

It must be mentioned that, according to my estimation, every third warrior promoted commander of a banner, only within the mobile defence of the borderland troops, had served at the King's or a feudal lord's court. The above mentioned banner commanders Marcin Herburt and Mikołaj Maciejowski were the most experienced ones. Stanisław Broniewski, Jan Kamieniecki, Jan Podwysoki and a few others had good practice, too. The ones who after the service at court became companions of the enlisted armies were still more numerous. Therefore it is not surprising that in 1564 Sigismund Augustus accepted Mikołaj Radziwiłł's suggestion and promoted courtiers to the rank of commanders in order to make them commanders of the banners enlisted for the war with Moscow. Accordingly, it appears that it was not only the King's or feudal lords' favouritism that determined military promotion. Fighting skills acquired through the constant court exercises also played an important part in this respect.

In 1563 Vice-Chancellor Piotr Myszkowski shouted at the Sejm in Warsaw, „our youth are spiritless..., practising skills and readiness for knightly

⁹ Ł. Górnicki, *Dzieje w Koronie Polskiej 1538-1572*, ed. K. J. Turowski, Sanok 1855, pp. 37-38, 45-46; S. Orzechowski, *Panagyricus Nuptiar Sigismundi Augusti Regis*, Cracow 1553, [in:] J. Niemcewicz, *Zbiór Pamiętników historycznych o dawnej Polsce*, vol. 5, pp. 249-251; M. Plewczyński, *Materiały do zagadnienia liczebności i organizacji wojska polskiego w latach 1506-1573*, „Studia i Materiały do Historii Wojskowości”, vol. XXXIII, Wrocław-Warsaw-Cracow, 1990, pp. 323-348.

exercises have died out"¹⁰. Whereas every fourth nobleman is known to have been engaged in the war craft and every seventh nobleman served in the mobile defence of the borderland troops. Therefore the contemporary complaints regarding the youth were exaggerated and the inscription made in the Wawel hall had nothing to do with the reality of the military circles of the royal and feudal lords' courts. It was only in the 17th century that tilting at people was abandoned and the knights limited themselves to games and entertainments in which only the dummies' heads were cut off. The type of show visible in the well-developed ceremony of games acquired considerable importance at that time.

The 16th century tourneys are not yet the theatre performed to the delight of the cheering audience.

The court fight school did not differ much from the battle conditions with which the lancemen and hussars were faced in reality. The massive scale of the court games as well as the individual and group fighting techniques employed made these court competitions resemble practical military training. Hence it may be assumed that the court tourneys were the fight school for the Polish enlisted commanders of the 16th century.

Translated by Zuzanna Poklewska-Parra

¹⁰ *Źródło pisma do dziejów unii Korony Polskiej i W. Ks. Litewskiego*, ed. A. T. Dziąłyński, vol. II, Poznań 1856, pp. 194-197; M. Plewczyński, *Liczebność wojska polskiego za ostatnich Jagiellonów (1506-1572)*, „Studia i Materiały do Historii Wojskowości”, vol. XXXI, Wrocław-Warsaw-Cracow 1989, pp. 52-53.