Research Article

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Battle of Kirchholm (Salaspils) in 1605. The current state of research

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Abstract

Background: The article aims to present the state of research on the Battle of Kirchholm (Salaspils), which took place in Livonia (now Latvia) on September 27, 1605., between the Polish-Lithuanian Commonwealth and Sweden. 74% of Swedes were killed, and the winners lost only 3% of their forces. It was an absolute massacre carried out by an army consisting in two-thirds of cavalry against an enemy with an advantage in infantry and artillery, which in theory is more modern.

Methodology: The author has analyzed the known and unknown historiography of sources, including archaeological, epistolary, historiographic, iconographic, narrative, and normative materials. He compared the results with previous literature on the subject.

Principal Findings/Results: The analysis conducted showed a brilliant tactic by the Polish-Lithuanian Commonwealth's army, consisting of combining cavalry with infantry. This, along with many errors in command of the Swedish army, led to the downfall of the Scandinavians.

Conclusions/Significances: The success at Kirchholm saved the Polish-Lithuanian rule over the Daugava River. Unfortunately, it cemented Polish-Lithuanian nobility in the mistaken belief about the power of the army of the Republic, that without money and reforms, they began to lose advantage over opponents.

Keywords: Jan Karol Chodkiewicz, Carl IX King of Sweden, Polish-Swedish war

1 Introduction

In the afternoon hours of September 17/27¹, 1605, the army of the Polish-Lithuanian Commonwealth annihilated the three times greater number of Swedish forces in the Battle of Kirchholm (Salaspils) in Livonia, in what is now Latvia. 74% of Swedes were killed with the winners losing only 3% of their forces. It was an absolute massacre carried out by an army consisting of two-thirds of cavalry against an enemy with an advantage in infantry and artillery, which in theory is more modern. The questions immediately arise, how did this happen? Where is the secret to such a spectacular success? What mistakes did the losing side make? What was the influence of this battle on the development of the art of war of that time?

The article aims to answer the above questions and smaller ones, allowing us to understand better what happened in September 1605. There are not many examples of such clear victories in the world history of wars. Therefore, each of them should be carefully analyzed so that we can get to know them better. It also applies to the Battle of Kirchholm, which is relatively well known to Poles, but much less to Swedes, Lithuanians, or Latvians. It does not mean that our knowledge of the clash is complete.

¹ The first date comes from the Julian calendar used by the Swedes and Courlanders, and the second from the Gregorian calendar used in the Polish-Lithuanian Commonwealth.

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On the contrary, the earlier authors did not reach all sources. As a result, we have many shortcomings and understatements in general circulation. Another important goal of the article is to present new materials and confront the current research results.

2 Methods

When preparing this article, we analyzed the sources known and mostly unknown to previous researchers, including material: archaeological and iconographic, as well as written: historiographic, epistolary, narrative, and normative.

Archaeological materials were little known and thus little used by researchers of the battle so far. At present, we only have accidental finds and rescue research results of the Swedish little fort later on in this place. However, they allow far-reaching conclusions to be drawn². The situation is different in the case of iconographic materials, which are widely known and often used. Among them is a copy of the battle scene on a copperplate by Antonio Tempesta³, a sketch of the situational plan by Józef Naronowicz-Naroński⁴, a sketch of *Ordre de Bataille* by Eric Dahlberg⁵, and an oil painting by Peter Snayers⁶. It is probably due to the lack of a language barrier, and easier access to pictorial material.

Most of the written sources have already been published. In some cases, we are still dealing with archival material. Surprisingly, among both the published and archival materials, we can find a position unknown to historiography. It is partly due to the language barrier. It is simply based on the fact that Poles rely mainly on Polish materials and Swedes on Swedish. The sources of local provenance in German had previously been used to a limited extent.

When doing a short overview of familiar sources, we start with a well-known historiographic material. We have analyzed all the works about the conflict between the Polish-Lithuanian Commonwealth and Sweden⁷ and the battle from the beginning and the middle of the 17th century⁸. Chronicles⁹, especially local ones¹⁰, which were rarely used before, are a valuable addition. Correspondence cannot be forgotten either.

2 J. Ciglis, „Szwedzki Szaniec” w Salaspils a Bitwa Pod Kirchholmem, *Z Otcłani Wieków*, Vol. 62, no. 1–4, 2007: 47–55 (in Polish).

3 Biblioteka Narodowa (Warsaw), G.11146: Wieszczycki T., [Kopia sporządzona przez polskiego artystę T. Wieszczyckiego w technice akwaforty w XIX w. miedziorytu ukazującego bitwę pod Kirchholmem autorstwa Antonio Tempesta na podstawie rysunku Giacoma (Jakuba) Lauro w 1606 r.].

4 Biblioteka Uniwersyteku Warszawskiego (Warsaw), Rps BUW nr 1954.: Naronowicz-Naroński J., *Optima Lub Perspectiva* ... (in Polish).

5 Riksarkivet (Stockholm), SE/KrA/0438: [Ordres de bataille] (in Swedish).

6 P. Snayers, *Bitwa Pod Kirchholmem, 1605 r.*, In: Wikipedia, wolna encyklopedia, https://pl.wikipedia.org/wiki/Plik:Kirholm_1605_I.JPG (in Polish).

7 *Equitis Litvani De Bello Livonico per Decennium gesto, Apud Ioannem Karcanum, Vilnae, 1610* (in Latin); D. Antanavičius, *Lietuvio bajoro Dešimtmetis livonijos karas (1610.) Ir jo autorius (autorystės atribucijos bandymas)*, LII leidykla, Vilnius, 2003 (in Lithuanian); *Slaktarebenck czyli Krwawe jatki księcia Karola Sudermańskiego*, W. Krawczuk (ed.), Towarzystwo Wydawnicze „Historia Iagellonica”, Kraków 2017 (in Polish).

8 B. Plinius, *Victoria, quam iuvante DEO Optimo Maximo*, s. n., Riga, 1605 (in Latin); E. Rzetowski, *Sława losu szczęśliwego w Inflanciech przez J. K. Chodkiewicza*, s. n., Wilno, 1605 (in Polish); L. Boierus, *Carolomachia, qua Felix Victoria, Ope Dvina...*, Typis Academicis S.I. Thomas Leuicki, Vilniae, 1606 (in Latin); *Nowiny z Inflant*, In: *Wypisy do ćwiczeń z historii wojskowej*, Vol. 1/1, J. Wimmer (ed.), Wojskowa Akademia Polityczna im. F. Dzierżyńskiego, Warszawa, 1961: 96–100; L. Bojeris, *Karolių mūšis*, B. Kazlauskas (ed.), Vilniaus V. Kapsuko universitetas, Vilnius, 1981 (in Lithuanian).

9 P. Piasecki, *Chronika Gestorum in Europa singulorum recentiorum, Ad Annum Christi*, In *Officina Typographica Francisci Caesarij, Cracoviae, 1645* (in Latin).

10 *Latvijas Valsts Vēstures Arhivs (Riga), 4038/2/90: Viecken G., Kurtze Beschreibung, was sich gedencckwürdiges zu Riga begeben und zugetragen von 1521 bis 1626* (in German); T. Hiärn, *Ehst-, Lyf-, und Lettländischer Geschichte*, In: *Monumenta Livoniae Antiquae*, Vol. 1, C. E. Napiersky (ed.), Verlag von Eduard Frantzen's Buchhandlung, Riga, Dorpat und Lepzig, 1835: 1–444 (in German); F. Nyenstädt, *Livländische Chronik*, In: *Monumenta Livoniae Antiquae*, Vol. 2, G. Tieleman (ed.), Verlag von Eduard Frantzen's Buchhandlung, Riga und Lepzig, 1839: 1–160 (in German); J. Bodecker, *Bodeckers Chronik. Livländischer und Rigascher Ereignisse. 1593-1638*, J. G. L. Napiersky (ed.), N. Kymmel's Buchhandlung, Riga, 1890 (in German).

We currently have letters from Hetman (the highest military officer in the Commonwealth) John Charles (Jan Karol) Chodkiewicz, and Prince Frederick of Courland, which have been published¹¹. The above letters came from the hand of the winners. However, we lack the losing side's report. This disadvantage is compensated by the detailed inventory of the Swedish king's army before and after the battle¹². We also have similar inventory for the winning side. However, it is more general than the Swedish one and forms an integral part of the sources mentioned above.

We compared the research results obtained from the sources with the existing literature on the subject, which is numerous. Here, we will briefly discuss the most groundbreaking and, above all, the latest works, apart from the compilations and popularizing ones. The first publications on the campaign of 1605 and the battle itself appeared in the 19th century. Despite the passage of time one of them, the work of the Polish researcher Ferdynand Kudelka from 1883, is still frequently used. It was the first complete and modern monograph at the time¹³. Another breakthrough work was an article by the Polish historian Antoni Hniłko from 1934 which, based on the battle plan by Józef Naronowicz-Naronski that he found, created a new vision of the fight widely accepted by Polish researchers until today¹⁴. Surprisingly, this text is still unknown on the other side of the Baltic Sea. As a result, Swedish historians use the outdated findings of Kudelka to this day¹⁵. The most significant contribution to the state of our knowledge about the battle among Swedish researchers was made by historians studying the history of the Swedish regiments: Gustav Petri¹⁶ and Bertill Barkman¹⁷. They devoted separate chapters of their books written in the 20s and 30s of the 20th century.

At the end of the last century, Polish researchers Jerzy Teodorczyk and Zdzisław Żygulski Jr. presented a new concept of the fight based on the painting by Peter Sneyer they discovered¹⁸. It was met with varying responses among historians. On the one hand the Polish historian Henryk Wisner, the author of the complete monograph devoted to the battle, mentioned it but did not make use of this discovery in any edition (the first in 1987, the second in 2005, and the third in 2011)¹⁹. On the other hand, Polish researcher Mariusz Balcerek used it in his analyses and added other finds to it, such as the *Ordre de Bataille* of Chodkiewicz's army

11 Biblioteka XX. Czartoryskich w Krakowie (Cracow), Teki Naruszewicza, Vol. 100: Sigismund III to John Charles Chodkiewicz, 5.10.1605, Cracow (in Polish); Schreiben Herzogs Friedrich von Kurland über die Schlacht bei Kirchholm am 17. Sept. 1605., J. Bohlen (ed.), Mittheilungen Aus dem Gebiete der Geschichte Liv-, Est- und Kurland, Vol. 9, 1858: 114–118 (in German); List J. Karola Chodkiewicza do króla, Dan pod Rygą, d. 30 września 1605 r., In: Wypisy do ćwiczeń z historii wojskowej, Vol. 1/1, J. Wimmer (ed.), Wojskowa Akademia Polityczna im. F. Dzierżyńskiego, Warszawa, 1961: 100–101 (in Polish); D. Antanavičius, Znane i nieznanne źródła do kampanii kircholmskiej w 1605 roku, In: Wojny Północne w XVI–XVIII wieku. W czterechsetlecie bitwy pod Kirchholmem, B. Dybaś (ed.), Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika, Toruń, 2007: 23–41 (in Polish).

12 Riksarkivet (Stockholm), SE/KrA/0455/G I 1605/1: Styrkeuppgifter från slaget vid Kirkholm (in Swedish); Riksarkivet (Stockholm), SE/RA/5104/5104.1/A./7: Summarisk uppgift över det krigsfolk, som följde konungen i fält 1605 13/9 (in Swedish).

13 F. Kudelka, Bitwa pod Kirchholmem, Ateneum, Vol. 3, 1883: 478–512 (in Polish).

14 A. Hniłko, Plan bitwy pod Kirchholmem Józefa Naronowicza-Naronskiego z r. 1659, Przegląd Historyczno-Wojskowy, Vol. 7, no. 1, 1934: 126–133 (in Polish).

15 L. Ericson, Den glömda katastrofen, In: Svenska slagfält, L. Ericson (ed.), Wahlström & Widstrand, Stockholm, 2003: 89–94 (in Swedish).

16 G. Petri, Kungl. Första livgrenadjärregementets historia, Vol. 1, Norstedt, Stockholm, 1926 (in Swedish).

17 B. Barkman, Kungl. Svea livgardes historia, Vol. 2, Stift. för Svea livgardes historia, Stockholm, 1939 (in Swedish).

18 J. Teodorczyk, Z. Żygulski jun., Dwugłos o Bitwie Pod Kirchholmem. Historia i Ikonografia, Rocznik Historii Sztuki, Vol. 24, 1999: 97–130 (in Polish); J. Teodorczyk, Tajemnice zwycięstwa, czyli bitwa pod Kirchholmem w ikonografii z XVIII w., Muzealnictwo Wojskowe, Vol. 8, 2005: 373–402 (in Polish).

19 H. Wisner, Bitwa Kircholmska – Pytania i Wątpliwości, In: Wojny Północne w XVI–XVIII Wieku. W Czterechsetlecie Bitwy Pod Kirchholmem, B. Dybaś (ed.), Towarzystwo Naukowe w Toruniu, Toruń, 2007: 15–22 (in Polish); H. Wisner, Kirchholm 1605, 3rd ed., Bellona, Warszawa, 2011 (in Polish).

by Eryk Dahlberg and local sources (Livonian, Riga, and Courland) and those of Swedish provenance²⁰. To the list of recent discoveries, we should add the study by the Lithuanian historian Darius Antanavičius on the work *Equitis Litواني De Bello Livonico per Decennium gesto* to shed new light on what happened on September 27, 1605²¹.

As we can see, most of the researchers dealing with the battle came and still come from Poland, which implies presenting it as mainly or exclusively Polish victory. It escapes us that in Chodkiewicz's army, there were representatives of the culturally rich Polish-Lithuanian Commonwealth. There are significantly fewer Swedish and Lithuanian historians describing the battle. In the case of Sweden, it is easily explained by the lack of willingness to deal with their compatriots' loss in the battle. It is more difficult to understand the relatively low interest of Lithuanian researchers.

To best discuss the problems presented in the introduction, we have divided the article into several thematic parts corresponding to the critical issues related to the Battle of Kirchholm. We will discuss in turn: the Swedish attack on Livonia and the siege of Riga, the battlefield, the numbers and composition of the army of Charles IX and Jan Karol Chodkiewicz, the march to Kirchholm, Prince Frederick's crossing the Daugava river, and the positioning of both warring sides against the Daugava River, then Ordre de Bataille of both sides, the fight itself, the losses, and the meaning of the victory.

3 The Swedish attack on Livonia and the siege of Riga

In 1600, a war broke out between the Polish-Lithuanian Commonwealth and Sweden to control the Baltic Sea (the dominion of *Maris Baltici*). The formal basis of the conflict was a family dispute between Charles, regent to the Swedish throne, and his nephew, Sigismund, the ruler of the Polish-Lithuanian Commonwealth and the king of Sweden. To better visualize this conflict, we need to look at the map. The Polish-Lithuanian Commonwealth occupied almost one million square kilometers, including the territory of today's Lithuania, Belarus, Latvia, the Kaliningrad District, most of Poland, and southern Estonia. From Stockholm, orders were sent to the territories of Sweden, Finland, northern Estonia, and a small part of Russia. Thus, it was a large-scale conflict that initially focused on today's Latvia's and Estonia's territories, where the land border between the parties to the conflict ran.

Until 1605 the military struggle was rich in battles and sieges but they did not bring a solution. The situation seemed to be stabilized when, in 1605, the Swedish side decided to launch a courageous attack. Crowned the King of Sweden a year earlier, Charles struck the largest city in the Baltic region, Riga. If he had conquered it, he would have been able to threaten the Polish-Lithuanian rule over the entire region.

Researchers wrote relatively little about the attempts to take over the city. It applies to all national historiographies, even Latvian ones. Therefore, we will take a closer look at this issue below.

The first Swedish troops arrived by sea in Riga in early August. On August 3/13, 1605, they began the blockade of the city²². Soon two more corps landed in what is now Estonia: led by Anders Lenartsson and

²⁰ M. Balcerek, Liczebność, skład i szyk wojska hetmana Jana Karola Chodkiewicz w bitwie pod Kirchholmem na „Ordre de bataille” Erika Dahlberga, *Zapiski Historyczne. Poświęcone Historii Pomorza i Krajów Bałtyckich*, Vol. 74, no. 3, 2009: 77–93 (in Polish); M. Balcerek, *Księstwo Kurlandii i Semigalii w wojnie Rzeczypospolitej ze Szwecją w latach 1600–1629*, Wydawnictwo Poznańskie, Poznań, 2012 (in Polish); M. Balcerek, *Ordre de Bataille armii walczących pod Kirchholmem dnia 27 września 1605 r.*, In: *Do szarży marsz, marsz...* Studia z dziejów kawalerii, Vol. 4, A. Smoliński (ed.), Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika, Toruń, 2013: 27–62; M. Balcerek, *Polacy w armii Karola IX w bitwie pod Kirchholmem 27 IX 1605 roku*, *Zapiski Historyczne. Poświęcone Historii Pomorza i Krajów Bałtyckich*, Vol. 78, no. 3, 2013: 93–104; M. Balcerek, *Polacy w armii Karola IX w bitwie pod Kirchholmem 27 IX 1605 roku*, *Zapiski Historyczne. Poświęcone Historii Pomorza i Krajów Bałtyckich*, Vol. 78, no. 3, 2013: 93–104; M. Balcerek, *Vom nationalen Narrativ vergessen – Der Beitrag des Herzogtums Kurland und Semgallen sowie des Piltener Kreises während der Schlacht bei Kirchholm im Jahre 1605*, *Militaergeschichtliche Zeitschrift*, Vol. 72, no. 2, 2013: 243–266. <https://doi.org/10.1515/mgz-2013-0010> (in German); M. Balcerek, *Ustawienie walczących stron w stosunku do rzeki Dźwiny w bitwie pod Kirchholmem w 1605 roku*, In: *Stan badań nad wielokulturowym dziedzictwem dawnej Rzeczypospolitej*, Vol. 7, K. Łopatecki and W. Walczak (eds.), Instytut Badań nad Dziedzictwem Kulturowym Europy, Białystok, 2017: 113–149 (in Polish).

²¹ D. Antanavičius, *Lietuvio bajoro Dešimtmetis livonijos karas (1610.) Ir jo autorius (autorystės atribucijos bandymas)*, LII leidykla, Vilnius, 2003 (in Lithuanian).

²² J. Bodecker, *Bodeckers Chronik. Livländischer und Rigascher Ereignisse. 1593–1638*, J. G. L. Napierky (ed.), N. Kymmel's Buchhandlung, Riga, 1890: 18–21 (in German).

Charles IX himself. After their merger, they moved south and stood near Riga on September 13/23²³. In total, almost 11,000 people were located near the city in September. Soldiers of Charles IX with artillery will be described in more detail below. Then, the Swedes surrounded Riga on three sides with 11 small ramparts; the Daugava River flowed on the fourth side²⁴.

During the siege of Riga, there were five infantry companies in the city and some cavalry, unfortunately of unknown numbers. An additional 140 footmen and 100 horsemen were stationed at Riga castle. We know the data of several commanders: Caspar Tyzenhauz, Benedict Wahlen (Wahl), Otto Medhen (Meheden), and Büring. We know that about 300 soldiers were left behind on the last trip²⁵. The need to fill the positions and not risk losses suggests that this separated group could account for at most 1/3 of the entire force. It makes a total of around 900 soldiers in the city and the castle. To this number mobilized townspeople should also be added. We do not know the artillery and ammunition stock in Riga, but because the city serves as the main arsenal and warehouse in the area, we can guess that they were sufficient²⁶. As the largest port and at the same time a market in the area to which the Dźwina flowed and goods were delivered, among others cereal, the city did not have to worry about food²⁷.

When the Swedes began a methodical siege, Charles IX received information about the arrival of Jan Karol Chodkiewicz's army to help the city. Confident of his strength, on September 16/26, the Swedish ruler set off with most of his troops to meet the enemy. At this point, it is worth asking if Riga would be able to hold out for a few more weeks? An example from 1621, when Charles' son Gustavus II Adolphus besieged the city, shows that it could²⁸. The means and strength would allow the townspeople to fight off Swedish attacks for a long time. The same as in 1621, the real problem was the loyalty of the authorities in Riga, resulting from the Commonwealth's commitment to defend their city²⁹. Therefore, Chodkiewicz had to quickly show the besieged sovereign's good intentions. Otherwise, the city and the entire province would be doomed.

At the time of the Swedish attack on Riga, Commonwealth forces in the region were stationed near the city of Tartu (now south-eastern Estonia), about 250 km north-east of Riga³⁰. Hetman Chodkiewicz then had about 3,000 soldiers. The enemy's forces did not form one army but were divided³¹. Therefore, according to Henryk Wisner, the hetman tried to fight only a part of the forces of Charles IX, using the initial division³².

23 J. Bodecker, *Bodeckers Chronik. Livländischer und Rigascher Ereignisse. 1593-1638*, J. G. L. Napiersky (ed.), N. Kymmel's Buchhandlung, Riga, 1890: 23, 26 (in German).

24 L. Boierus, *Carolomachia, qua Felix Victoria, Ope Dvina...*, Typis Academicis S.I. Thomas Leuicki, Vilniae, 1606 (in Latin).

25 J. Bodecker, *Bodeckers Chronik. Livländischer und Rigascher Ereignisse. 1593-1638*, J. G. L. Napiersky (ed.), N. Kymmel's Buchhandlung, Riga, 1890: 18-19, 22 (in German); *Slaktarebenck czyli Krwawe jatki księcia Karola Sudermańskiego*, W. Krawczuk (ed.), Towarzystwo Wydawnicze "Historia Iagellonica", Kraków 2017: 72 (in Polish); A. Naruszewicz, *Historia Jana Karola Chodkiewicza, Woiewody Wilenskiego, Hetmana Wielkiego W.X.L.*, Vol. 1, w Drukarni Nadwornej J. K. Mci, Warszawa, 1871: 122, 129, 145 (in Polish); D. Antanavičius, *Znane i nieznane źródła do kampanii kircholmskiej w 1605 roku*, In: *Wojny Północne w XVI-XVIII wieku. W czterechsetlecie bitwy pod Kircholmem*, B. Dybaś (ed.), Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika, Toruń, 2007: 35 (in Polish).

26 A. Ziemlewska, *Ryga w Rzeczypospolitej Polsko-Litewskiej (1581-1621)*, Towarzystwo Naukowe w Toruniu; Uniwersytet Mikołaja Kopernika w Toruniu, Toruń, 2008: 220, 229-230 (in Polish).

27 W. W. Doroszenko, *Eksport Rygi na zachód w okresie przynależności do Rzeczypospolitej (1562-1620)*, *Zapiski Historyczne. Poświęcone Historii Pomorza i Krajów Bałtyckich*, Vol. 31, no. 1, 1966: 7-44 (in Polish).

28 M. Balcerek, *Zdobycie Rygi w 1621 roku – rewanż za Kircholm?* In: *Wojny północne w XVI-XVIII wieku. W czterechsetlecie bitwy pod Kircholmem*, B. Dybaś (ed.), Towarzystwo Naukowe w Toruniu, Toruń, 2007: 81-92 (in Polish); M. Balcerek, *Oblężenie Rygi w 1621 roku*, *Studia i Materiały do Historii Wojskowości*, Vol. 45, 2008: 14-39 (in Polish).

29 A. Ziemlewska, *Ryga w Rzeczypospolitej Polsko-Litewskiej (1581-1621)*, Towarzystwo Naukowe w Toruniu; Uniwersytet Mikołaja Kopernika w Toruniu, Toruń, 2008: 220 (in Polish).

30 *Nowiny z Inflant*, In: *Wypisy z ćwiczeń z historii wojskowej*, Vol. 1/1, J. Wimmer (ed.), Wojskowa Akademia Polityczna im. F. Dzierżyńskiego, Warszawa, 1961: 96 (in Polish).

31 *Nowiny z Inflant*, In: *Wypisy z ćwiczeń z historii wojskowej*, Vol. 1/1, J. Wimmer (ed.), Wojskowa Akademia Polityczna im. F. Dzierżyńskiego, Warszawa, 1961: 96 (in Polish).

32 H. Wisner, *Bitwa Kircholmska – Pytania i Wątpliwości*, In: *Wojny Północne w XVI-XVIII Wieku. W Czterechsetlecie Bitwy Pod Kircholmem*, B. Dybaś (ed.), Towarzystwo Naukowe w Toruniu, Toruń, 2007: 17 (in Polish); H. Wisner, *Kircholm 1605*, 3rd ed., Bellona, Warszawa, 2011: 113 (in Polish).

4 The numbers and composition of the armies of Charles IX and John Charles Chodkiewicz

The size and composition of Charles IX's army are known in Swedish literature. It is worse with the data on the Polish army. Until recently, the opposite was confirmed on the other side of the Baltic Sea. Recently, Mariusz Balcerek collected and put together information on the number of both parties.

We start with the data on the army of Charles IX, which was to have exactly 10,736 soldiers, including 2,500 cavalry and 8,236 footmen, and 11 guns. We also know its division into regiments and companies³³. It gives a cavalry to infantry ratio of 1 : 4. The then English military officer and politician George Monck believed that a 1 : 4 or 1 : 5 ratio was ideal. It means that the ratio of cavalry to infantry in Charles IX's army was perfect, at least in theory. According to the American researcher Geoffrey Parker, in some situations, the cavalry was equal in number or outnumbered the infantry, but this was due to the devastation of the army and operation in the devastated area³⁴.

Let us take a closer look at the tactics employed by the army of Charles IX. The infantry was positioned in two rounds, 7 and 6 squares of pikemen-musketeer, which on average equals 634 soldiers in each of them. In the painting by Peter Snayers, we can see that there were many musketeers among them, who could have made up half of the entire infantry, which in 1605 was very brave. The problem was that the shooters evenly surrounded the pikemen so that only those standing on the unit's front, i.e., about a quarter, could take part in the fight. If we divide the number of infantry by 2 (only half of them are musketeers) and then by four more, we get only 1030 musketeers who could fight against the opponent standing in front of him. When we realize that only seven squares (54%) were placed in the first throw, the number of shooters will decrease to 556.

Charles IX's cavalry also stood in deep formations to conduct fire fighting, the so-called caracole, which eliminated the charge on white weapons. It significantly weakened the strength of the cavalry. The more so because in front of it stood the cavalry of the Polish-Lithuanian Commonwealth, using aggressive tactics.

An interesting fact that so far has not been noticed is the presence in the army of Charles IX of three infantry companies of Polish origin. The first was commanded by Pävfel Stilicken (Stigelchen), the second by Tideman Skrowe (Schro, Schrow), and the third by Erwat (Horvath) Michael. They had 97, 81, and 113 people, respectively. Organizationally, they were part of the Anders Lenartson's regiment, composed of Poles, Hungarians, Germans, and Scots³⁵.

We are not able to provide such precise calculations for the army of Jan Karol Chodkiewicz. Based on the sources known to us, we know that this number ranged from 2,500 to 3,950 soldiers. The author of *Slaktarebenck czyli Krwawe jatki księcia Karola Sudermańskiego*, published, translated into Polish and annotated by Wojciech Krawczuk, writes about 2,500³⁶, Erasmus Rzetowski wrote about 3,492 (including 2,452 cavalries and 1,040 infantry)³⁷, author of *Carolomachia* about 3,482 (2,242 cavalries and 940 infantry)³⁸, and Józef Naronowicz-Naroński about 3,950 (2,910 cavalries and 1,040 infantry) and seven guns³⁹. The hetman himself mentioned in the letter about 3,750 (exactly 3,400 of his own, 300 Kurlanders

³³ Riksarkivet (Stockholm), SE/KrA/0455/G I 1605/1: Styrkeuppgifter från slaget vid Kirkholm (in Swedish); Riksarkivet (Stockholm), SE/RA/5104/5104.1/A./7: Summarisk uppgift över det krigsfolk, som följde konungen i fält 1605 13/9 (in Swedish); M. Balcerek, *Ordre de Bataille armii walczących pod Kircholmem dnia 27 września 1605 r.*, In: *Do szarży marsz, marsz...* Studia z dziejów kawalerii, Vol. 4, A. Smoliński (ed.), Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika, Toruń, 2013: 27–62.

³⁴ G. Parker, *The military revolution : military innovation and the rise of the West, 1500-1800.*, Cambridge University Press, Cambridge, 1988: 69-70, 183.

³⁵ M. Balcerek M., *Polacy w armii Karola IX w bitwie pod Kircholmem 27 IX 1605 roku*, *Zapiski Historyczne*. Poświęcone Historii Pomorza i Krajów Bałtyckich, Vol. 78, no. 3, 2013: 93–104 (in Polish).

³⁶ *Slaktarebenck czyli Krwawe jatki księcia Karola Sudermańskiego*, W. Krawczuk (ed.), Towarzystwo Wydawnicze "Historia Iagellonica", Kraków 2017: 74 (in Polish).

³⁷ E. Rzetowski, *Sława losu szczęśliwego w Inflanciech przez J. K. Chodkiewicza*, s. n., Wilno, 1605 (in Polish).

³⁸ L. Boierus, *Carolomachia, qua Felix Victoria, Ope Dvina...*, Typis Academicis S.I. Thomas Leuicki, Vilniae, 1606 (in Latin).

³⁹ A. Hniłko, *Plan bitwy pod Kircholmem Józefa Naronowicza-Narońskiego z r. 1659*, *Przegląd Historyczno-Wojskowy*, Vol. 7, no. 1, 1934: 131 (in Polish).

and volunteers)⁴⁰. Losses and ordinary desertions and volunteers, which can compensate each other should be added. By deducting 10% for blind posts and a portion (functioning in the Polish-Lithuanian Commonwealth) from Chodkiewicz's data, we will get 3,375. Of these, almost 2,400 were cavalry and about 1,000 infantry, which gives a ratio of 2.4 : 1. In the 17th century, such an account was considered outdated and, therefore, ineffective. Taking the above numbers 10,736 and 3,375, this ratio of 1 to more than 3 is in favor of Charles IX's army.

Mariusz Balcerek published the most up-to-date and accurate list of the composition of Chodkiewicz's army based on available sources⁴¹. Erazm Rzetowski and the author of *Carolomachia* give the number of individual units, differing only by 310 soldiers. Thanks to these combinations, we know that there were 1050-1450 hussars, i.e., riders armed with lances up to 6 m long (i.e., they were longer than pikes) with half-armor and cones, 100 petihorts (light hussars), also equipped with lances (could have been shorter) with lighter protective armament (probably chain mail and helmet), 510-600 cuirassiers (protective armament similar to that of a hussar), 392-492 cossacks (not identical to the Ukrainian Cossacks), riders without protective armament, and 940-1040 footmen. As we can see, the army had the most significant number of hussars, who had excellent breaking power when performing their charges, thanks to the most significant mass and, despite this, high speed and long lances. Other cavalry formations may have supported and exploited breaches made by the hussars. All types of cavalry of the Commonwealth, preferring aggressive combat with white weapons, were better than their opponents, who used caracole, i.e., a complicated firing system from a horse.

It is also worth noting that there were no pikemen, only shooters among the infantry of the Commonwealth, standing 10 in a row. It translated into firepower in which this formation outperformed the opponent. If we compare 940-1040 Polish-Lithuanian shooters with 1030 Swedish musketeers at the head of their squares, we will notice a balance here. However, it is quickly shaken when only over a half (56%) of the Swedish infantry, standing in the first line, could immediately make contact with an opponent who threw all his infantry forward.

Mariusz Balcerek analyzing the composition of the army of Chodkiewicz stressed the forgotten and overlooked contribution of local contingents from the Duchy of Courland and Semigallia (fief of the Polish king, today's Latvia) and the county of Pilten (present Latvia) in the Polish-Lithuanian army. Thanks to the publication of the results of these analyzes, we know that Courland sent three banners, including one of Prince Frederick and two of the noble horse service (German: Roßdienst). In total, they numbered 300 cuirassiers. The Kurlanders in the battle were commanded by Captain Mateusz von der Recke. The Piltians issued one horse service banner of 80-100 cuirassiers, commanded by Ewald von Sacken⁴².

Battlefield

Let us now turn to the question of the battlefield. Its general location is not controversial. Kirchholm itself was a small town situated on a hill on the northern bank of the Daugava River. To the east of it, the terrain went down and then rose slightly again. A forest bordered it from the north and the Daugava River from the south. It was where the battle was about to take place⁴³.

⁴⁰ List J. Karola Chodkiewicza do króla, Dan pod Rygą, d. 30 września 1605 r., In: Wypisy do ćwiczeń z historii wojskowej, Vol. 1/1, J. Wimmer (ed.), Wojskowa Akademia Polityczna im. F. Dzierżyńskiego, Warszawa, 1961: 101 (in Polish).

⁴¹ M. Balcerek, Ordre de Bataille armii walczących pod Kirchholmem dnia 27 września 1605 r., In: Do szarży marsz, marsz... Studia z dziejów kawalerii, Vol. 4, A. Smoliński (ed.), Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika, Toruń, 2013: 27–62 (in Polish).

⁴² M. Balcerek, Vom nationalen Narrativ vergessen – Der Beitrag des Herzogtums Kurland und Semgallen sowie des Piltener Kreises während der Schlacht bei Kirchholm im Jahre 1605, Militärgeschichtliche Zeitschrift, Vol. 72, no. 2, 2013: 243–266. <https://doi.org/10.1515/mgzs-2013-0010> (in German).

⁴³ M. Balcerek, Ustawienie walczących stron w stosunku do rzeki Dźwiny w bitwie pod Kirchholmem w 1605 roku, In: Stan badań nad wielokulturowym dziedzictwem dawnej Rzeczypospolitej, Vol. 7, K. Łopatecki and W. Walczak (eds.), Instytut Badań nad Dziedzictwem Kulturowym Europy, Białystok, 2017: 122-123 (in Polish).

Unfortunately, no comprehensive archaeological research has ever been carried out on the battlefield. Therefore, the hitherto historiography of the battle has not devoted any space to this issue. There are many indications that exciting artifacts can be found underground and underwater. In 2010, researchers from the National Museum of Latvian History in Riga, the Institute of Archeology of the University of Warsaw, the Polish Army Museum, and the Warsaw Diver Club planned to conduct surface prospection and underwater reconnaissance in the following year. However, for procedural reasons, the research was not carried out⁴⁴.

We have today only accidental finds and rescue research results of the later Swedish rampart. Among them are four marks of Charles IX from 1604 and a spearhead from the 17th century. The burials of Swedish soldiers should be located near the rampart. Polish-Lithuanian graves should be found in the flooded area (in the 20th century an artificial water reservoir was built there) next to Reznies, located south-east of Salaspils⁴⁵.

The results of the planned research could have told us a lot about the location of the bloodiest fights, the number of deaths, and the equipment of the fighting sides, confirming or refuting the previous findings.

5 The march to Kircholm, the crossing of Prince Frederick through the Daugava river, and the positioning of both warring sides towards the Daugava river

Hetman Chodkiewicz, during the march from Dorpat towards Riga, tried to separate the corps of Lennartsson and Charles IX. Both Swedish commanders, however, decided not to launch the battle before joining all their forces⁴⁶. In this situation, on September 16/26, Chodkiewicz stood near the village of Ikšķile on the Daugava River, about 30 km east of Riga. Then the hetman headed west to Kircholm, from where it is only 20 km to the besieged city.

On the night of September 16/26 to September 17/27, Charles IX, with almost all his army, went to Kircholm, wanting to surprise the enemy. The king left only 200 soldiers under the besieged Riga, far from being sufficient to defend the camps. The hazardous plan of Charles IX can explain why so few forces were left under the city. It assumed the army marching out at night, in secret from the citizens of Riga, a quick defeat of Chodkiewicz's forces, and a return to the besieged city. It explains perfectly the king's later impatience, the effects of which led to his spectacular defeat⁴⁷.

The issue of the Swedish army's route has not been given sufficient attention before by researchers. After conducting a cursory analysis, Henryk Wisner came to the controversial conclusion that the army of Charles IX had pinned his opponent to the river⁴⁸. It was only Mariusz Balcerek who did a thorough research in this regard, who drew attention to the critical issue of the place and circumstances of the crossing of prince Frederick's troops across the Daugava River. He showed that the Kurlanders had planned a crossing west of Kircholm, but the Swedish army's march along the river prevented it. In such a situation, Prince

⁴⁴ K. Kowalski, *Archeolodzy na polu bitwy husarii, Rzeczpospolita*, 2010, no. 252: A22 (in Polish); M. Balcerek, *Ustawienie walczących stron w stosunku do rzeki Dźwiny w bitwie pod Kircholmem w 1605 roku*, In: *Stan badań nad wielokulturowym dziedzictwem dawnej Rzeczypospolitej*, Vol. 7, K. Łopatecki and W. Walczak (eds.), Instytut Badań nad Dziedzictwem Kulturowym Europy, Białystok, 2017: 126 (in Polish).

⁴⁵ J. Ciglis, „Szwedzki Szaniec” w Salaspils a Bitwa Pod Kircholmem, *Z Otchłani Wieków*, Vol. 62, no. 1–4, 2007: 53–55 (in Polish); M. Balcerek, *Ustawienie walczących stron w stosunku do rzeki Dźwiny w bitwie pod Kircholmem w 1605 roku*, In: *Stan badań nad wielokulturowym dziedzictwem dawnej Rzeczypospolitej*, Vol. 7, K. Łopatecki and W. Walczak (eds.), Instytut Badań nad Dziedzictwem Kulturowym Europy, Białystok, 2017: 126 (in Polish).

⁴⁶ *Nowiny z Inflant*, In: *Wypisy do ćwiczeń z historii wojskowej*, Vol. 1/1, J. Wimmer (ed.), Wojskowa Akademia Polityczna im. F. Dzierżyńskiego, Warszawa, 1961: 96–97 (in Polish).

⁴⁷ M. Balcerek, *Ordre de Bataille armii walczących pod Kircholmem dnia 27 września 1605 r.*, In: *Do szarży marsz, marsz ... Studia z dziejów kawalerii*, Vol. 4, A. Smoliński (ed.), Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika, Toruń, 2013: 34–35 (in Polish).

⁴⁸ H. Wisner, *Kircholm 1605*, 3rd ed., Bellona, Warszawa, 2011: 116–117, 124–127 (in Polish).

Frederick had to cross the Daugava River east of the village, between two hostile armies standing in line by the river. It is hard to prove the thesis about the Swedish army's march along the Dvina and its subsequent positioning on its shores⁴⁹.

This positioning by the river was a topic of discussion among researchers. Most of them tended to place two armies flanking the river. The exceptions are Swedish publications from before World War II and the works of Henryk Wisner, who saw the Dźwina at the rear of Chodkiewicz's army⁵⁰. The supporters of both hypotheses had arguments to support them⁵¹.

Mariusz Balcerek presented the last analysis of this issue. He was the first to notice the meandering course of the Dvina near Kirchholm. Thanks to this, depending on the point of observation, the viewer could see the river at the back of the Chodkiewicz army or on its flank. The same researcher recreated and analyzed the march of Charles IX's troops from Riga to Kirchholm, reaching conclusions different from those of Henryk Wisner. Mariusz Balcerek stated the presence of the Swedes on the Dźwina river, and more precisely, around the church in Kircholma. It seems to be a matter of course, but when we look at many battle plans, we will notice that Charles's army is positioned on them at some distance from the river. According to Balcerek, the presence of both armies on the Daugava River refutes the hypothesis that Charles may have pinned Chodkiewicz against it. The former could not have both the river behind his back and the enemy in front of him. The meandering river indeed made it possible, but more to the east of Kirchholm.

In summary, Charles IX leaned the right-wing of his army against the river, and the front turned east, south-east. Chodkiewicz's army also lined up on the Daugava River, initially leaning against the camp located above it, with its front-facing west, north-west. Later developments caused half of the Swedish army to move away from the river, while the Polish army, conversely, approached it⁵².

6 Ordre de bataille of both warring sides

The combat form of both armies in literature was less controversial than in the last case. The Ordre de Bataille of Charles IX's army was known and widely accepted from the beginning of battle research. The Swedish king lined up his army in 4 lines. Infantry stood in the first and third, cavalry in the second and fourth. The first line consisted of 7, the second and third of 6, and the fourth of 5 units (infantry quadrangles and cavalry squadrons). 9 out of 11 guns stood in front of the first line, only 2 in front of the second (see Figure 1).

⁴⁹ M. Balcerek, *Księstwo Kurlandii i Semigalii w wojnie Rzeczypospolitej ze Szwecją w latach 1600-1629*, Wydawnictwo Poznańskie, Poznań, 2012: 111-115 (in Polish); M. Balcerek, *Ustawienie walczących stron w stosunku do rzeki Dźwiny w bitwie pod Kirchholmem w 1605 roku*, In: *Stan badań nad wielokulturowym dziedzictwem dawnej Rzeczypospolitej*, Vol. 7, K. Łopatecki and W. Walczak (eds.), Instytut Badań nad Dziedzictwem Kulturowym Europy, Białystok, 2017: 136-138 (in Polish); M. Balcerek, *Vom nationalen Narrativ vergessen – Der Beitrag des Herzogtums Kurland und Semgallen sowie des Piltener Kreises während der Schlacht bei Kirchholm im Jahre 1605*, *Militaergeschichtliche Zeitschrift*, Vol. 72, no. 2, 2013: 243–266. <https://doi.org/10.1515/mgzs-2013-0010> (in German).

⁵⁰ G. Tranér, *Kungl. Carl IX's krig i Livland år 1602–1605*, Akad. bokh., Sztokholm, 1876: 39 (in Swedish); G. Petri, *Kungl. Första livgrenadjärregementets historia*, Vol. 1, Norstedt, Stockholm, 1926: 340-351, ill. 6 (in Swedish); E. Bensow, *Kungl. Skaraborgs regementes historia*, Vol. 1, Wald. Zacharissons Boktryckeri A.-B., Göteborg, 1931: ill. 11 (in Swedish); H. Wisner, *Polska Sztuka Wojenna Pierwszej Połowy XVII Wieku. Wątpliwości i Hipotezy*, *Kwartalnik Historyczny*, Vol. 84, no. 2, 1977: 408 (in Polish); H. Wisner, *Bitwa Kirchholmska – Pytania i Wątpliwości*, In: *Wojny Północne w XVI–XVIII Wieku. W Czterechsetlecie Bitwy Pod Kirchholmem*, B. Dybaś (ed.), Towarzystwo Naukowe w Toruniu, Toruń, 2007: 15–22 (in Polish); H. Wisner, *Kirchholm 1605*, 3rd ed., Bellona, Warszawa, 2011: 124-127 (in Polish).

⁵¹ M. Balcerek, *Ustawienie walczących stron w stosunku do rzeki Dźwiny w bitwie pod Kirchholmem w 1605 roku*, In: *Stan badań nad wielokulturowym dziedzictwem dawnej Rzeczypospolitej*, Vol. 7, K. Łopatecki and W. Walczak (eds.), Instytut Badań nad Dziedzictwem Kulturowym Europy, Białystok, 2017: 115-122 (in Polish).

⁵² M. Balcerek, *Ustawienie walczących stron w stosunku do rzeki Dźwiny w bitwie pod Kirchholmem w 1605 roku*, In: *Stan badań nad wielokulturowym dziedzictwem dawnej Rzeczypospolitej*, Vol. 7, K. Łopatecki and W. Walczak (eds.), Instytut Badań nad Dziedzictwem Kulturowym Europy, Białystok, 2017: 122-143 (in Polish).

Figure 1: The original settings of both armies.

Source: Own study based on a sketch by Józef Naronowicz-Naroński.

It was different from Chodkiewicz's army, which description changed from the 19th to the 21st century. Until modern times, researchers, following the research of Ferdynand Kudelka⁵³ and Antoni Hniłko⁵⁴, wrote and presented this army on maps in a deep and tight formation. Such a vision was not changed even by a relatively recent discovery by Jerzy Teodorczyk and Zdzisław Żygulski Jr. of the painting depicting the battle by Dutch painter Peter Snayers (Witold Rawski is a positive exception)⁵⁵. It was not changed by the publication and critical discussion of the battle formation from the Eryk Dahlberg album entitled: *Ordres de Bataille 1600-1679*⁵⁶, which Mariusz Balcerek did in 2009⁵⁷.

Unlike the earlier setups, which were relatively tight and deep, the battle array we see in Dahlberg's album is broad, linear, and shallow. The setting of the army of hetman Chodkiewicz, at first glance, resembles the ranks of the 18th century but is a century older than them. There were cavalry squadrons formed into columns on both flanks to protect the linear *Ordre de Bataille* from flanking or to launch such an attack more easily. Interestingly, it is very similar to the one presented by Peter Snayers. In both cases, we have three lines, and in the first, there is cavalry mixed with infantry. It gave a lot of firepower

⁵³ F. Kudelka, *Bitwa pod Kirchholmem*, Ateneum, Vol. 3, 1883: 478–512 (in Polish); F. Kudelka, *Bitwa pod Kirchholmem*, O. Laskowski (ed.), *Główna Księg. Wojskowa*, Warszawa, 1921 (in Polish).

⁵⁴ A. Hniłko, *Plan bitwy pod Kirchholmem Józefa Naronowicza-Narońskiego z r. 1659*, *Przegląd Historyczno-Wojskowy*, Vol. 7, no. 1, 1934: 126–133 (in Polish).

⁵⁵ P. Snayers, *Bitwa Pod Kirchholmem, 1605 r.*, In: Wikipedia, wolna encyklopedia, https://pl.wikipedia.org/wiki/Plik:Kirholm_1605_I.JPG (in Polish); J. Teodorczyk, Z. Żygulski jun., *Dwugłos o Bitwie Pod Kirchholmem. Historia i Ikonografia*, *Rocznik Historii Sztuki*, Vol. 24, 1999: 97–130 (in Polish); J. Teodorczyk, *Tajemnice zwycięstwa, czyli bitwa pod Kirchholmem w ikonografii z XVIII w.*, *Muzealnictwo Wojskowe*, Vol. 8, 2005: 373–402 (in Polish); W. Rawski, *Kirchholm 1605. Refleksje w 400-lecie bitwy*, *Przegląd Historyczno-Wojskowy*, Vol. 6, no. 3, 2005: 145–172 (in Polish).

⁵⁶ Riksarkivet (Stockholm), SE/KrA/0438: [Ordres de bataille], fol. 44 (in Swedish).

⁵⁷ M. Balcerek, *Liczebność, skład i szyk wojska hetmana Jana Karola Chodkiewicz w bitwie pod Kirchholmem na „Ordre de bataille” Erika Dahlberga*, *Zapiski Historyczne. Poświęcone Historii Pomorza i Krajów Bałtyckich*, Vol. 74, no. 3, 2009: 77–93 (in Polish).

Figure 2: Setting up both armies after Chodkiewicz stopped the mock escape.

Source: Own study based on *Ordre de Bataille* by Erik Dahlberg.

and breakthroughs on the front line, a brilliant and pioneering idea, ahead of a similar solution used by Gustav Adolf⁵⁸.

Mariusz Balcerek, who researched this issue, proposed to treat the narrow, tight, and deep array as primary, aimed at persuading the opponent to offensive actions⁵⁹. Erasmus Rzetowski and Paweł Piasecki wrote about such a trick by Chodkiewicz in the first half of the 17th century⁶⁰. The author of the work, *Slaktarebenck*, stated that “Mr. Chodkiewicz stood as if he wanted to run away⁶¹.” Rzetowski added that after the opponent moved, the hetman ordered the formation to be extended. The battle array had to be stretched anyway to be as wide as the enemy’s front⁶². Initially, on the left wing of the hetman’s army, a camp did not take part in the fight, and without the deployment maneuver, it would be attacked by the enemy’s right wing (see Figure 2).

When discussing the issue of formation, it is worth paying attention to the evolution of the views of researchers on the positioning and the resulting role of Chodkiewicz’s infantry in battle. From the nineteenth to the twenty-first century, the formation shifted from the back to fighting front-to-side with the great hussars.

⁵⁸ M. Balcerek, *Liczebność, skład i szyk wojska hetmana Jana Karola Chodkiewicza w bitwie pod Kirchholmem* na „*Ordre de bataille*” Erika Dahlberga, *Zapiski Historyczne. Poświęcone Historii Pomorza i Krajów Bałtyckich*, Vol. 74, no. 3, 2009: 90 (in Polish).

⁵⁹ M. Balcerek, *Liczebność, skład i szyk wojska hetmana Jana Karola Chodkiewicza w bitwie pod Kirchholmem* na „*Ordre de bataille*” Erika Dahlberga, *Zapiski Historyczne. Poświęcone Historii Pomorza i Krajów Bałtyckich*, Vol. 74, no. 3, 2009: 88 (in Polish).

⁶⁰ E. Rzetowski, *Sława losu szczęśliwego w Inflanciech przez J. K. Chodkiewicza*, s. n., Wilno, 1605 (in Polish); P. Piasecki, *Chronika Gestorum in Europa singulorum recentiorum, Ad Annum Christi*, In *Officina Typographica Francisci Caesarii*, Cracoviae, 1645: 270 (in Latin).

⁶¹ *Slaktarebenck* czyli *Krwawe jatki księcia Karola Sudermańskiego*, W. Krawczuk (ed.), Towarzystwo Wydawnicze “*Historia Jagellonica*”, Kraków 2017: 74 (in Polish).

⁶² E. Rzetowski, *Sława losu szczęśliwego w Inflanciech przez J. K. Chodkiewicza*, s. n., Wilno, 1605 (in Polish).

On the painting of Snayers, discovered by Jerzy Teodorczyk and Zdzisław Żygulski Jr., we see infantry in three battalions firing at the enemy; two small ones in the center and on the right-wing and one large on the left-wing. It was a big novelty, as only two appeared on the sketches by Józef Naronowicz-Naroński, on which the views on the formation were commonly based⁶³. On the equally well-known copperplate by Antonio Tempesta, we can find three, but it was not considered very schematic⁶⁴. The same can be said about the painting by Snayers because Naronowicz-Naroński's *Ordre de Bataille* still functioned after its discovery and acceptance into the discourse. In Dahlberg's drawing, we see as many as four infantry battalions, which can be explained by the subsequent merger of two smaller ones and the formation of three large ones.

Battle

The army of Charles IX after moving to Kirchholm occupied a hill that fell steeply south and east. Hetman Chodkiewicz set up a camp and situated his forces on opposite hills. A slight depression of the terrain stretched between the opponents. Both commanders assumed good positions and waited for the situation to unfold. The hetman showed the initiative and ordered his troops to make a mock retreat. The impetuous King Charles, who did not want an easy victory to slip out of his hand, directed half of his army, that is, the first and second lines, to the lowering of the ground. Then the forces of the Republic attacked the enemy from the hill. It was the beginning of the battle that can be found in every source. There is no controversy connected with this point.

The battle that began in this way ended with an excellent success of the Commonwealth. The secret of the victory of Chodkiewicz's army intrigued us from the very beginning. Many concepts were created explaining the success of the Lithuanian hetman. The dominant vision is a short and relatively easy battle for the winners, during which the hussars ran over the enemy. During the fighting, the Swedes were flanked, then surrounded, and mostly killed⁶⁵ (see Figure 3).

In publications from recent years, this picture has changed somewhat. The discovery of the painting by Peter Snayers prompted researchers to change their views on the role of infantry and showed that the battle had a more challenging course. Researchers Jerzy Teodorczyk and Zdzisław Żygulski Jr., followed by Witold Rawski, noticed the hetman's use of a gap in the center of the opponent's first line, which was a great discovery as it refuted the thesis about double-flanking as the only maneuver. With this maneuver, Chodkiewicz divided and separated parts of the enemy army to defeat it more easily.

A novelty that Jerzy Teodorczyk and Zdzisław Żygulski Jr. noticed was that infantry also contributed to this plan. It did not lag behind but together with the cavalry participated in implementing the brilliant idea of the hetman. The participation of Chodkiewicz's infantry in the fight against the enemy is confirmed by the anonymous author of the work *Equitis Lituani*⁶⁶.

It is worth noting that, apart from the hussars, there were also other types of cavalry in Chodkiewicz's army. There were petihors companies armored with copies who, on a par with the hussars, charged on the opponent's footmen and cavalry. Courland cuirassiers fought with the Swedish cavalry in the center, as the author of *Carolomachia* wrote and as can be seen in the painting by Snayers. Other cavalry formations also

⁶³ Biblioteka Uniwersytetu Warszawskiego (Warsaw), Rps BUW nr 1954.: Naronowicz-Naroński J., *Optima Lub Perspectiva* ..., fol. 144 (in Polish).

⁶⁴ Biblioteka Narodowa (Warsaw), G.11146: Wieszczycki T., [Kopia sporządzona przez polskiego artystę T. Wieszczyckiego w technice akwaforty w XIX w. miedziorytu ukazującego bitwę pod Kirchholmem autorstwa Antonio Tempesta na podstawie rysunku Giacomina (Jakuba) Lauro w 1606 r.].

⁶⁵ F. Kudelka, *Bitwa pod Kirchholmem*, O. Laskowski (ed.), *Główna Księg. Wojskowa*, Warszawa, 1921: 59-60 (in Polish); T. Bohun, *Kirchholm 1605. Gambit hetmański*, *Mówią Wieki*, no. 10, 2005: 13-14 (in Polish); H. Wisner, *Kirchholm 1605*, 3rd ed., Bellona, Warszawa, 2011: 124-125 (in Polish).

⁶⁶ *Equitis Lituani De Bello Livonico per Decennium gesto*, Apud Ioannem Karcantum, Vilnae, 1610: 40 (in Latin); D. Antanavičius, *Lietuvio bajoro Dešimtmetis livonijos karas (1610.) Ir jo autorius (autorystes atribucijos bandymas)*, LII leidykla, Vilnius, 2003: 7, 14-17 (in Lithuanian).

Figure 3: The first phase of the battle.
Source: Own study based on *Ordre de Bataille* by Erik Dahlberg.

took part in the battle, contributing to the victory. The light ones were perfect for flanking, chasing, and cutting out a crashed enemy on a par with the hussars. The author of *Carolomachia*, describing the activities at the Daugava River itself, wrote about the attack from the wing of Tomasz Dąbrowa’s troops, which is also confirmed in the painting by Snayers⁶⁷.

Polish researcher of the history of hussars, Radosław Sikora, drew attention to the participation of artillery in breaking the squares of the Swedish infantry. Together with the infantry, it could weaken the compactness of the battalions, making the cavalry’s task easier. Radosław Sikora also noticed in the painting of Snayers how the cavalry armed with copies attacks the battalion. Thanks to the broader front, it could charge simultaneously on the front and sides of the quadrilateral, which, according to this researcher, may have contributed to the success of the cavalry⁶⁸.

However, it did not end with one charge. The opponent put up a tough resistance, as all sources mention. The author of *Carolomachia*, describing the fight of the hussar company of Chodkiewicz himself, wrote poetically about repeated attacks on the same place⁶⁹:

Pontus vt alternis incurrit fluctibus actam Et retro meat, & pullat reuolutus eandem	Another wave attacked with turbulent movements It walked backward and hit the same spot again
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Unfortunately, we do not know how many charges were there. The above quotation shows a similarity to the situation from the Battle of Kluszyn in 1610, where one attack on the arena was not enough⁷⁰. The author

67 L. Boierus, *Carolomachia, qua Felix Victoria, Ope Dvina...*, Typis Academicis S.I. Thomas Leuicki, Vilniae, 1606: [52] (in Latin).
68 R. Sikora, *Niezwykłe Bitwy i Szarże Husarii*, Instytut Wydawniczy ERICA, Warszawa, 2011: 32-34 (in Polish).
69 L. Boierus, *Carolomachia, qua Felix Victoria, Ope Dvina...*, Typis Academicis S.I. Thomas Leuicki, Vilniae, 1606: [50] (in Latin).
70 R. Sikora, *Niezwykłe Bitwy i Szarże Husarii*, Instytut Wydawniczy ERICA, Warszawa, 2011: 44 (in Polish).

of Carolomachia points out that “per horae vix partem quartam, contorum imperuis cum seps vi penetrata fuit” (for only a quarter of an hour, the fence inaccessible with pikes was penetrated)⁷¹. It means that it took only a quarter of an hour to break one quadrilateral by the hetman’s formally 300-horsepower company, considered to be elite. Taking into account many factors: the division of the Swedish army into two throws, the numerical and qualitative differentiation of the Polish-Lithuanian cavalry units, the loss of copies by the cavalry after the first charge, and general fatigue during the fights, it should be assumed that the process of liquidating all battalions lasted 2-3 hours.

We do not know thoroughly what the smashing process of pikemen-musketeer squares looked like. The 6 m long Hussar copy played an essential role in it as it surpassed the pikes in this respect. Before the lance breaks, taking advantage of the weight and speed of the horse and rider, it should knock back the hit pikemen and many behind him. In this way, the charging cavalry was able to break up the infantry formation without suffering significant losses from the pikes which were probably instinctively raised to the vertical position. However, this is not the end. Based on the painting by Peter Snayers we see that three rows of musketeers surround the pikemen. Thus, the gunners standing in the hussars’ path took the strike and were thrown back, knocking down the pikemen behind them before the pikes could harm the horses and riders.

We know from written sources about the escape of the Swedish cavalry and the fight to the end of the infantry, some of which barricaded themselves in the Kircholm church. The Poles and Hungarians did so, headed by Swedish soldiers, led by their commander, Pävfel Stilicken. He, trying to save himself, pretended to be a Pole but to no avail⁷².

The breakdown of the first flush is well known. It is more difficult to talk about cracking down on the rest of Charles IX’s army. Henryk Wisner wrote about the escape of the first line, which must have had a terrible effect on the rest of the Swedish army⁷³. It is seen in the Snayers painting where the retreat of the leading troops confused those in the rear. From the troops standing on the right-wing by the river, footmen and cavalymen flee⁷⁴. For the victorious men of hetman Chodkiewicz, driving the Swedes ahead of them, it was undoubtedly easier to get close to the opponent’s second throw and smash it.

Despite the tipping of the scales of victory to the side of the Commonwealth the fight was not short. Chodkiewicz himself wrote that “for quite a long time, with a great advantage on both sides, Mars had dubious victory⁷⁵.” There is also time of the pogrom of infantry and the pursuit of refugees. Piasecki wrote about three hours of fighting⁷⁶. Wojciech Wijuk Kojałowicz, in his *Nomenclator* created in the mid-17th century also wrote about a 3-hour battle followed by a chase⁷⁷. The same information was repeated after him in the 19th century by Adam Naruszewicz⁷⁸.

After three hours of fighting, hetman Chodkiewicz’s three times weaker forces completely smashed the enemy with an advantage in infantry and artillery, i.e., theoretically more modern. Where is the secret of such a spectacular success? The answer to such a question cannot be short and straightforward. There were many reasons. First of all, the advantage of Chodkiewicz in excellent cavalry should be mentioned. In addition, the hetman exploited his infantry to the maximum putting them in the first line where they gained a firing

71 L. Boierus, *Carolomachia, qua Felix Victoria, Ope Dvina...*, Typis Academicis S.I. Thomas Leuicki, Vilniae, 1606: [50] (in Latin).

72 L. Boierus, *Carolomachia, qua Felix Victoria, Ope Dvina...*, Typis Academicis S.I. Thomas Leuicki, Vilniae, 1606: [51-52] (in Latin).

73 H. Wisner, *Kircholm 1605*, 3rd ed., Bellona, Warszawa, 2011: 130 (in Polish).

74 P. Snayers, *Bitwa Pod Kircholmem, 1605 r.*, In: Wikipedia, wolna encyklopedia, https://pl.wikipedia.org/wiki/Plik:Kirholm_1605_I.JPG (in Polish).

75 List J. Karola Chodkiewicza do króla, Dan pod Rygą, d. 30 września 1605 r., In: *Wypisy do ćwiczeń z historii wojskowej*, Vol. 1/1, J. Wimmer (ed.), Wojskowa Akademia Polityczna im. F. Dzierżyńskiego, Warszawa, 1961: 101 (in Polish).

76 P. Piasecki, *Chronika Gestorum in Europa singulorum recentiorum, Ad Annum Christi*, In *Officina Typographica Francisci Caesarij, Cracoviae*, 1645: 271 (in Latin).

77 W. W. Kojałowicz, *Herbarz szlachty Wielkiego Księstwa Litewskiego zwany Nomenclator*, W. L. Anczyc i Sp., Kraków, 1905: 84 (in Polish).

78 A. Naruszewicz, *Historia Jana Karola Chodkiewicza, Woiewody Wilenskiego, Hetmana Wielkiego W.X.L.*, Vol. 1, w Drukarni Nadwornej J. K. Mci, Warszawa, 1871: 62 (in Polish).

advantage over the pikemen-musketeer squares. Thanks to this he combined the strength of the breaking power of the hussars' charge, which had laps longer than the opponent's pikes, with the fire of shooters. The Swedes struck by fire could not cope with the hussars who, together with the rest of the cavalry, broke them and cut them down. Such a combination was a brilliant and pioneering idea. The son of Charles IX, Gustavus II Adolphus, could have benefited from adding musketeers to his cavalry.

It was also crucial that Charles divided his forces in half. Thanks to this Chodkiewicz had an easier task as he could beat the opponent in parts. Not only did he manage to divide the enemy in half. Later, with skillful maneuvers, he additionally managed to dismantle the first throw of the Swedish army. The Hetman had previously laid the groundwork for this by extending the formation of his army which became more comprehensive than the Swedish. The vast and thin *Ordre de Bataille* allowed for simultaneous flanking and penetration into the center of the enemy formation which could not be achieved with a narrow and deep arrangement. Such a bold action was allowed by the advantage of a better and faster cavalry. Thanks to it, the hetman could quickly patch holes in the line and attack.

Finally, it should be emphasized that the first throw of the Swedish army left a good position and stood in a lower ground, where it was more difficult for it to fight off the attack of heavy cavalry charging from the hill. In addition, such a maneuver exposed their wings, which was visible on the river, from which the Swedes thus departed. The rest of Charles IX's forces stood on the hill idly watching the pogrom of their colleagues. The king did not want to leave his position and signed a death warrant for the whole army, beaten in parts.

Losses

Chodkiewicz's army suffered symbolic losses while destroying the enemy which may be surprising. The author of *Equitis Litvani* wrote about 70 killed, about 200 wounded, and many injured horses⁷⁹. It was probably on this basis that Wojciech Wijuk Kojałowicz reported 79 killed and 200 wounded⁸⁰. Hetman wrote about a hundred killed, many wounded, and the loss of a large number of horses⁸¹. The author of *Carolomachia* and Erasmus Rzetowski mentioned Chodkiewicz himself who was killed under the Hussar banner. The latter also mentioned the wounded and added information about 150 killed horses, i.e., more than half of the entire unit⁸². Prince Frederick only mentioned four killed Courland nobles⁸³. Unfortunately, there is no exact statement regarding the entire army of Chodkiewicz. If we assume for the hetman the losses of the order of 100 killed soldiers, they will amount to only 3% of the initial state. If we add about 200 wounded we get a total of 9% which contrasts strongly with the opponent's losses.

The losses in the army of Charles IX reported in Polish literature are very rounded and, therefore, do not inspire confidence. It is strange because the Livonian sources contain relatively accurate data. The chronicler of Riga, Thomas Hiärn, wrote about 8,609 fallen soldiers (including 8,000 footmen and 609 cavalymen)⁸⁴, the doctor of Riga, Basilius Plinius, about 8,903⁸⁵, and Johann Christoph Brotze, operating in Riga at the turn of the 18th and 19th centuries, about 8,983⁸⁶.

⁷⁹ *Equitis Litvani De Bello Livonico per Decennium gesto*, Apud Ioannem Karcantum, Vilnae, 1610: 42 (in Latin).

⁸⁰ W. W. Kojałowicz, *Herbarz szlachty Wielkiego Księstwa Litewskiego zwany Nomenclator*, W. L. Anczyc i Sp., Kraków, 1905: 85 (in Polish).

⁸¹ List J. Karola Chodkiewicza do króla, Dan pod Rygą, d. 30 września 1605 r., In: *Wypisy do ćwiczeń z historii wojskowej*, Vol. 1/1, J. Wimmer (ed.), Wojskowa Akademia Polityczna im. F. Dzierżyńskiego, Warszawa, 1961: 101 (in Polish).

⁸² E. Rzetowski, *Sława losu szczęśliwego w Inflanciech przez J. K. Chodkiewicza*, s. n., Wilno, 1605 (in Polish); L. Boierus, *Carolomachia, qua Felix Victoria, Ope Dvina...*, Typis Academicis S.I. Thomas Leuicki, Vilniae, 1606: [50-51] (in Latin).

⁸³ Schreiben Herzogs Friedrich von Kurland über die Schlacht bei Kirchholm am 17. Sept. 1605., J. Bohlen (ed.), *Mittheilungen Aus dem Gebiete der Geschichte Liv-, Est- und Kurland*, Vol. 9, 1858: 117 (in German).

⁸⁴ T. Hiärn, *Ehst-, Lyf-, und Lettländischer Geschichte*, In: *Monumenta Livoniae Antiquae*, Vol. 1, C. E. Napiersky (ed.), Verlag von Eduard Frantzen's Buchhandlung, Riga, Dorpat und Leipzig, 1835: 400 (in German).

⁸⁵ B. Plinius, *Victoria, quam iuvante DEO Optimo Maximo*, s. n., Riga, 1605 (in Latin).

⁸⁶ F. Nyenstädt, *Livländische Chronik*, In: *Monumenta Livoniae Antiquae*, Vol. 2, G. Tielemann (ed.), Verlag von Eduard Frantzen's Buchhandlung, Riga und Leipzig, 1839: 120 (in German).

Additionally, we have a list of bodies placed in mass graves in Gotthard Viecken's manuscript entitled: *Kurtze Beschreibung*, was sich gedenckwürdiges zu Riga begeben und zugetragen von 1521 bis 1626. It shows that 7,919 bodies were buried in 20 graves⁸⁷; Riga's mayor Franz Nyenstädt wrote about 15 graves⁸⁸. According to the author of *Slaktarebenck*, as many as 8,936 bodies were counted on the battlefield and "over a hundred were still left in the forest, on the road, and in the Daugava River, except for those who died later, shot and wounded"⁸⁹.

Fascinating due to its provenance and detail is the list of losses of the Swedish army from itself. Unfortunately in this list we only find data for some units. For example, there is no information about mercenary units, including Polish ones, which either surrendered or were killed. If we count the post-battle states, it turns out that the Swedish army had only 2,395 men after the fight (1,410 infantry and 985 cavalries), which gives 8,341 losses⁹⁰.

Suppose we subtract from the number from the above list the 400 prisoners mentioned by Rzetowski⁹¹ (the hetman and the author of *Nowin z Inflant* wrote about several hundred prisoners)⁹². In that case, we will obtain a value corresponding to the one from Viecken's list. Bodies found in nearby forests, on roads, and those that came to the surface of the Daugava were probably buried and included in the *Kurtze Beschreibung* list. Thus, data from these sources can be treated with a high degree of probability. Assuming, 8341 (all losses) and 7,919 (fallen) we will obtain 78% and 74% of losses respectively, which is the scale of the pogrom that Chodkiewicz's army made on the enemy. And this for the price of 3% of their own dead.

The reason for such high losses remains a mystery. Is it the result of a pogrom during a chase? The fact that the RP side had faster horses certainly mattered. There was also: fierce resistance from the losers and the stubbornness of the winners. There are many indications that the simple infantry, which did not give up before being crushed, was cut down by the conquerors enraged by its attitude. It probably happened in the vicinity of the Kirchholm church where mass graves are to be located. Officers distinguished by wealth were probably taken prisoner for a future ransom.

7 The importance of victory

Henryk Wisner presented the reception of the victory at Kirchholm in literature and art⁹³. It was, without a doubt, an inspiration for posterity and comfort in difficult times. We should ask ourselves about its usefulness. After the battle Sigismund III wrote to Jan Karol Chodkiewicz asking him to persuade the army to wait for payment. In addition, the ruler wanted to use the success of capturing a castle in Estonia⁹⁴. Unfortunately, the resources did not match the expectations. It was far from the nearest enemy point of resistance, and without the salary for the service to date, there could be no question of any offensive actions⁹⁵. Therefore, any claims of a wasted success should be considered as based on weak arguments since, knowing the realities, it was challenging to require further action from the winners.

Henryk Wisner is right when he states that "the Kirchholm victory saved Riga for the Commonwealth, decided the fate of the campaign of 1605"⁹⁶. The battle of Kirchholm should be viewed in the context of the

⁸⁷ Latvijas Valsts Vēstures Arhīvs (Riga), 4038/2/90: Viecken G., Kurtze Beschreibung, was sich gedenckwürdiges zu Riga begeben und zugetragen von 1521 bis 1626.: fols. 105v-106 (in German).

⁸⁸ F. Nyenstädt, Livländische Chronik, In: Monumenta Livoniae Antiquae, Vol. 2, G. Tieleman (ed.), Verlag von Eduard Frantzen's Buchhandlung, Riga und Leipzig, 1839: 120 (in German).

⁸⁹ Slaktarebenck czyli Krwawe jatki księcia Karola Sudermańskiego, W. Krawczuk (ed.), Towarzystwo Wydawnicze "Historia Iagellonica", Kraków 2017: 74 (in Polish).

⁹⁰ Riksarkivet (Stockholm), SE/KrA/0455/G I 1605/1: Styrkeuppgifter från slaget vid Kirkholm (in Swedish).

⁹¹ R. Rzetowski, Sława losu szczęśliwego w Inflanciech przez J. K. Chodkiewicza, s. n., Wilno, 1605 (in Polish).

⁹² List J. Karola Chodkiewicza do króla, Dan pod Rygą, d. 30 września 1605 r., In: Wypisy do ćwiczeń z historii wojskowej, Vol. 1/1, J. Wimmer (ed.), Wojskowa Akademia Polityczna im. F. Dzierżyńskiego, Warszawa, 1961: 101 (in Polish); Nowiny z Inflant, In: Wypisy do ćwiczeń z historii wojskowej, Vol. 1/1, J. Wimmer (ed.), Wojskowa Akademia Polityczna im. F. Dzierżyńskiego, Warszawa, 1961: 100 (in Polish).

⁹³ H. Wisner, Kirchholm 1605, 3rd ed., Bellona, Warszawa, 2011: 136-147 (in Polish).

⁹⁴ Biblioteka XX. Czartoryskich w Krakowie (Cracow), Teki Naruszewicza, Vol. 100: Sigismund III to John Charles Chodkiewicz, 5.10.1605, Cracow: 336 (in Polish).

⁹⁵ F. Kudelka, Bitwa pod Kirchholmem, O. Laskowski (ed.), Główna Księg. Wojskowa, Warszawa, 1921: 49-50 (in Polish).

⁹⁶ H. Wisner, Kirchholm 1605, 3rd ed., Bellona, Warszawa, 2011: 148 (in Polish).

threat to Riga and Livonia. Then the victory achieved we will perceive as a fully consumed success that saved the Polish-Lithuanian rule over the Daugava River.

At this point, it is worth considering whether the success at Kirchholm did not, paradoxically, hurt the Commonwealth. That is what Geoffrey Parker thinks⁹⁷ and it is hard to disagree with him. The Swedes have learned far-reaching conclusions from this bloody lesson. As a result, more than two decades after the battle, they achieved a significant position on the continent. At the same time, on the other side of the Baltic Sea, the Battle of the Daugava River, along with other victories, created a misconception about the opponents' weaknesses combined with an exaggerated belief in own strength. Already in the years 1621-1622, Sigismund III, accustomed to smashing the enemy with relatively few forces, was unpleasantly surprised by the lack of success. The Polish-Lithuanian nobility used to hearing about victories without passing taxes, expected this practice. This lack of understanding of the situation later translated into a reluctance to reform, and this, in a very simplified manner, destroyed the Commonwealth. Thus, Kirchholm's victory accepted without a reflection harmed the descendants of the victors.

8 Conclusion

How was the Swedish army massacred near Kirchholm? Where is the secret of Chodkiewicz's spectacular success? What mistakes did the losing side make? What was the influence of this battle on the development of the art of war of that time? Below, we will try to answer these questions and summarize the current state of knowledge about the Battle of Kirchholm.

Let us begin with the mistakes of Charles IX. The king disregarded his opponent and fell for Chodkiewicz's simple maneuver of retreat. In this way he led to the division of the army which reduced his numerical advantage over his opponent. By ordering the pursuit of the enemy Charles left a convenient position occupied by the first throw of his army. They became easy prey for the enemy in the lower ground with exposed flanks and lonely Swedish soldiers.

Hetman Chodkiewicz set his army into a vast and thin, linear array ahead of time. It allowed him to flank both sides simultaneously and penetrate the center of the enemy formation, which could not be achieved with a narrow and deep positioning. Such a bold action was allowed by the advantage of a better and faster cavalry. Thanks to it, the hetman could quickly patch holes in the stretched formation.

Chodkiewicz strengthened his excellent cavalry with foot men, ahead of Gustavus Adolphus, who later modelled himself on him, remembering his father's defeat. In this way, he obtained a solid formation in the first line, combining the hussar's charge, having laps longer than the opponent's pikes, with the fire of shooters. The Swedes were unable to cope with such a combination and succumbed. This brilliant combination of all types of troops was the secret of Chodkiewicz's success, greatly helped by Charles's mistakes.

The brilliant tactics used by Hetman Chodkiewicz translated into significant losses of the enemy. The Swedes, putting up fierce resistance, additionally increased them. The pursuit of numerous cavalry after the broken and defenseless infantry should also be added as it increased the losers' losses. Despite these explanations, the total loss of 78% of the baseline state is still surprising and puzzling. More so because the winners counted 3% of the dead and 6% of the wounded.

What was the influence of this bloody battle on the development of the art of war of that time? Here, the roles have reversed. The Swedes learned far-reaching conclusions from this lesson and reformed their tactics. Thanks to this Gustavus Adolphus could celebrate great successes on the European continent after more than two decades since the battle. It was different in the Republic of Poland. The nobility, accustomed to hearing about victories without passing taxes, expected this practice to continue. This lack of understanding of the situation later translated into a reluctance to reform, and this, in a very simplified manner, destroyed the Polish-Lithuanian Commonwealth. Thus, Kirchholm's victory accepted without a reflection harmed the descendants of the victors.

⁹⁷ G. Parker, *The military revolution : military innovation and the rise of the West, 1500-1800.*, Cambridge University Press, Cambridge, 1988: 37.

Our analysis also revealed past differences between national historiographies. We get the impression that the Baltic Sea was a severe obstacle in the reception of the researchers' findings. Polish-Lithuanian and Swedish historiographies, with some exceptions, ignored each other, while the Latvian historians were passive.

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