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Battlefield Archaeology at Grunwald (Tannenberg, Žalgiris) A Polish-Scandinavian Research Project during the period 2014–2017

Key words: Grunwald, Tannenberg, Žalgiris, Battle 1410, Battlefield Archaeology, Grunwald Museum, Harja

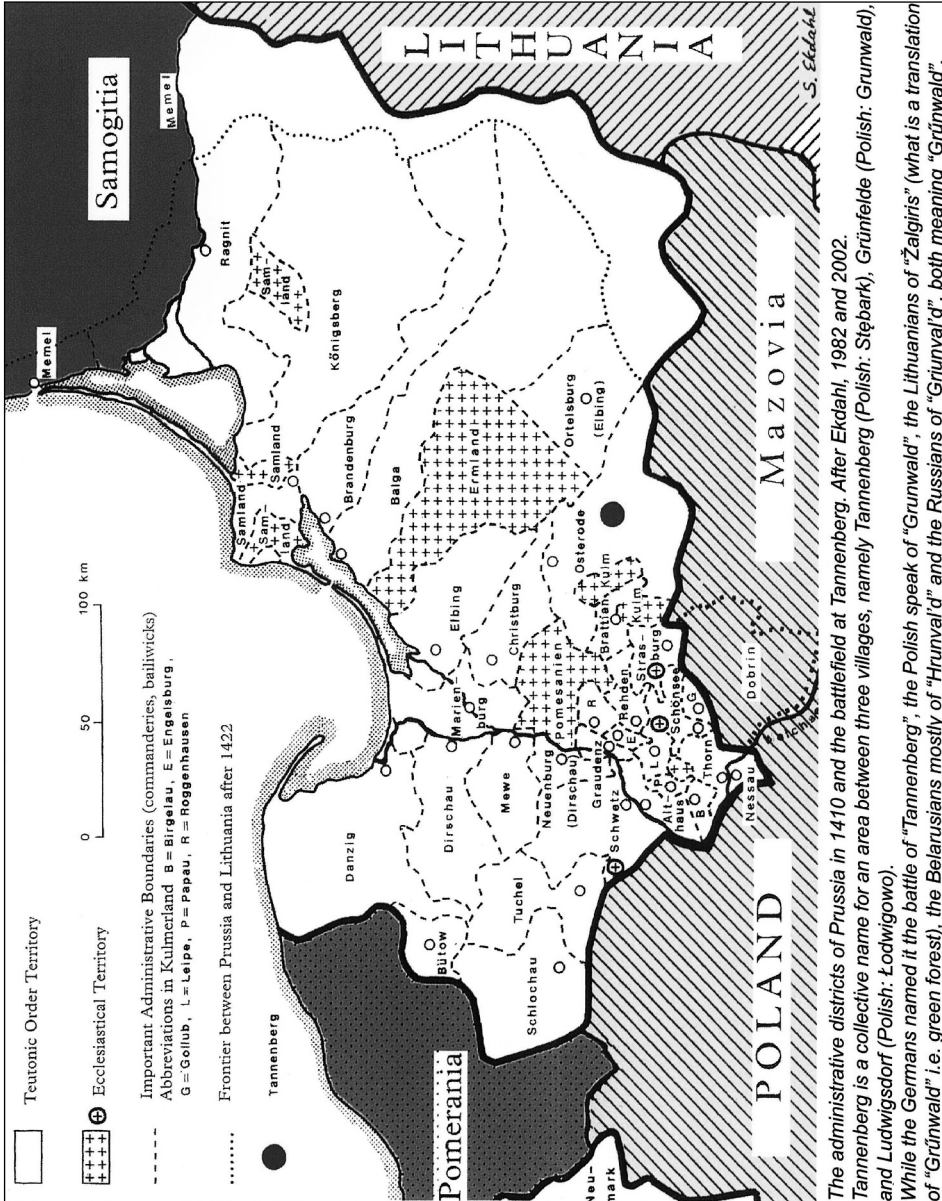
In 2014, an important Polish-Scandinavian research project was initiated between the Grunwald Museum — Muzeum Bitwy pod Grunwaldem w Stębarku — and the Danish Archaeological Society Harja from Odense. This article details the aim, circumstances and progress of this cooperation and summarizes the overwhelming results of the project.

The main battle at the village of Grünfelde (in Polish Grunwald) on July 15, 1410, when the Teutonic Order in Prussia suffered a destructive defeat against the allied Polish and Lithuanian armies, was most notably celebrated in 1910, 1960 and 2010 as a triumph of the victorious nations, and increasingly appeared to emerge as a dominant event in the history of the two countries (fig. 1). In Lithuania it is called Battle of Žalgiris, while the traditional German name is the Battle of Tannenberg (in Polish Stębark). The two villages lie approximately 3 km apart and together with the village of Ludwigsdorf (in Polish Łodwigowo) form a triangle.

The most important Polish conference about Grunwald in 2010 was held at Malbork, which is the former main castle Marienburg of the Teutonic knights, and also at the Jagiellonian University in Cracow. One of the papers dealt with the topic „Grunwald Research Problems and Perspectives” and predicted that the archaeological research henceforth would come to play an increasingly important role.¹

This has proven to be the case. The management of the Grunwald Museum, opened in 1960, and historians from the universities in Łódź, Olsztyn and Toruń applied for grants to carry out archaeological and other research on the battle in 2012 and 2013,

¹ EKDAHL 2013, pp. 88–89. An excellent overview of Grunwald research in recent years is given by KWIATKOWSKI 2015.



The administrative districts of Prussia in 1410 and the battlefield at Tannenberg. After Ekdahl, 1982 and 2002. Tannenberg is a collective name for an area between three villages, namely Tannenberg (Polish: Stębark), Grünfelde (Polish: Grunwald), and Ludwigsdorf (Polish: Łodwigowo). While the Germans named it the battle of "Tannenberg", the Lithuanians of "Zagiris" (what is a translation of "Grünwald" i.e. green forest), the Belarusians mostly of "Hrunval d" and the Russians of "Grjunval d", both meaning "Grünwald".

Fig. 1. Map of Prussia in 1410 (after EKDAHL 2002 and 2012b).

in accordance with their theories, but their applications were rejected by the National Science Center in Cracow. Museum Director Szymon Drej M.A. and archaeologist Dr. Piotr A. Nowakowski from the University of Łódź thus had to look for an alternative which would not burden the finances of the museum. Together with museum employee Jarosław Malecki M.A. they developed a new project based on private engagement and support, mainly from abroad, but also from Poland.

Happily, circumstances played into the museum's hands. The Danish Archaeological Society Harja had planned one of its annual bus journeys to the Baltic countries in 2013 and, in that context, contacted the Grunwald Museum. Harja member Leif Tvilum met museum employee Sławomir Moćkun, who showed great interest in cooperating with Harja's detector department, specializing in archaeological surveys with metal detectors both at home and abroad.² During a subsequent visit by Glenn Abramsson, Michael Nielsen and Kenny Thygesen to the museum in September, 2013, the plans took on a concrete form. It was agreed that Harja would help to search for the battlefield at Grunwald with metal detectors. The necessary permission for this was obtained from the appropriate conservationist and the planned undertaking was given the green light. The project meant that all participants would themselves be responsible for the costs of traveling to Poland and for accommodation there. In February, 2014 the treaty was signed in Odense. Later, Polish detectorists living in Great Britain also joined the project. Contact person and head of the Danish-Norwegian group was the computer specialist Glenn Abramsson from Odense, who would document the search tracks and sites of discovery with Global Positioning System (GPS) and draw the relevant maps.

The project's aim was to try and locate the battlefield(s) of 1410. Artefacts and mass graves had been found during previous archaeological investigations in 1958–1960, when the museum was built, but they were near the ruins of Saint Mary's chapel, which was built by Grand Master Heinrich von Plauen in 1411, and did not mean that the main battlefield itself had been found.³

There are two theses about why the chapel was located right at this place within the triangle formed by the villages Tannenberg–Grünfelde–Ludwigsdorf. According to a long-standing perception, Grand Master Ulrich von Jungingen had been killed in action just there, whereas I represent the view that this had been the site of the Teutonic Order's Chapel tent during the battle. The Chapel, in turn, was placed in the camp of the Knight's army.⁴

² Information from Glenn Abramsson, Odense, leader of the Harja group during the Grunwald project 2014–2017.

³ EKDAHL 1982. See Chapter IV: *Die archäologischen Quellen* (pp. 320–369). — Polish translation: EKDAHL 2010b. See Chapter IV: *Źródła archeologiczne* (pp. 299–341). Cf. ODOJ 2014.

⁴ EKDAHL 2009 with three coloured maps (details) of the area around the three villages Tannenberg, Grünfelde and Ludwigsdorf on the handcoloured map by von SCHROETTER 1796–1802. Cf. the big coloured Map 1 („Okolica pola bitwy pod Grunwaldem/Tannenbergiem/Żalgirisem”) and Map 2 („Okolica [...] — badania archeologiczne”) in KWIATKOWSKI 2015.

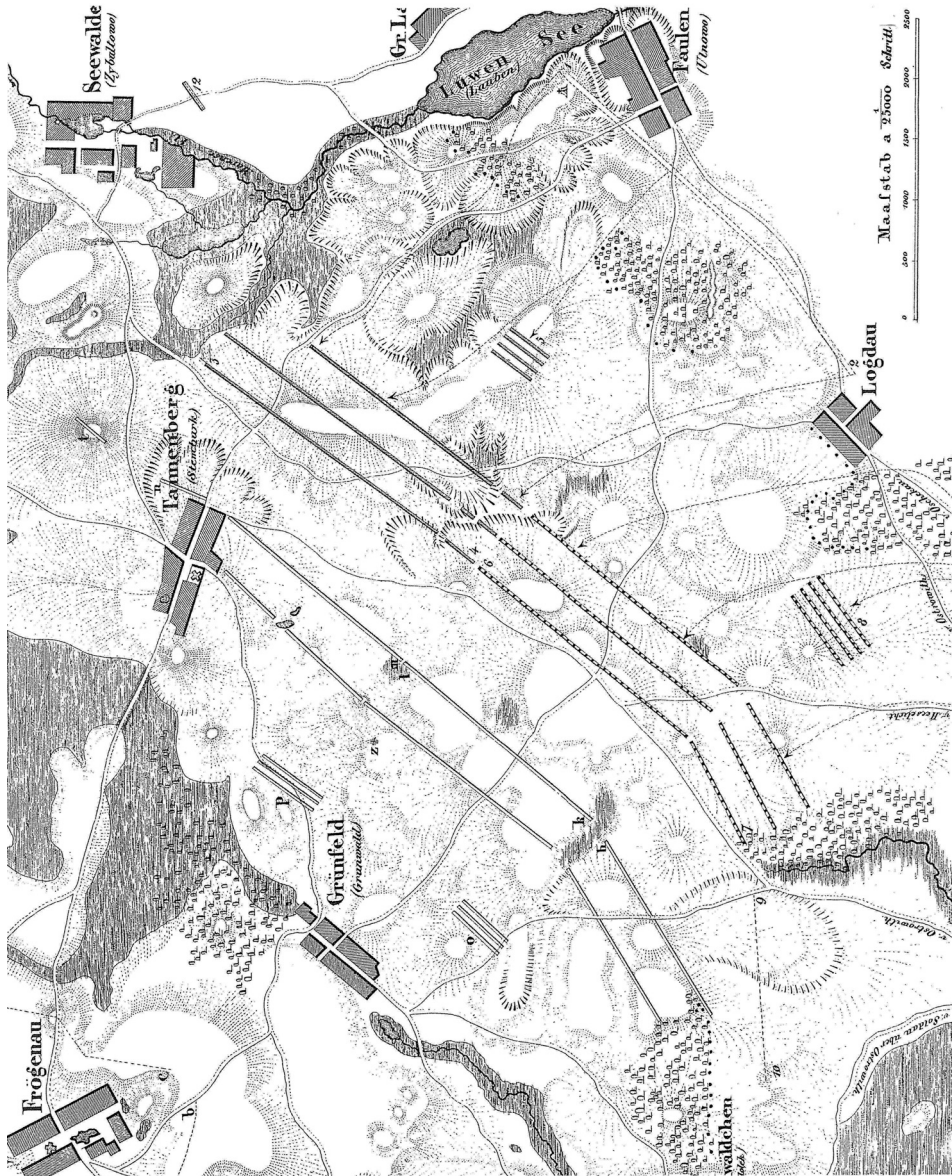


Fig. 2. Johannes Voigt's map of the battlefield (1836). Detail (after VOIGT 1836).

There are also other important differences between my stance and the most supported hypothesis. I have proven that the latter doesn't build on a reliable analysis of the written sources, but simply follows a tradition which was established by the Prussian historian Johannes Voigt (1786–1863) in vol. 7 of his famous book „The History of Prussia”, published in 1836 (fig. 2). Supposedly with support from the sources — thereby wrongly referring to the Polish chronicler Jan Długosz⁵ — Voigt claimed that the Polish King's camp during the days before the battle was situated south of the town of Gilgenburg (in Polish Dąbrówno) and that, on the morning of July 15, 1410, the Polish and Lithuanian armies broke up from a camp south of Great Damerau Lake (Jezioro Dąbrowa Wielka).⁶ For my part, I refer to the statement of the contemporary chronicler Annalista Thorunensis that the camp was located in the northwest corner of Small Damerau Lake (Jezioro Dąbrowa Mała): „Fixit [King Władysław Jagiełło] tentoria sua non longe a civitate Gilgenborg, prope campum, qui dicitur Virzighuben” (in Polish Wierzbica).⁷ This statement has been totally ignored by research until now. It leads to a completely different conclusion about the march of the Polish army and the site of the future battlefield. Johannes Voigt's thesis has dominated the research from all countries for more than 180 years now.⁸ A well-known Polish variant was launched by Professor Andrzej Nadolski (1921–1993) from the University of Łódź in the second half of the 20th century (fig. 3). According to him, the main battlefield is situated east of the road between Stębark (Tannenberg) and Łodwigowo (Ludwigsdorf) in an area he called „Dolina Wielkiego Strumienia” (Valley of the Great Stream).⁹ One of his Anglo-American followers is the British military historian Stephen Turnbull, who has published a widespread and oft-quoted book „Tannenberg 1410. Disaster for the Teutonic Knights”.¹⁰

⁵ Last edition: DŁUGOSZ 1997. Długosz's dependency on the early *Cronica conflictus* in his description of the battle 1410 will not be discussed here. The best edition of that very important source until now: *Cronica conflictus* 1911. Older editions: *Cronica conflictus* 1866 and 1872. Associate Professor Marek A. Janicki from the University of Warsaw investigates the dependency of Długosz's *Annales* on the contemporary chronicle *Cronica conflictus* and prepares its new edition. Cf. BIAŁUŃSKI 2011, JANICKI 2014 and KWIATKOWSKI 2015.

⁶ VOIGT 1836, pp. 78, 81. Detailed analysis of the problems in EKDAHL 2009, pp. 32–44.

⁷ ANNALISTA THORUNENSIS 1866, p. 314. Cf. EKDAHL 2009 (see note 4), pp. 32–36.

⁸ See the more than 30 maps from different countries like Germany, Poland, Lithuania, USA, the Soviet Union and Russia, Belarus, and Ukraine, demonstrating the deployment of the armies at the battlefield and reproduced by EKDAHL 2009. The examples could be multiplied. The maps all contradict each other regarding the deployment of the armies and the course of the battle, but they all — like Johannes Voigt — hold the opinion that the camp of the Polish army at departure on the morning of July 15, 1410, was situated south of the Great Damerau Lake. They are thus all incorrect. A positive feedback to my research is given by GOUGUENHEIM 2012 with maps on pp. 102–103. Also see GRABARCZYK 2011, with a map on p. 25.

⁹ NADOLSKI 1990/2010. A second edition of that book edited by Tadeusz Poklewski-Kozieliński and Maria Żemigała was published in 2010 (after Nadolski's death 1993). Also see the summarizing book NADOLSKI 1993, with two coloured maps.

¹⁰ TURNBULL 2003. The book has many coloured maps, adopting the theories of Nadolski et al.

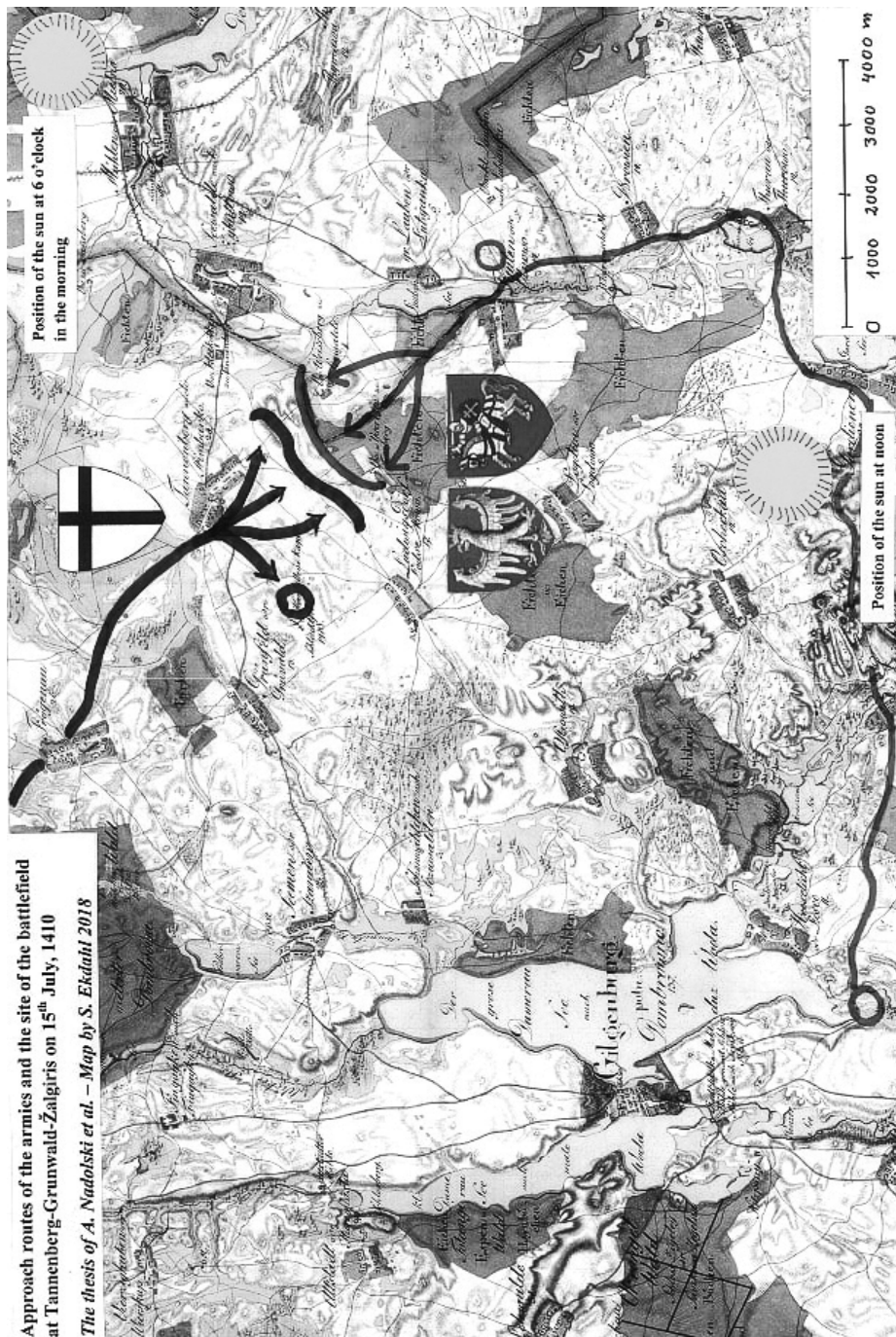


Fig. 3. Approach routes of the armies and the site of the battlefield at Tannenbergrunwald/Zalgiris on 15th July, 1410 according to A. Nadolski et alii. Map by S. Ekdahl.

I conducted my own analysis, entirely different from the prevailing Polish research, in a seminar essay for Professor Erik Lönnroth at Gothenburg University in 1965,¹¹ but only published it a long time later, most notably in a Polish conference book in 2009.¹² According to my interpretation there are at least three different battlefields east and south of Grunwald (Grünfelde), i.e. about 2–3 kilometers farther to the northwest than claimed by Andrzej Nadolski and his followers (cf. fig. 4 and 5). The largest of these are located northeast of the road between Grunwald and Łodwigowo (cf. fig. 6). In view of the profound consequences of my analysis of the written sources, it was met with skepticism and rejected or ignored by Polish historians and archaeologists who supported the theory of a battlefield east and south of Stębark (Tannenberg). There were and are, however, also colleagues in Poland who recognize the value of my research. I quote from a letter to me from Dr. Ryszard Walczak in Poznań (Posen) of September 29, 1986: „One can say that all of us — with Prof. [Gerard] Labuda at the head — belong to your ‘lobby’; it’s just a question of whether this is enough to overcome the decisiveness of the Nadolski ‘lobby’!”¹³

The Grunwald Museum and the adjacent imposing victory monuments were built for the 550th anniversary of the battle in a location consistent with the prevailing traditional interpretation of Johannes Voigt, which at that time was prominently represented mainly by professors Stefan M. Kuczyński (in his famous book „Wielka Wojna”)¹⁴ and Stanisław Herbst.¹⁵ Nowadays, the amended version by Andrzej Nadolski is presented to the visitors.

Through the project initiated in 2014, the management wished to verify the prevailing Nadolski thesis, and hoped to find artefacts that would enrich the existing collection and which could be presented in the museum.

¹¹ EKDAHL 1965.

¹² EKDAHL 2009.

¹³ „Man kann sagen, dass alle — mit Prof. Labuda an der Spitze — zu Ihrer ‚Lobby‘ gehören; es entsteht nur die Frage, ob und wie weit das reichen wird, um die Durchsetzungskraft der Nadolski’schen ‚Lobby‘ zu besiegen!?” Walczak refers to the Polish medievalist Professor Gerard Labuda (1916–2010). Later on there were also other positive remarks by BIAŁUNSKI 2011, JANICKI 2014 and KWIATKOWSKI 2015.

¹⁴ KUCZYŃSKI 1955/1987. Kuczyński was consultant for the producer Aleksander Ford, who shot the film „Knights of the Teutonic Order” („Krzyżacy”) in 1960. He was also involved in the shaping of the monumental grounds at Grunwald, among other things the large, impressive „stone map” in front of the Amphitheatre with the formation of the armies before the battle.

¹⁵ So, for instance, HERBST 1958. Herbst wrote many articles in „Komunikaty Mazursko-Warmińskie” 1958–1960. See the bibliographical references in ODOJ 2014, p. 70.

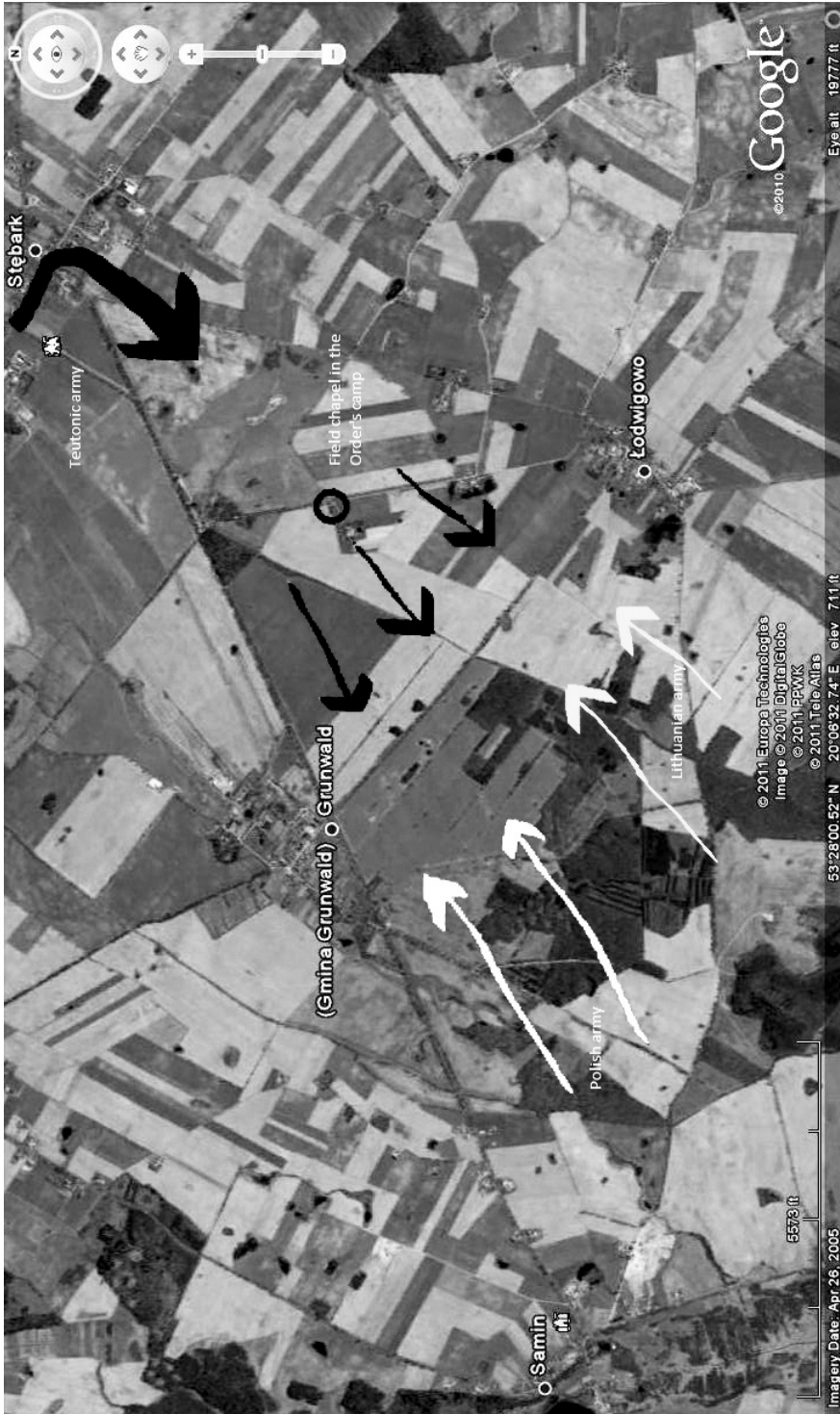


Fig. 5. Position of the armies before the battle. Sketch by Sven Ekdahl (2011).



Fig. 6. F. L. baron v. Schroetter's map of Prussia 1796–1802. The battlefield of 1410 (Detail).

2014

The first search with metal detectors took place during a week in September, 2014.¹⁶ 22 of the participants were Harja members from Denmark and Norway, while 11 were Poles. Most Harja members were equipped with GPS or „loggers”, which enabled Glenn Abramsson to follow their search tracks on his laptop and later insert them on a Google Earth map. Although it is not apparent from the maps presented by him, the areas between the visible search traces were also searched but by people who had no GPS equipment and therefore did not leave any search traces. In 2014 the search tracks on Abramsson’s maps were displayed in a light blue colour, while in the following years other colours were used: 2015 red, 2016 light green, and 2017 yellow (on red or maroon fields). This is evident from a map drawn by Glenn Abramsson after the end of the search in 2017 (fig. 7).

During those four years Abramsson also wrote search track reports in which he numbered the searched fields in chronological order, indicating the date, number of participants and search hours as well as the size of the examined fields given in hectares.¹⁷ In 2016 and 2017 he added information about the search conditions, i.e. the nature of the soil.

As shown in the first report of October 3, 2014, nine fields were scanned that year (no. 1–9 on the abovementioned map, fig. 7). Most of these lay to the east of the road Stębark–Łodwigowo, where the Grunwald Museum hoped to be able to verify Andrzej Nadolski’s hypothesis. This, however, was not successful. A total of 155 hectares of land was searched during 799 search hours, but the results were very disappointing. Only very few „military objects” were found: a few arrowheads and bits and a part of a spur. The management therefore decided that in 2015 my research results would be taken into account, but without giving up Nadolski’s views.¹⁸ This is confirmed in a letter to the magazine „Mówią Wieki” in September 2017: „As stated above, our research is carried out *sine ira et studio*. For this reason in 2015 we decided to explore zones which in the opinion of Sven Ekdahl were the proper area of the battle of Grunwald. This, however, does not mean that we abandoned the verification of the hypothesis proposed by Andrzej Nadolski.”¹⁹ In my reply to the Museum I stressed that the letter should be regarded as a defense

¹⁶ Detailed information in EKDAHL 2016a, pp. 175–205, here pp. 182–186 and 196–198. Cf. NOWAKOWSKI 2015, pp. 79–87.

¹⁷ EKDAHL 2009, pp. 196–198 and 201–203. The search track reports of 2016 and 2017 will be published in a separate article.

¹⁸ Letters to the author from director Dr. Szymon Drej (14.11.2014) and archaeologist Dr. Piotr A. Nowakowski (19.11.2014).

¹⁹ „Ponieważ nasze badania, co sygnalizowano wcześniej, prowadzone są *sine ira et studio*, w roku 2015 postanowiliśmy rozpoznać tereny będące według Svena Ekdahla właściwymi polami bitwy grunwaldzkiej. Nie oznacza to, że zarzuciliśmy weryfikację hipotezy Andrzeja Nadolskiego [...]” DREJ, NOWAKOWSKI 2017, p. 70.



Fig. 7. Fields scanned with metal detectors 2014–2017. Map by Glenn Abramsson.

memorandum to show that the traditional guidelines have not been abandoned by the Museum's management.²⁰

2015

As shown by Glenn Abramsson's new search track report, 15 Harja members from Denmark and Norway and a dozen other detectorists from Great Britain and Poland joined the project that year.²¹ The University of Gothenburg (Göteborgs universitet) and the Polish-Scandinavian Research Institute (Instytut Polsko-Skandynawski) in Copenhagen (IPS) were represented by me, the Lithuanian Television (LRT Televizija) by Aleksandras Matonis from Vilnius. In July 2014, I was awarded the prominent Grunwald medal.

During one week in August, 2015, 8 fields (no. 10–17) mainly west of the road Stębark–Łodwigowo with a total area of 120 hectares were searched during 681 search hours. The result was significantly better than the year before: we found parts of spurs, swords and iron gloves, three axes and many crossbow bolts and arrowheads. A comparison with the very few finds from 2014 is striking. The information about the number of such projectiles varies. Piotr A. Nowakowski later announced that in 2015 it was 37. In 2015 as well as in 2014 many horseshoes were also found, but they are surely mostly due to later farming and not to the battle of 1410. The large number of „Militaria” on fields near the chapel is interpreted by both Nowakowski and me as evidence that heavy fighting had taken place there when the wagon lagers in the Teutonic Order's camp were stormed and captured in the final stage of the battle.²² Several other findings have to do with the fact that the Chapel was a place of pilgrimage for a long time after the battle.²³ When the same fields were investigated again in 2017 under favorable weather condition, an additional large number of artefacts was found, not least in terms of „Militaria” from 1410 (see below).

Of particular interest are the finds of crossbow bolts on both sides of the road half way between Grunwald and Łodwigowo, where troops of the Lithuanian Grand Duke Vytautas (in Polish Witold) according to my research clashed with the left wing of the Knight's army.²⁴ According to me the main battlefields of King Jagiełło's Pol-

²⁰ „List z Muzeum Bitwy pod Grunwaldem w Stębarku do redakcji 'Mówią Wieki' jest w istocie memorandum obrony pokazującym, że dotychczasowe wytyczne nie zostały zarzucone.” EKDAHL 2017c, p. 71.

²¹ For detailed information see EKDAHL 2016a, pp. 186–195, 199–200 and 201–203. Also see EKDAHL 2015, pp. 27–29. The Norwegians were members of Harja as well as of the Norwegian Møre detektorlaug.

²² Cf. NOWAKOWSKI 2016, p. 114.

²³ EKDAHL 1994. Also see EKDAHL 2007, EKDAHL 2008, EKDAHL 2010a.

²⁴ EKDAHL 2009, p. 56. Also see EKDAHL 2012a, pp. 285–305.

ish army are situated farther to the northwest, closer to the village of Grunwald, but in 2015 it was not possible to search those fields, because of various crops growing there. The most interesting areas are now owned by farmers simply because leading Polish historians and archaeologists have always considered them uninteresting. The museum acquired large land areas before the 1960s jubilee, but that was in accordance with the incorrect hypothesis described above. As a result, agreements with the landowners must be entered into before any search can take place on other fields than those owned by the museum.

2016

The search was continued during a week in September, 2016. It started with a solemn ceremony in Palace Pacółtowo (formerly the Groß Pötzdorf estate) about 10 km north of Grunwald in presence of, among others, Gustaw Marek Brzezin, Marshal of Warmia and Mazury, and Director Zdzisław Fadrowski of the Ministry of Culture and Education in Olsztyn (formerly Allenstein). Like the year before I had been asked to give a speech and in this context I handed over bound copies of a work published by me a few weeks before in a Lithuanian book on the occasion of the 90th birthday of Professor Mėcislovas Jučas in Vilnius: „Archäologische Grabungen bei Grunwald (Tannenberg, Žalgiris) in den Jahren 2014 und 2015”.²⁵

Throughout the years the search was competently organized by Jarosław Malecki M.A. of the Grunwald Museum in accordance with the decisions made by the management, i.e. Dr. Szymon Drej and Dr. Piotr A. Nowakowski. Harja's participation in 2016 was also considered indispensable. Of the 26 detectorist that year, GPS search tracks from 11 members of Harja were recorded by Glenn Abramsson on a Google Earth map. During 470 search hours, 11 fields of approximately 100 hectares were searched. Following the numbering of searched fields in previous years they amassed numbers 18 to 28 (see fig. 7). Apart from the findings in the surroundings of the chapel, the result was particularly good in some areas along the road between Grunwald and Łodwigowo.

In 2014 and 2015, the Museum had put its inventory of the finds (*inwentarz znalezisk*) at Harja's disposal, but in 2016 it refused to do so. The reason was my above-mentioned work on the surveys from 2014 and 2015, in which Abramsson and I had collaborated in publishing maps with the sites of the finds.²⁶

Although there are thus no references in the shape of a discovery list, it is clear that most „Militaria” artefacts (crossbow bolts and arrowheads as well as other parts of weapons and equestrian equipment) were found in the fields between Grunwald and Łodwigowo, especially in the area marked as battlefield by two crossed Sabres

²⁵ EKDAHL 2016a. As for my speech that year, see EKDAHL 2016b.

²⁶ Cf. EKDAHL 2017b.

on the famous original hand coloured map of East and West Prussia (etc.) by Friedrich Leopold Freiherr [Baron] von Schroetter of 1796–1802 (Scale: 1:50 000) (see fig. 6).²⁷ Military artefacts from 1410 were also found west of the road between the two villages. The survey east of the road leading from Stębark (Tannenberg) to Łodwigowo — the area of the „Great Stream Valley”, according to the Nadolski thesis — produced no positive results.

The survey ended on Friday, September 16 with a dinner invitation from the Grunwald Museum to the project members in the Palace Pacóftowo. In this context the Museum arranged an exhibition of some of the most important findings of that year.

THE SEARCH FOR MASS GRAVES

Metal artefacts can be traced by metal detectors to a depth of about 30 cm, but to find mass graves other technical equipment is required, namely *Ground Penetration Radar (GPR)*. It was therefore great news for the project when a Lithuanian GPR team led by TV journalist, editor and diplomat Aleksandras Matonis arrived at Grunwald on September 16, 2016 and was able to attend the opening ceremony of the exhibition in the Pacóftowo Palace. The Lithuanians did not belong to the Harja group, and I was completely unaware of their plan to visit Grunwald. It was an initiative planned solely by Aleksandras Matonis.

On the following two days (a Saturday and a Sunday), the GPR team from Vilnius was able to spend several hours searching for mass graves. Since Matonis was very familiar with my Grunwald research, he asked me to suggest an appropriate area for their survey, which I did.

The results of this survey with ground penetration radar on September 17 and 18, 2016 was very exciting. Within an area proposed by me on fields northeast of the road between Grunwald and Łodwigowo (about halfway between the villages) 17 anomalies were found consisting of pits of different sizes, shapes and depths (fig. 8). The depths range from 1 to 2.4 meters. In several of them, reflecting objects — probably made of metal — were traced. This indicates that they are not of natural origin.

This finding of course raises the question whether some of the anomalies could possibly be mass graves from the battle in 1410. As the technical expert Dr. Rokas Vengalis stated in his report of September 29, 2016, which was written in Lithuanian and translated into English in April, 2017, a regular archaeological excavation is required to verify if they are of natural origin or not.²⁸ The problem is that

²⁷ SCHROETTER 1796–1802.

²⁸ VENGALIS 2016/2017. This report, written in Lithuanian, was translated into English in April 2017 and sent to me as attachment of an email from Aleksandras Matonis of 16 April 2017. Vengalis added 8 pictures to the written text. One of these is reproduced in a differing form in my article EK-DAHL 2017b. The report will be published *in extenso* in another article.



Fig. 8. Anomalies (pits) found on fields to the east of the road between Grunwald and Lodwigowo. Map by Rokas Vengalis.

the Grunwald Museum management for some reason regards these anomalies as rather unimportant²⁹ and does not seem to be particularly interested in carrying out such an investigation. Despite myself and others making repeated attempts, no action has been taken so far by the museum in this regard.

2017

My aforementioned work „Archäologische Grabungen bei Grunwald (Tannenberg, Żalgiris) in den Jahren 2014 and 2015” about the survey with metal detectors in those years and its results were not welcomed favourably by the Grunwald Museum, whose management subsequently ended correspondence with me in October, 2016. None of my seven letters containing various questions were answered. In 2017, relations became more strained when I gave a lecture on Grunwald battlefield archaeology at a conference at the University of Haifa in February³⁰ and another at the University of Warsaw on April 24³¹, and I also published two articles on my research and the results of the metal detector surveys in the well-known popular historical journal „Mówią Wieki”.³² In those lectures and articles I also mentioned the interesting discovery of anomalies in fields between Grunwald and Łodwigowo by the Lithuanian team using GPR, which greatly annoyed the management of the museum. Dr. Szymon Drej and Dr. Piotr A. Nowakowski immediately sought to relativize the significance of this discovery.³³ Of course, I have never asserted that the anomalies are mass graves, but merely emphasized this as a possibility and stressed the necessity of a regular archaeological excavation to establish the facts.

On August 24, 2017, i.e. two weeks before my planned departure from Gothenburg to Grunwald for that year’s survey, I received an entirely unexpected email from Dr. Drej and Dr. Nowakowski in which they declared that I was not welcome to participate in the search³⁴, despite my membership in Harja and my function as IPS Secretary General.³⁵ Consequently I had to cancel the trip by ferry from Karlskrona to Gdynia and the stay at hotels in Poland, which caused both myself and my wife substantial financial loss and inconvenience. This action by the management was

²⁹ DREJ, NOWAKOWSKI 2017, p. 70. — See my reply: EKDAHL 2017c, p. 71.

³⁰ EKDAHL 2017a.

³¹ Sven Ekdahl, *Modern Battlefield Archaeology at Grunwald*. — Invitation by the Museum of Polish History (Muzeum Historii Polski) and the Institute of History at the University of Warsaw (Instytut Historyczny UW).

³² See EKDAHL 2017b and 2017c.

³³ DREJ, NOWAKOWSKI 2017.

³⁴ „Due to the upcoming launch of this year’s excavation season at the Grunwald Battlefield, we would like to inform you that we are not seeing the possibility of working with you during the research.”

³⁵ Cf. EKDAHL 2017d.

considered incomprehensible by the Danish and Norwegian project members, as well as by the IPS in Copenhagen. Many other people in various countries — historians and archaeologists — have also expressed their dismay.

Despite the negative news from the Grunwald Museum as well as a later decreed news blackout concerning the survey and the findings, including the deletion of informative files on the internet, I got valuable information on the results from my Scandinavian friends from Harja, mainly from the Dane Glenn Abramsson and the Norwegians Trond A. Hansen and Kjell Kåsastul.³⁶ The number of participants with metal detectors varied during different days, but mostly was just below 40. Of these, only 5 were members of Harja from Denmark and 2 from Norway. Most of the detectorists were Poles. The internetfilm „W pogoni za legendą — Grunwald 2017” by Przemysław Korgul with text by Daniel Kozieł lists the following organizations: PHEC Thesaurus, Fundacja Recupero, Stowarzyszenie Twierdza Chełmno, Olsztyńskie Stowarzyszenie Historyczno-Eksploracyjne „Medalion”, Grupa Paszukiwawcza „Riese”, Warmińsko-Mazurskie Stowarzyszenie Historyczno-Kolekcjonerskie, Koło Przyjaciół Muzeum Broni Pancерnej, Mocny Sygnał, Eksploracja Łódź, Świętokrzyska Grupa Eksploracyjna, as well as students of archaeology and members of the Museum’s staff. — For some reason Harja is not mentioned. — The number of search hours was approximately 900 and the surveyed area of 7 fields (no. 29–35) was approximately 90 hectares. The uncertainty is caused by the fact that no Harja-members participated in the search on the two latter fields, so they could not be considered in Glenn Abramsson’s report for this year.

BATTLEFIELD FOUND!

In 2017, there were no important findings of „Militaria” east of the road Stę bark–Łodwigowo (according to the Nadolski hypothesis about the main battlefield in the so-called Valley of the Great Stream, „Dolina Wielkiego Strumienia”), but the survey in the surroundings of St Mary’s chapel and west of it at the road Grunwald–Łodwigowo produced excellent results. Trond A. Hansen has drawn a very useful map of these fields (fig. 9) and furthermore informed which finds were made in them.³⁷ They were virtually the same fields that had been searched already in 2015, but due to the humid weather now with even greater success. The conductivity of the ground changes and, especially when the earth is dry, the signals not always

³⁶ Abramsson has sent me his Search track report of 2017 (ABRAMSSON 2017) together with many pictures and drawn a precious map of all fields that were searched during the years 2014–2017 (fig. 7). Hansen has in a detailed email of September 18, 2017 given important information about the result of that year’s search and also added a map of the fields in question (fig. 9). I also thank Kjell Kåsastul, who daily sent emails from Grunwald to Gothenburg with information on the search and the finds and added several photos (cf. fig. 10).

³⁷ Email of September 18, 2017 (see note 36). I refrain from listing the finds.



Fig. 9. Trond A. Hansen's map of the most important scanned fields 2017. Cf. fig. 7.

go to the metal detector. Of the four years covered by the project, 2017 was the most rewarding. Among other things, approximately 65 crossbow bolts and 20 arrowheads were found, as well as parts of spurs, stirrups, gauntlets etc. A photo from the 2017 exhibition shows some of the many findings (fig. 10). The Harja members Kjell Kåsastul from Norway and Dariusz Jezak from Denmark found two interesting, possibly Lithuanian or Prussian spearheads. Some of the projectiles seem to be of Tartar origin.

In the future, it will be especially important to continue the search in the large fields south and east of Grunwald which are still „virgin” from a research perspective, because they have so far been regarded as unimportant by influential colleagues in Poland or inaccessible because of crops, mostly maize (cf. fig. 7). As emphasized above, an archaeological excavation of the abovementioned anomalies at the road Grunwald–Łodwigowo is essential.

Although the results of the described surveys with metal detectors from 2014–2017 are only preliminary and not all fields are scanned, there is no doubt that the battlefield from 1410 has now been found. No evidence or findings exist which can contradict this. The archaeological research confirms the correctness of the analysis of the written sources and the terrain, which I first presented at the University of Gothenburg in 1965. We now know where the main battle took place. It is not where Andrzej Nadolski and others supposed it to be, but instead south and east of Grunwald.

I would like to quote a statement by Glenn Abramsson in an article in Harja’s magazine „Fynboer & Arkeologi” in January, 2018. His answer to the oft-repeated question, as to whether the detectorists from Harja have found the battlefield, was: „Yes, we have. We actually found the site already in 2015. The three last years we have spent investigating where the outer boundaries of the battlefield are.”³⁸

The hypothesis of a battlefield east of the road from Stębark to Łodwigowo can thus definitely be shelved. It has cost 820 search hours and a survey of 180 acres of land to definitely prove this. These resources could have been used in a better way if the Grunwald Museum management had been ready to accept my analysis of the written sources at an earlier stage.

The tough resistance from the followers of Andrzej Nadolski’s hypothesis will probably continue for a long time to come. I refer once again to the above-cited statement by Dr. Ryszard Walczak in the letter to me of September 29, 1986: „One can say that all of us — with Professor [Gerard] Labuda at the head — belong to your ‘lobby’; it’s just a question of whether this is enough to overcome the decisiveness of the Nadolski ‘lobby’!?” This question is still relevant today.

³⁸ ABRAMSSON 2018, here p. 8: ”<Har I fundet slagmarken?> Det er det spørgsmål, der stilles, hver gang Harjas detektorfolk har været i Grunwald. Og svaret er ’Ja det har vi’. Vi fandt faktisk stedet allerede i 2015. Det vi har brugt de sidste tre på, er att finde ud af hvor ydergrænserne for slagmarken går.”



Fig. 10. Exhibition of some of the finds 2017 in the Grunwald Museum. Photo by Kjell Kåstastul.

According to Glenn Abramsson the cooperation between the Grunwald Museum and the Danish Archaeological Society Harja was completed in 2017. The project has in its entirety meant that a total of 450 hectares were investigated during nearly 3000 search hours. The search, however, will surely continue led by the Grunwald Museum in the coming years, either with or without new participation of Scandinavian detectorists. A new survey is planned by the Museum for September 15–21, 2018. Hopefully the Museum's management, i.e. Dr. Drey and Dr. Nowakowski, will also want to benefit from the enthusiasm, willingness sacrifices and technical know-how of the Harja members in the future. Many Danes and Norwegians have expressed their desire to participate in a new survey now that the location of the famous battlefield has been proven.³⁹

Any future „Militaria” artefact finds in the area south and east of the village of Grunwald will provide additional evidence for my claim that the research of the great battle of 1410 has effectively spent the last 180 years in a *cul-de-sac*. Archaeology has so far confirmed my half a century-old analysis of the written sources. I therefore look forward to the results of future surveys with great interest!

THE GRUNWALD MUSEUM'S DILEMMA

The logical consequence of all this is both obvious and at the same time painful for the Grunwald Museum. The imposing victory monuments and the museum were built for the anniversary in 1960 in accordance with incorrect assumptions about the march of the armies, their deployment and the site of the battlefield, which at that time dominated the research. They are therefore located in a place that no longer has much in common with the battle itself.

In 2016, about 5 million Euros (22 million zloty) were granted for the construction of a new museum at Grunwald. One third of this sum (6.7 million zloty) will be put at disposal of the province of Warmia and Mazury, whereas the rest will be spent by the EU for promoting tourism in this region.⁴⁰ Construction will begin in the first half of 2018. The site was determined years ago and, of course, cannot be changed. It is close to the parking near the road between Stębark and Grunwald.

Of interest is a comparison with a similar problem experienced by the Bosworth Battlefield Heritage Centre in Leicestershire in the UK, commemorating the decisive battle of Bosworth on August 22, 1485, in the „War of the Roses” between the families York and Lancaster.⁴¹ Recent research, at a cost of one million pounds, has shown

³⁹ In an email from Glenn Abramsson from April 9, 2018 he informed me that no less than 17 members of Harja had registered their interest in participating.

⁴⁰ POROWSKA 2017 (interview with the marshal of the Voivodeship Warmia i Mazury, Gustaw Marek Brzezin).

⁴¹ There is much literature on the battle and its consequences, also about the questions concerning the battlefield. I refer only to the online article „Battle of Bosworth Field” (<https://en.wikipedia.org/wi->

that the 1974 Heritage Centre was built in the wrong place in accordance with incorrect assumptions published one year before, and that the battlefield is situated about 3 km further away. The management of the Centre has accepted this fact and drawn up the following plan: all buildings, including the museum, will remain as before, but visitors can now follow a „Battlefield Trail” across the fields and thereby get a panoramic view of the landscape together with audio and visual information about the battle during the walk. Corresponding agreements have been met with the many landowners affected. Would not a similar pragmatic solution also be suitable for the Muzeum Bitwy pod Grunwaldem w Stębarku?

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The Grunwald Museum and its management deserve many thanks for taking the initiative in the successful project in cooperation with the Danish Archaeological Society Harja. The undertaking and its outstanding results are an important milestone in the history of battlefield archaeology.⁴² The old question on where the battle of Tannenberg/Grunwald/Żalgiris in a narrower sense took place has finally, after 180 years, been given a reliable response. This success can be attributed to the fact that the international project was based on cooperation between several nations: Poland, Denmark, Norway, Great Britain and Lithuania, as well as — through my own research — Sweden.

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⁴² A comparison to the very meagre result of battlefield archaeology on, for instance, the fields of the Battle of Agincourt/Azincourt 1415, is striking. See SUTHERLAND 2002/2015, Archaeological metal detector survey on the acknowledged site of the Battle of Agincourt (Online 2002, updated 2015); also SUTHERLAND 2006.

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Battlefield Archaeology at Grunwald (Tannenberg, Żalgiris). A Polish-Scandinavian Research Project during the period 2014–2017

On July 15, 1410 allied Polish and Lithuanian armies won an important victory over the Prussian branch of the Teutonic Order in fields around the villages of Tannenberg (Polish: Stębark), Grünfelde (Polish: Grunwald), and Ludwigsdorf (Polish: Łodwigowo) in Prussia. After the Second World War this part of Prussia was ceded permanently to Poland. The victory of 1410 was fundamental in forming the national identity of many countries in central and eastern Europe and it is thus the subject of intensive research. In 2014, an important international research project was initiated between the Grunwald Museum (*Muzeum Bitwy pod Grunwaldem w Stębarku*) and the Danish Archaeological Society *Harja*. Its aim was to try and locate the battlefield(s) of 1410 with metal detectors equipped with GPS. This essay presents the main outlines of the survey 2014–2017 and its overwhelming results. A total of 450 hectares were investigated during almost 3000 search hours. Many military artefacts were found, mainly crossbow bolts and arrowheads but also spearheads, axes, knives, and parts of swords, spurs, gauntlets, bits, horseshoes etc. In 2016, several anomalies consisting of pits of different sizes, shapes and depths were found by a Lithuanian GPR team on fields between Grunwald and Łodwigowo. This raises the question whether some of them could possibly be mass graves from the battle. An archaeological excavation is essential to establish this. In any event, we now know where the main battle(s) of 1410 took place: east and south of the village of Grunwald. The old question has finally been answered. This success can be attributed to the fact that the project was based on a cooperation between

several nations: Poland, Denmark, Norway, Great Britain and Lithuania, as well as — through the research of the author — Sweden. The Grunwald Museum and its management deserve many thanks for taking the initiative in this successful project in cooperation with the Danish Archaeological Society *Harja*. It is undoubtedly a milestone in the history of medieval battlefield research.