

**Aleksander Bóldyrew**University of Lodz  
e-mail: [aleksander.boldyrew@uni.lodz.pl](mailto:aleksander.boldyrew@uni.lodz.pl) <https://orcid.org/0000-0002-8626-9582>**Karol Łopatecki**University of Białystok  
e-mail: [k.lopatecki@uwb.edu.pl](mailto:k.lopatecki@uwb.edu.pl) <https://orcid.org/0000-0002-7921-9421>

## Military Migration as a Social Consequence of War On the Example of the Hvizdets-Obertyn Campaign of 1531<sup>1</sup>

**Summary:** Since the end of the Middle Ages, most of the wars fought by the Jagiellons were fought by enlisted soldiers, while every year they served in the permanent defence system (Polish: *obrona potoczna*) in the Ruthenian lands. As a result, several thousands, tens of thousands, and sometimes even tens of thousands of men left their place of residence and moved to another area, sometimes hundreds of kilometres away. As their destination was most often the Ruthenian lands, and the largest percentage of recruits with a known territorial affiliation came from Lesser Poland, it can be assumed that the distance oscillated, on average, around 290 km (in a straight line from Kraków to Lviv) and another 225–250 km from Lviv (the traditional place of concentration of troops) to the region of Kamianets-Podilskyi or Medzhybizh, i.e. to the area of fairly frequent military operations.

Thus, the question arises, to what extent the phenomenon of the migration of soldiers (permanent or temporary) is perceptible in the source material? Having the treasury and military registers, it is possible to compile data directly concerning individual soldiers with knowledge about their territorial origin and activity in a specific territory during the war expedition. Given the bulk of the preserved source material, certain exclusions have to be made in this study.

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The entirety of the surviving archives requires thorough and lengthy research. Thus, this paper is a test survey, based on sources related to Hetman Jan Tarnowski's Moldavian expedition of 1531. At that time, Tarnowski commanded around six thousand soldiers, which seems to be a sufficiently large research sample. We aim to show the sheer regularity of soldier movements/migrations, especially as this issue is essentially absent from Polish military-historical literature.

**Keywords:** Migrations, mercenaries, war, Kingdom of Poland, 16<sup>th</sup> century, Obertyn, early modern history

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The gathering and moving of several thousand soldiers during the summer campaign of 1531 during the war with Moldavia meant not only a certain organisational and logistic effort but also – something that the literature on the subject has so far overlooked – a depletion of the demographic potential in lands other than those affected by the hostilities. Joining the mercenary army meant agreeing to military service for a minimum of a quarter of a year. This three-month period coincides with the indicator for the occurrence of so-called temporary migration.<sup>2</sup> Temporary movement (temporary migration) must last for a minimum of three months and mean an uninterrupted stay outside the place of permanent residence. This period corresponds to the quarterly enlistment of mercenary troops – the time taken to reach the area of the troops' concentration and to return home (if applicable) was not included. Therefore, we can assume that, in fact, the period of absence from the place of usual residence was longer than that.

As the warfare in the period in question was most often conducted in Ruthenian lands, on a general scale it can be assumed that the average recruit, and after the cessation of service, a demobilised soldier, had to travel in a straight line from Kraków to Lviv about 290 km, and then the same distance on his way back.<sup>3</sup> Next, we have to add another 225–250 km from Lviv (a traditional place of concentration of troops) to the area of Kamianets-Podilskyi or Medzhybizh, i.e., to the region of fairly frequent military operations. In total, therefore, on their way to the area of hostilities, the soldiers (counting only from Kraków) had to travel a total distance of about 515–540 km, while their time of service usually began in the vicinity of Lviv, so the first almost 300 km were covered privately, so to speak, and then, after the troops had disbanded, they still had to return home. This time extended the absence of individuals from their place of residence beyond the aforementioned three months. In the case of veterans from Kuyavia, for example, it was extended significantly, taking into consideration the additional distance on the way to the war and the return journey. This is, of course, a very

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2 For more on this subject, see: Kuklo C. 2006, 148–156; Pooley C.G. 2017; Wyźga M. 2018, 13–14.

3 We accept Kraków as an important point of the recruits' route, because the largest percentage of recruits with known territorial affiliation came from Lesser Poland, see: Boldyrew A. 2011, 131–134. Preliminary studies on mercenary cavalry indicate a similar trend.

generalised approach, because it is impossible to clearly state, based on the surviving source material, what happened to the soldiers after the end of their military service. Their return home remains a matter of probable guesses. There is another aspect of military service in remote Ruthenian lands that cannot be overlooked. To a certain extent, the Jagiellonian army was very diversified, far from being ethnically homogeneous – in the Polish army served representatives of various ethnic groups, cultures and religions, speaking different dialects and languages. There were people of different territorial and social backgrounds and representatives of different professions.

Thus, the question arises, then, to what extent is the indicated phenomenon perceptible in the preserved historical sources? The first category of sources that is associated with research on the organisation of the Polish army during the last Jagiellons' rule are treasury and military registers. This mundane source turns out to be extremely effective in the context of the issues raised in this paper as well. The combination of data on individual soldiers with knowledge about their territorial origin and activity in a specific territory brings surprising results. We have made the following assumption: in the case of establishing the data for verification of the phenomenon of soldiers' mobility, first of all, it is necessary to give up the simple division into cavalry and infantry, due to the specific nature of sources created as a result of the activity of veterans of noble or plebeian origin. The possibility of identifying a soldier as to his social and territorial origin derives not from his membership in a particular military formation but precisely from his social origin. Thus, in the whole army, we can distinguish two basic groups.

The first group consists of the captains (Polish: *rotmistrz*, German: *Rittmeister*) (regardless of whether they served in cavalry or infantry) and the cavalry companions. These military men, usually members of the nobility, are identifiable from the relevant source material. In practical terms, at this stage of research, identification of all captains and cavalry soldiers' place of origin and residence is possible only to a certain extent. The basic data concerning the soldiers of the permanent defence system (Polish: *obrona potoczna*) were compiled by Marek Plewczyński in his own indexes.<sup>4</sup> The problem, however, is that this study is concerned with an *ad hoc*, one-off enlistment, and, as we will show further on, the social substrate in the *ad hoc* expedition overlapped only marginally with the group regularly serving in the permanent defence. In other cases, not included in M. Plewczyński's indices, additional analysis of sources, based on genealogical and economic materials, would be necessary – exceeding the scope of this study and the authors' competences.<sup>5</sup>

4 Plewczyński M. 2012, 320–420.

5 The most influential families have their monographs (most of them covering the period until the end of the 15<sup>th</sup> or early 16<sup>th</sup> century), see: Dworzaczek W. 1971; Dworzaczek W. 1985; Dworzaczek W. 1996; Kurtyka J. 1997; Sperka J. 2001, Czwojdrak B. 2007, Szybkowski S. 2018, and many others. It is worth remembering, however, that in the Crown mercenary army each time there were only a few individuals from these notable families, while hundreds and sometimes

The second group consists of all soldiers of plebeian origin, namely those serving in infantry (in most cases burghers). The source materials associated with the nobility and burghers are definitely different. In the case of the plebeians, their territorial and social origin can be verified on the basis of military-fiscal records, because their names or names and surnames and place of origin were recorded. This is mass material, which largely eliminates the inaccuracies associated with misrepresentations regarding the recording of places of origin, or even deliberate deceptions committed by recruits when stating it. This is because there is always a certain margin of error in quantitative studies to determine certain proportions, which on a general scale has little impact on the final findings.

The choice of the summer campaign of 1531 as the basis for the research survey is associated with the work on a critical edition of part of the inspection registers of the Crown mercenary army during the reign of the last two Jagiellons. As part of this academic project, book 19, containing a list of soldiers serving under Hetman Jan Tarnowski's orders from the end of June to the early autumn of 1531, was prepared for publication.<sup>6</sup> From 22 June, official letters stating enlistment quotas for the mercenary units (Polish: *list przypowiedni*) were issued for the captains (this lasted until July 6: a letter for Captain Stanisław Pierzchnicki). On July 2, the first unit involved in the war with Moldavia was inspected (a thirty-horse-strong unit of cavalry guard under the command of Mikołaj Sieniawski), while the registering of troops was carried out until August 31 (10 days after the battle of Obertyn).<sup>7</sup> The entirety of these records constitutes the source basis for this study. As far as the expedition itself is concerned, it is difficult within the confines of this paper to cite all the basic publications referring to it.<sup>8</sup> However, it should be emphasised that among many studies, only M. Plewczyński made even a limited reference to the matter of the territorial origin of soldiers (captains and companions) in his indices.

### Captains and cavalry

In the Hvizdets-Obertyn campaign of 1531, a total of 35 rotas (25 cavalry units and 10 infantry units) were recorded.<sup>9</sup> However, only 34 captains participated in the expedition (Mikołaj Sieniawski commanded the cavalry rota and the aforementioned guard unit). Jointly, they commanded 646 cavalry companions. All captains have been identified

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thousands of soldiers of noble descent came from families of no importance, today difficult to capture and record even in genealogical research.

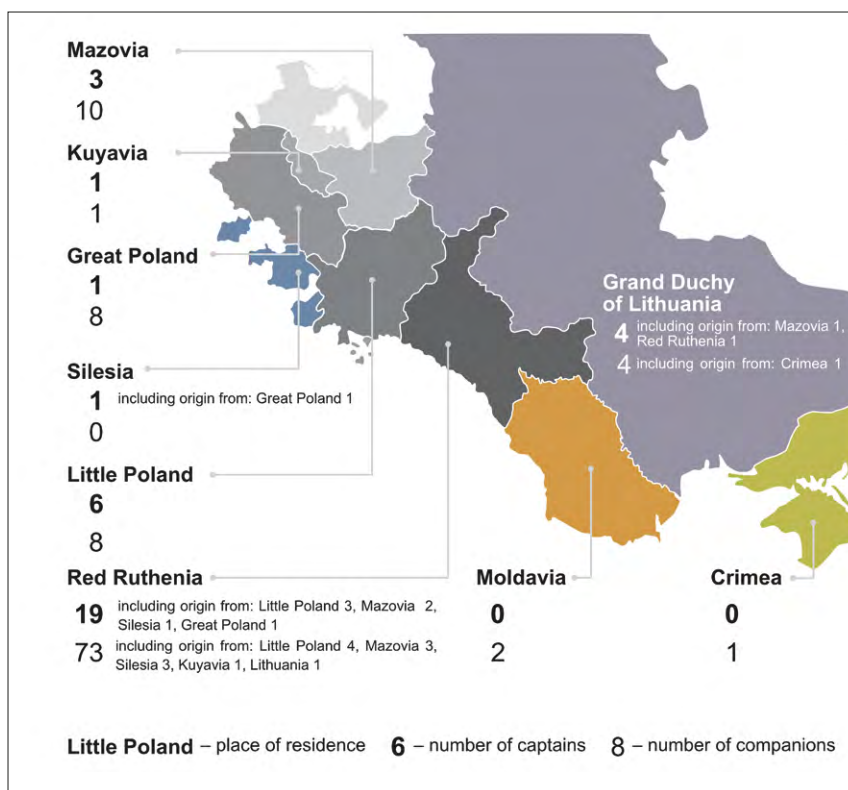
6 *Rejesty 1531*.

7 Boldyrew A. 2023.

8 The most important, apart from general textbook studies, include Czołowski A. 1890, 631–662; Górski K. 1894, 560–577; Czołowski A. 1931; Kolankowski L. 1938, 48–85; Spieralski Z. 1958, 74–76, 144–153; Spieralski Z. 1962; Plewczyński M. 1994; Plewczyński M. 2011, 349–393.

9 AGAD. ASK 19.

as regards their origin and place of residence. The area of their current residence in 1531 was not always the same as their place of origin – this discrepancy concerned 11 captains (just over 32%). With the exception of Hieronim Noskowski, who came from Greater Poland and settled in Silesia, Hipolit Młodecki, who came from Lesser Poland and settled in Lithuania, and Walerian Rokitnicki, who came from Mazovia and also settled in Lithuania, the remaining captains moved to the Ruthenian lands: three each from Lesser Poland and Mazovia, and one each from Greater Poland and Silesia. Consequently, in 1531, the captains from other places of origin were residing in the Ruthenian lands (19), Lesser Poland (6), Mazovia (3), the Grand Duchy of Lithuania (3), and Greater Poland, Kuyavia, and Silesia (1 each). The Ruthenian lands therefore had considerable potential to attract military commanders, mainly because of the constant border skirmishes with Moldavia and frequent Tatar attacks. The vast territories of the southeastern borderlands of the kingdom of Poland were sparsely populated but required constant surveillance, if only not to be an easily traversed territory for the enemy (Fig. 1).



**Fig. 1.** Place of origin and residence of the captains and companions of the Polish army in the Obertyn campaign of 1531 (data compiled by the authors).

It should be noted that although the Ruthenian lands, which most frequently were the arena for hostilities in the first half of the 16<sup>th</sup> century, were an ideal location not only for conducting military operations but also for training new command personnel, this does not automatically mean that representatives of noble families moving to this area did so solely in connection with their military activities. The decision to settle permanently on the southeastern border of the country could be equally influenced by family and property matters, taking up offices, or completely different reasons; participation in military activity was instead one of the consequences of relocation. However, without additional source studies, it is impossible to determine the mutual proportions and correlations of these causes; nevertheless, this does not change the fact that this was permanent migration. Perhaps the most famous examples are Mikołaj Iskrzycki and Bernard Pretwicz. Iskrzycki, who came from the duchy of Cieszyn, settled permanently at the estate of his wife Katarzyna from Jagielnica in Podolia,<sup>10</sup> while Bernard Pretwicz, also from Silesia (in 1531 he served as a companion in the ten-horse-strong retinue in Mikołaj Sieniawski's rota),<sup>11</sup> in later years the starost of Bar, and then Trembowla, became known as an excellent commander who successfully stopped Tatar attacks. The remaining captains, although permanently linked to other provinces of the kingdom of Poland, remained in the Ruthenian lands for many months out of the year commanding cavalry and infantry units. In addition to the captains, a certain percentage of cavalry companions were also identified (Table 1).

**Table 1.** Percentage of the identified captains and cavalry companions in the 1531 Obertyn campaign

	Captains	Companions	Total
<b>Total</b>	34	646.00	680.00
<b>Identified</b>	34	107.00	141.00
<b>Percentage</b>	100	16.56	20.74

Source: AGAD. ASK 19; Plewczyński M. 2012, 320–420; Author's calculations

While the identification of the captains was straightforward, it was much more difficult to identify the cavalry companions. Of the 646 cavalry soldiers recorded in the register book, we managed to determine the place of origin and residence of only 107, noting that in as many as 36 cases this information is presumed. This means that these companions did not appear in M. Plewczyński's indexes. Furthermore,

<sup>10</sup> AGAD. ASK 19, 218–221v, see: Spieralski Z. 1962–1964, 171–172; Böldyrew A. 2016b, 53–65.

<sup>11</sup> AGAD. ASK 19, 23, see also: Tomczak A. 1984–1985, 33–435.

the criterion of a companion's surname may be misleading. However, we assume that the person of interest may have been in the family circle of a soldier serving in the permanent defence. Thus, for example, Jan Pomorski, commander of a seven-horse retinue in Mikołaj Orłowski's rota,<sup>12</sup> could have been a cousin of Kacper, Krzysztof, and Mikołaj Pomorski listed in Plewczyński's index. These, in turn, presumably came from and lived in Brześć in the Kuyavia region<sup>13</sup> and so the same origin and place of residence was attributed to Jan though it was not mentioned in the index. The percentage of identified companions is not impressive, as it constitutes only 16.56%. On an absolute scale, this is – as was already mentioned – only 107 people. At the same time, this means that only so many of them appeared in the ranks of the permanent defence, and this in turn proves that the army enlisted *ad hoc* for the Moldavian expedition was based on recruitment among soldiers who did not permanently participate in the battles against the Tatars and Moldavians. As a result, our knowledge of the victors from Hvizdets and Obertyn is very limited. Also unanswered is the question of why experienced cavalry non-commissioned officers were not summoned. One might even risk the hypothesis that perhaps they did not want to accept an *ad hoc* enlistment, were unable to do so, or the constant skirmishes at the border had so severely strained the mobilisation capacity that there was no other choice but to enlist mostly new recruits. The structure of the territorial origin of the companions is also interesting (Table 2).

Despite significant shortcomings in the findings on both the soldiers' origins and residences, it is still possible to draw some preliminary conclusions from the data collected. The values presented in bold script in Table 2 show the cases in which the companions had changed their place of residence. This was proved for Kuyavia, Mazovia, Lesser Poland, Silesia, and Crimea. While the case of Janiczura (most likely a Tatar living in the Grand Duchy of Lithuania) commanding a five-horse retinue in Jan Mielecki's rota<sup>14</sup> can be omitted, we should pay special attention to the companions from Mazovia and Lesser Poland. First of all, the population of Lesser Poland was much smaller than that of the Ruthenian lands (8 to 73). Secondly, the Mazovians were a larger group than the soldiers from Lesser Poland. All those who changed their place of residence settled in the Ruthenian lands. As a result, there were 61 identified companions coming from Ruthenia and the total number of Ruthenian residents was 73. This is another indication of the specific situation of the area in question and its impact on the potential taking up of service.

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12 AGAD. ASK 19, 146v.

13 Plewczyński M. 2012, 398.

14 AGAD. ASK 19, 86v.

**Table 2.** The structure of the territorial origin of the cavalry companions in 1531

Province	Origin		Residence	
	Quantity	Percentage	Quantity	Percentage
Royal Prussia	0	0.00%	0	0.00%
Kuyavia	2	0.31%	1	0.15%
Greater Poland	8	1.24%	8	1.24%
Mazovia	13	2.01%	10	1.55%
Lesser Poland	12	1.86%	8	1.24%
Ruthenian lands	61	9.44%	73	11.30%
Lithuania	5	0.77%	5	0.77%
Silesia	3	0.46%	0	0.00%
Moldavia	2	0.31%	2	0.31%
Crimea	1	0.15%	0	0.00%
Unidentified	539	83.44%	539	83.44%
<b>Total</b>	<b>646</b>	<b>100.00%</b>	<b>646</b>	<b>100.00%</b>

Source: AGAD. ASK 19; Plewczyński M. 2012; Author's calculations

### Infantry soldiers

A summary of data from the inspection registers of the mercenary army serving under the orders of Jan Tarnowski in the summer of 1531 reveals 1,165 infantry.<sup>15</sup> This discrepancy (in relation to the commonly cited number of about 1,500 soldiers<sup>16</sup>) results from the fact that the figure of 1,500 is in fact the number of military pay rates allocated to the infantry (or what is known as 'full-time status'), while the actual number of soldiers was always less, as some veterans took double pay (*dziesiętnik* or sergeants, pavisiers, standard-bearers). To the detriment of the actual number of infantry rotas, this difference averaged 27.17% in the first half of the 16<sup>th</sup> century, 18.02% in the decade of 1531–1540, and 22.20% during the Hvizdets-Obertyn campaign alone.<sup>17</sup> In fact, 1,165 infan-

<sup>15</sup> AGAD. ASK 19, 209–229.

<sup>16</sup> See: Spieralski Z. 1962, 140.

<sup>17</sup> Boidyrew A. 2011, 86.



try soldiers took part in the expedition, of whom only 641 can be identified as far as the place of origin is concerned. This is mainly due to the fact that in the units commanded by Wojciech Polak from Leśnica and Lambert Gnojeński, the soldiers' place of origin was not recorded at all,<sup>18</sup> while in several other rotas it was recorded inconsistently.

Based on the collected data, it was established that among the 641 identified infantry, 471 were burghers, constituting 73.48% of the total number of identified infantry soldiers. As a side note, it is worth mentioning that for the entire first half of the 16<sup>th</sup> century, this indicator oscillated at the level of about 60%.<sup>19</sup> The remaining 170 identified infantry soldiers were peasants; 14 came from outside the Crown lands (12 from Bohemia, of which 4 from Silesia) and 2 from Lithuania. Among the 471 burghers, as many as 74 were identified as foreigners (61 from Bohemia, 24 from Silesia, 6 from Lithuania, 4 from the German Reich, and 3 from Hungary). Therefore, there were 397 Crown lands burghers who served in Tarnowski's army in 1531.

At first glance, there is a clear predominance of soldiers coming from the Lesser Poland region (274), who accounted for 69.02% of all identified burghers in the army, and a dominant role of the inhabitants of the Kraków voivodeship (174, i.e. 57.4%). This means that more than half of the identified foot soldiers came from just one voivodeship out of the 20 voivodeships mentioned in the compilation. Ruthenian lands are in second place with 69 soldiers (17.38%).

All veterans included in Table 3 and those whose origin could not be traced to a particular territory left their place of residence and went to war. As a result, they had a passive effect on weakening the population potential and thus the economic potential of their hometowns, while at the same time living in the Ruthenian lands and Pokuttia, changing – at least for a few months – the local demographic and, as one can assume, cultural structure. This second change in particular could have led to the emergence – even in a very rudimentary form – of the so-called cultural diffusion associated with professional military migrations.<sup>20</sup> Moreover, the movement of soldiers, even if temporary, coincided with other processes, such as the migration of inhabitants of the Crown lands to Ruthenian towns, in which in the second half of the 16<sup>th</sup> century the Polish population constituted up to 10%.<sup>21</sup> Therefore, we can assume that army migrations were one of the many elements that made up the complex picture of internal migration in the Jagiellonian state.<sup>22</sup> To some extent they corresponded to the phenomenon observed in the context of inter-state military migrations, in which

18 AGAD. ASK 19, 209–211v (Wojciech Polak of Leśnica); folio. 211v–214 (Lambert Gnojeński).

19 Bóldyrew A. 2011, 143–152.

20 Cultural diffusion is mentioned in many contexts as one of the basic phenomena that accompany the meeting of representatives of different communities, see: Nowicka E. 2000, 105–108; Parker C.H. 2010, 111; Fattori N. 2019, 2; Luzzi S. 2022, 53–54.

21 Kuklo C. 2000, 262; Kuklo C. 2006, 150.

22 On the importance of migration in the past in research, see: Pooley C.G. 2017.

foreign soldiers were readily accepted first as warriors and military specialists and then as potential settlers.<sup>23</sup> In turn, those who went to war may have been looking not only for an opportunity to earn money, but also for new life perspectives that could change the daily routine of functioning in a thoroughly agricultural society.<sup>24</sup>

Tracing regular movements of the population over several decades is beyond quantification. However, the data in Table A can be partially clarified. This is because all soldier-burghers can be assigned not only to specific provinces and voivodeships but also to the towns (ordered by their size) from which they originated (Table 4). This is where the classification of Crown towns into four categories (I–IV) – within which the first category denoted the largest cities, significant centres of manufacturing and international trade (*civites principales*) – proves extremely helpful.<sup>25</sup> Therefore, knowing the approximate number of inhabitants of the cities from the first category and the average estimated population of the other three categories, it is possible to attempt to combine the data from Table B with these values to determine, at least approximately, what kind of population loss resulted from the recruitment to the mercenary army.

Based on the above-mentioned table we primarily see that the 52 soldiers who came from Kraków constituted the lion's share of the group originating from the cities of category I (62 in total). There is also a noticeable increase in temporary migration from towns of category II and III, i.e., those most numerous in the Crown lands, but at the same time did not have high demographic density. We now assume that towns of particular categories were inhabited by quantifiable groups of people. The above-mentioned 52 infantry soldiers from Kraków, compared to the probable population of this settlement centre (10–20 thousand<sup>26</sup> – for the purpose of this paper we will assume the higher value of 20 thousand), accounted for only 0.26%. In the case of a city of this rank, which attracted a constant stream of new inhabitants, the aforementioned value seems almost negligible. In other words, Kraków could afford to lose approximately 50 men aged 20–59. The situation is slightly different in the case of towns from category II and III, however, from which 68.01% of the infantry soldiers originated. Soldiers came from as many as 88 centres of this size (an average of 3 soldiers per town). Henryk Samsonowicz estimated that these towns had on average about 2,000 (category II), 1,000 (category III), and 400 (category IV) inhabitants each, although it should be noted that these figures are underestimated in the case of towns of category II and overestimated in the case of the two lowest categories.<sup>27</sup>

23 Boldyrew A. 2016c, 59–60; Reith R. 2008, 123–142.

24 Ailes M.E. 2002, 1, 24–25, 29; Boldyrew A. 2016a, 89–93.

25 Samsonowicz H. 1979, 917–931.

26 Samsonowicz H. 1979, 929; Bogucka M., Samsonowicz H. 1986, 119.

27 Samsonowicz H. 1979, 929–930; Bogucka M., Samsonowicz H. 1986, 119–122.

**Table 3.** Territorial origin of identified infantry soldiers in the 1531 campaign

Province	Voivodeship	Number of soldiers	Total	Percentage
Royal Prussia	Chełmno	1	2	0.50%
	Pomerania	1		
	Warmia	0		
Kuyavia	Brześć	0	2	0.50%
	Inowrocław	2		
Greater Poland	Kalisz	12	31	7.81%
	Łęczyca	7		
	Poznań	7		
	Sieradz	5		
Mazovia	Dobrzyń	0	19	4.79%
	Mazovian	11		
	Płock	1		
	Rawa	7		
Lesser Poland	Kraków	174	274	69.02%
	Lublin	34		
	Sandomierz	66		
Ruthenian lands	Bełz	14	69	17.38%
	Chełm	5		
	Podolia	1		
	Ruthenia	49		
<b>Total</b>		397	397	100.00%

Source: AGAD. ASK 19, 209, 229; Author's calculations

**Table 4.** Origin of soldiers-burghers in 1538 from towns of four categories

Province	Voivodeship	I category		II category		III category		IV category		Total		Total by Province		
		A	B	A	B	A	B	A	B	A	B	A	B	
Prussia Royal Prussia	Chełmno Prussia	1	1							1	1			
	Pomerania					1	1			1	1	2	2	
	Warmia													
Kuyavia	Brześć											2	2	
	Inowrocław			1	1			1	1	2	2			
Greater Poland	Kalisz			8	4	4	3			12	7			
	Łęczyca			4	2	1	1	2	1	7	4			
	Poznań			7	3					7	3	31	18	
	Sieradz			4	3	1	1			5	4			
Mazovia	Dobrzyń													
	Mazovian			6	3	4	3	1	1	11	7	19	11	
	Płock							1	1	1	1			
	Rawa			6	2			1	1	7	3			
Lesser Poland	Kraków	52	1	55	9	39	14	28	9	174	33			
	Lublin			15	1	10	1	9	3	34	9	274	67	
	Sandomierz			18	6	44	16	4	3	66	25			
Ruthenian lands	Bełz					14	1			14	1			
	Chełm			1	1	2	2	2	1	5	4	69	21	
	Podolia			1	1					1	1			
	Ruthenia	9	1	9	3	15	6	16	5	49	15			
<b>Total</b>			62	3	135	39	135	49	65	26	397	121	397	121

Comment: Column A – number of soldiers-burghers; Column B – number of towns in the category/categories

Source: AGAD. ASK 19, 209, 229; Author's calculations

From 9 category II towns located in the Kraków voivodeship, 55 soldiers joined the army. Assuming that the towns of category II had an average population of around 2,000 each, it can be considered that these 55 soldiers came from a group of around 24,000 inhabitants, i.e. constituting only a small percentage of the population (0.23%). Although this calculation shows a certain regularity, it is far from average and, on the scale of a town smaller than Kraków or Lviv, does not fully reflect reality, since we must remember that men aged about 20–59 years were only a part of the total number of the 24,000 inhabitants. Unfortunately, there is no data to establish the sex and age structure for the population of a town of this size and thus to quantitatively separate potential recruits.<sup>28</sup> With some reservations, we can assume that in small towns men aged 20–59 years constituted a group of 25.22%.<sup>29</sup> Therefore, in order to obtain the correct estimation of the loss of men joining the army in this case, we must once again recall the data presented in Table 4 quoted earlier in this paper. Thus, soldiers-burghers from category II towns from the Kraków voivodeship accounted for 0.91% of the population. This does not seem like much, but we must remember that the populations of smaller towns also had a lower chance of rebuilding their population potential. Furthermore, such attrition occurred regularly every few years, and so had far-reaching consequences in the long term, especially in category II–IV towns.

In conclusion, we want to emphasise strongly that the estimates presented here are not yet final findings. The values and indicators presented in this paper are the result of a calculation based on several assumptions/parameters. The first assumption is the estimated population size of category II–IV towns, the second is the sex and age structure of the inhabitants of these towns, and the third is the determination of the size of the population of men of working age. In the case of obtaining new premises, each of these three model value variables can be substituted independently of the others, which will also affect the outcome.<sup>30</sup> In this paper, however, we are primarily interested in showing a certain model on the basis of which one can attempt to create a numerical and statistical description of the phenomenon in question.

28 The best documented and at the same time the closest chronologically data concern only the late 17<sup>th</sup> century and come from the town and parish of Miasteczko from 1695, see: Borowski S. 1975, 125–198. It remains to be debated to what extent Miasteczko, or also Dobre Miasto analysed by S. Borowski, correspond in size to a 16<sup>th</sup>-century Crown town of category II. However, more complete data, for example on Wieluń, come from 1791, see: Kuklo C. 1998, 49 *et seq.* Aware of the limitations of relying on such temporally divergent material, we assume that urban communities in the Crown lands in the pre-partition era remained in the first, high-stationary phase of demographic transition, which implies relatively low dynamics of demographic change in the long-term perspective (excluding, of course, local fluctuations, for example during major wars).

29 See: Kuklo C. 1998, 49 *et seq.*

30 For example, slightly different values of individual indicators for establishing the sex and age structure of urban society in the pre-industrial era are given by Coale A.J., Demeny P., Vaughan B. 1983, 105–154 with subsequent discussion, see, *inter alia*, Preston S.H., McDaniel A., Grushka C. 1993, 149–159; Woods R. 2007, 373–399. Another age range (men aged 15–55 years) for similar estimates was also adopted by Bachrach D.S. 2014, 262, see: Bachrach D.S. 2012, 234.

To sum up this thread, it is worth emphasising that the whole process discussed here clearly indicates that the Hvizdets-Obertyn campaign most probably had no major migratory and demographic effects on the society of the kingdom of Poland, although the migration itself (if only temporary) remains a fact. When juxtaposed with the conclusions drawn from a similar analysis based on the enlistment for the Moldavian expedition in 1538, the situation discussed is downright peculiar. In 1538, the distribution and scale of demographic shifts looked much less favourable for all urban centres from which infantry soldiers came.<sup>31</sup>

It should be emphasised that with regard to the year 1531, the differences in the origin of infantry and cavalry soldiers are surprising. While in the case of infantrymen a certain model, common to the discussed era, is reproduced, based on recruits primarily from Lesser Poland and the Ruthenian lands, the cavalry was based mainly on residents of Crown Ruthenia and Mazovia (which had a slight advantage over Lesser Poland). The surprising prominence of Mazovians in the cavalry, since Mazovia was generally poorly represented in the mercenary army, may also be a manifestation of the previously signalled phenomenon – that a significant part of the cavalry soldiers probably did not have any previous connection with the popular defence system. Thus, their enlistment may suggest that Tarnowski's army was gathered in extraordinary conditions and based on new recruits – as if the 'old' officer and non-commissioned officer cadre were unable – or unwilling – take part in the war. In a way, this would correspond to the peculiar over-representation of infantrymen from Lesser Poland and the average presence of soldiers of this formation coming from Ruthenia. Simply put, the rush in which the army was gathered forced the commander to reach for the human resources immediately available. There was no time for long journeys on foot to assembly points. As it turned out, this haste was still insufficient, since the inspection of seven infantry rotas (out of ten) ended on 1 August in Rohatyn, and Zbigniew Słupecki's cavalry regiment (Polish: *hufiec*) took over Pokuttia on 2–4 August. Tarnowski was unable to move the infantry in such a short time (about 105 km in a straight line from Rohatyn to Hvizdets).<sup>32</sup>

Another interesting topic to explore would be the issue of potential links between soldiers and the captains. It can be assumed that most of the soldiers in a rota came from the same land as the captain, and this assumption can be provisionally verified on the basis of the material collected. For this analysis, we selected two rotas, in which the actual identification rate exceeded 80%<sup>33</sup> – the infantry rotas of Feliks Ziemicki (83.33%)

31 As analysed by the authors of this paper.

32 For more information see: Boldyrew A. 2023.

33 The actual identification rate means identification not only in terms of a residency of a given town or village, but also the assignment of a settlement centre to a specific land and province. A good example of this distinction is Andrzej Bylicki's rota, in which the identification rate is 81.08% in relation to the town-village division, but the actual identification rate is only 64.86%, because among the soldiers identified in the basic degree 6 came from a place whose location was impossible to determine.

and Hieronim Noskowski (80.70%). In the case of Feliks Ziemicki's rota, 36.11% of the soldiers came from the Ruthenian voivodeship, from which the captain himself came and where he lived. We could assume that there is a consistency here, except that the remaining veterans came from the Poznań, Mazovian, and Płock voivodeships, three Lesser Poland voivodeships and Bohemia, while 6 could not be assigned to any area. This is a rather large and chaotic scattering which, together with the small absolute basis of the calculation, takes away much of the quoted argument in favour of the claim that the captain most often selected his soldiers among his countrymen. In Hieronim Noskowski's rota, 50 soldiers were associated with the Kraków voivodeship (43.86%). This is a much higher rate than in the case of the previous unit. Noskowski, on the other hand, came from the Poznań voivodeship but lived in the area of the duchy of Oświęcim, i.e. – considering its geopolitical situation – in fact in the same region. However, as in the case of Ziemicki, the remaining soldiers came from Greater Poland, Mazovia, the other two Lesser Poland voivodeships, Ruthenian lands and from abroad. This preliminary survey – if one can rely on its results – does not confirm the assumption that the majority of soldiers came from the same land/voivodeship as the captains. In a sense, however, it also does not contradict this supposition, as evidenced by a cursory examination of other units. For example, 35 soldiers (28.23%) in Stanisław Ożarowski's rota (where the actual identification rate is 74.19%) came from the Lublin voivodeship, i.e. the same one from which the commander came and lived. At the same time, as many as 32 soldiers remained unidentified in this unit (25.81%). Thus, their possible identification may completely change the result of the count.

This concluding remark suggests that the assumption that a captain would summon most of his soldiers from among his neighbours is not entirely true. Only further detailed source studies on the structure of the ethnic and territorial origins of the mercenary soldiers of the kingdom of Poland can facilitate our understanding of the conditions of the 16<sup>th</sup>-century military service itself as a phenomenon, but also of the circumstances associated with it, such as the enlistment process, links between the recruits and their commanders, etc. One of them is undoubtedly the issue of the command and the ranks and therefore, for example, its impact on soldiers' morale, willingness to take on risky challenges and, finally, the ability to maintain discipline during a military action. On the other hand, as if to provide a backdrop to these issues is the question of the movement of the soldiering masses throughout the country, taking into account the network of acquaintances, neighbourhood, and sense of local community, i.e. *de facto* basing the army on close-knit teams who knew each other and had common (not only military) experience, or selecting recruits in a completely random and disorderly manner. Was the sporadic appearance of captains and soldiers from Royal Prussia and the slightly more frequently recorded inhabitants of Kuyavia a result solely of the distance that had to be covered on the way to the inspection site of the troops, or was it rather a lack of interest in the fate of the south-eastern frontiers

of the Crown? How strong, then, was the sense of community and identification with the state among the inhabitants of the Crown lands? These are open questions formed on the basis of an analysis of a certain fragment of the reality of the Jagiellonian monarchy. However, they seem important, especially at a time when the late medieval monarchy was transforming into an early modern one.

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