FIRES IN THE TOWNS OF THE KINGDOM OF POLAND IN THE 16TH-18TH CENTURIES AND THEIR ECONOMIC, SOCIAL AND CULTURAL CONSEQUENCES

A Summary

The monograph is one of the two parts of the publication, whose first part was a catalogue published in May, 2020 containing information on nearly 5,000 fires in Polish and Lithuanian cities and towns between the $16^{\rm th}$ and $18^{\rm th}$ centuries. The data was used to compile numerous lists and tables which will be analysed in the subsequent parts of this dissertation.

The aim of this pioneering work is to describe fires in the early modern towns of the Commonwealth of Two Nations in a synthetic way. The conflagrations that destroyed Polish villages have been deliberately omitted, and the in-depth analyses concentrate on the chosen period and do not refer to well-documented medieval fire disasters. As the consequences of the fires were the same for the city dwellers regardless of their origins, this work explores conflagrations in the times of war and peace.

The dissertation covers the period from the beginning of the 16th century to the end of the Polish-Lithuanian Commonwealth in 1795. Its explores almost the entire area of the Commonwealth of Two Nations with the exception of fieldoms (the Duchy of Prussia, Livonia, Moldavia) and the regions that belonged to the Kingdom of Poland and the Grand Duchy of Lithuania for a short time (Lauenburg and Bütow Land, Smolensk and Chernihiv Voivodeships, Silesian borderlands). The lands lost by Poland after the First (1772) and the Second (1793) Partition have been analysed until October 1795.

The books consists of the introduction, four chapters and the conclusion. Three chapters have been written by Andrzej Karpiński, the fourth one by Elżbieta Nowosielska. Chapter One, "The Causes of Fires," discusses the typology of Polish and Lithuanian towns, their development and the causes of their regress, the size and the location of towns and city agglomerations. It also describes the factors conducive to conflagrations and the various reasons for them (wars, invasions, arsons, so called lighting fires, careless handling of fire).

Chapter Two, "The Course of Disasters," consists of two parts. The first part discusses the number of fires in towns, their extent, frequency, duration and the involvement of people in fighting it. The second part shows the most tragic fires in selected Polish and Lithuanian cities and towns (Cracow, Poznan, Warsaw, Vilnius, Lviv, Gniezno, Piotrków Trybunalski, Kalisz, Zamość, Przemyśl, Grodno among others).

 $^{^1}$ Fires in the Towns of the Kingdom of Poland in the $16^{th}-18^{th}$ Centuries and Their Economic, Social and Cultural Consequences, Warsaw 2020.

Chapter Three, "The Consequences of the $16^{th}-18^{th}$ Century Fires in Polish and Lithuanian Towns," analyses demographic, socio-religious, political and economic results of the disasters. Most information relates to economic consequences of the fires in the nationwide, local and individual aspect. It also discusses the changes in the urban, architectural and cultural spheres resulting from fires.

Chapter Four, "Fire Protection," is devoted to a detailed description of fire protection legislation and the measures, which were to prevent conflagrations effectively. These included, among others, the formation of appropriate fire services, enforcing new building regulations in cities and storing fire equipment. In an attempt to see the real consequences of demanded reforms, Polish solutions are juxtaposed with the European fire prevention legislation.

The scholarly apparatus of the monograph, whose integral part is the above-mentioned catalogue, consists of: an extensive, Oxford style bibliography, footnotes, an English summary and indexes (subject and town names index), illustrations, lists and tables.

The dissertation is largely descriptive, using wherever it was possible, the results of quantitative research. Comparisons, pro and retrogression were applied more sparingly, although the authors also relied on archaeology, climatology, the history of art and literary studies.

As the authors wanted to make the most efficient use of the available resources relating to the First Commonwealth within the limit of a small study, the information concerning different types of fire disasters in Europe was deliberately reduced.

As for the resource material, it is immensely varied and scattered. Most sources give information regarding fires and their consequences. This is why the research was conducted in numerous Polish, Lithuanian, Belarussian and Ukrainian libraries and archives, among others, the Central Archives of Historical Records in Warsaw, the National Archives in Krakow, the State Archives in Białystok, Lublin, Poznan, Przemyśl and Rzeszów, Central State Historical Archives of Ukraine in Kyiv and Lviv, Lithuanian State Historical Archive in Vilnius, the National Archive of the Republic of Belarus in Minsk, the Princes Czartoryski Library in Cracow, the Scientific Library of the PAAS and the PAS in Cracow and the Library of the Lithuanian Academy of Sciences in Vilnius. Moreover, the authors used numerous series of source materials and many unpublished works.

The overview of the materials should commence with the inspection of about one hundred burnt cities and towns of the Grand Duchy of Lithuania, conducted by Komisja Skarbowa Litewska (the Lithuanian Treasury Commission) in 1775–1790. The documents describe in detail municipalities destroyed by fire, listing burnt properties and damages suffered by the owners of buildings, goods and movables. So called *iuramenta* (oaths) are of similar albeit more general character: among others the Poznan ones from 1705–1763, prepared by Komisja Skarbowa Poznańska (Poznan Treasury Commission) and many protests in magistrates' court books.

Useful information concerning fires and their consequences can be found in printed inspections of the royal estates from the $16^{th}-18^{th}$ centuries as well as in parliament acts and instructions and in so called *lauda* (acts passed by local parliaments). Exemptions found in royal prerogatives and ordinances of private owners of towns also include information on municipalities destroyed by fire and discuss fire prevention orders. Fire prevention ordinances, laws passed by city councils and the legislations introduced by the 18^{th} century *Boni Ordinis* Commissions advise how to prevent fires.

Another source of valuable information are surviving city council registers: advisor, juror, mayor and economic, where one can find full descriptions of big fires as well as information regarding city investigations into causes and perpetrators of disasters. Such sources mention a trade in burnt properties, visions of mansions and houses destroyed by fire and the results of city inspections of fire prevention recommendations. City criminal records and council registers report on trials of arsonists whereas legal codes list punishments for such offences.

An important source of information on fires are various diaries and memoirs as well as monastic and town chronicles. Their authors write about their own experiences of the best known conflagrations.

As for literature works, the detailed descriptions of two Vilnius fires from 1748–1749 given by a Vilnius resident, Bazyli Bonifacy Jachimowicz, are of special importance. Occasional, rhymed texts (signed or anonymous) referring to the fires in Stradom, Jarosław, Lviv, Vilnius and Dubiecko are also note-worthy.

Other sources used in this work are church inspections, correspondence, the lives of the saints, *miracula* (collections of miracles), the press, calendars and economic and medical guides as well as iconography, cartography and surviving cultural monuments.

As for Polish specialist literature, with the exception of the issues concerning fire prevention (the older work by Franciszek Giedroyć, the newer by Maurycy Zajęcki), there are no synthetic treatises, since neither Antoni Walawender's detailed study nor Mirosław Nagielski and his disciples' joint publication on damage inflicted in the Second Northern War (1655–1660) can be considered as such. The same refers to a valuable joint publication *Poland in the Second Northern War* and comprehensive studies by Maurycy Horn and Andrzej Gliwa, which discuss Tatar military incursions into Red Ruthenia in the 17th century. Of course, all these listed studies proved particularly useful, especially with reference to the fires caused by wars. Special mention must be made of several articles and studies whose authors discuss either a particular fire or all fire disasters that occurred in a town (e.g. Bochnia, Chełm, Jarosław, Lublin, Radymno) or a region (Podlachia, Grodno Voivodeship).

As stated above, it was possible to find information on more than 4,700 fires in Polish and Lithuanian towns in the sources and studies. Detailed analyses show that conflagrations were advanced by flammable materials used in buildings (wood, shingles) and thatched roofs. In spite of numerous recommendations and fire regulations, with the exception of towns in Royal Prussia and the biggest cities in the Polish-Lithuanian Commonwealth, not much changed until the end of the 18th century. Wood and shingles used in construction were easily accessible and relatively cheap thus enabling the owners of the destroyed properties to rebuild them fast.

Town fires were also advanced by high-density housing, especially in Jewish quarters, which made the spreading of fire easier and extinguishing it much more difficult. Many conflagrations were also caused by: faulty construction and conservation of chimneys, stoves and hearths; storing flammable materials such as straw, hay, linen, gunpowder in houses or shops; lightning streets with torches or candles; workshops or factories using fire located inside the city walls (breweries, distilleries, bakeries, smithies); poor condition or lack of water supply systems; not enough fire equipment; no fire services and the common use of fire in everyday life.

Even though local and state authorities and private owners of towns paid particular attention to all these factors, the situation hardly changed.

Another factor which facilitated fires regardless of human activity was climate: prolonged droughts, extremely hot summers, thunderstorms and wind carrying around flames in a burning town.

The causes for the 16th–18th century fires were varied. The biggest number of disasters was connected with wars waged by the First Commonwealth at that time and with destructive Tatar military incursions. In the case of war fires, there were attempts to destroy the rear of the attacked enemy by groups of arsonists and conflagrations caused by fights or withdrawals of the troops. Setting fire to the suburbs of a town by its defenders to hinder enemy attacks also belongs to this category. There are well-known cases of using arson as blackmail in order to extort tribute or ransom, or fires set by steppe nomads to spread panic among local population. Polish and Lithuanian towns were burnt by all neighbouring people and even allies: among those responsible for war conflagrations there were Tatars, Kozaks, Russians, Swedes, Teutonic Knights, Brandenburgians, Transylvanians, Moldavians, Vlachs, Turks and Austrians.

Fires that did not result from military activities are treated separately. Although there were many, they did not outnumber those caused by wars. Some of them resulted from religious conflicts and ended in burning protestant churches or more seldom catholic churches or monasteries, others facilitated crimes and theft. Numerous fires were also caused by personal feuds or revenge; in some cases mental illness of a pyromaniac-arsonist is thought to be the reason.

The arsonists usually belonged to lower social classes: they were servants, farmhands, the dregs of society and professional criminals. A separate category comprised students and pupils who were extremely active in religious conflicts. Although both men and women set fires deliberately, men dominated in criminal gangs which committed thefts during started conflagrations. Fires set by women were caused by revenge, personal feuds or mental illness. There are not many cases of serial arsonists punished as severely as those who attempted or committed arson once. Municipal and land law punished such crimes with exceptional harshness: the perpetrator was to be burnt. Sometimes the arsonist was beheaded first and then his corpse was burnt. Only in the late 18th century such punishment was slowly abandoned and arsonists were sentenced to prison or work in forced labour houses.

Another cause of fires were lightning discharges – thunderstorms. Although they usually destroyed individual buildings (town houses, churches), there are cases when the whole town burnt as a result of a thunderbolt.

Surviving sources show that many conflagrations were caused by human carelessness. People acted thoughtlessly in workshops, factories, houses and outbuildings while cooking meals, using candles and torches in attics and stables. Fires were also set on by left Sabbath candles, fireworks and when salutes were fired during church or secular celebrations. In many cases the disasters were spelt by careless smoking, drinking, games (so-called "key shooting" when a sulphur or gunpowder was put into a key) and chemical experiments. The Jews living in towns and soldiers stationed in them were usually blamed for this careless conduct.

Town authorities generally tried to find the reason for particular disasters: if an unintentional perpetrator was caught, he was duly punished with a fine, forced labour, forfeiture of property or expulsion from a town. There was also a system of punishments for citizens not conforming to fire regulations.

In order to describe the number of fires in the chronological and territorial order, their range and frequency, numerous lists and tables were used. Their analysis shows that in the 16^{th} century 1,065 (22% of the total number) were found, in the 17^{th} century 2,111 (44,6%), in the 18^{th} century 1,555 (32,9%). This proportion is understandable in view of numerous war fires in the 17^{th} century.

Most information on particular conflagrations relates to seven biggest cities of the First Commonwealth: Poznan, Cracow, Warsaw, Vilnius, Lviv, Lublin and Gdansk. Here the proportion is different: 25,9% of all fires in the 16th century, 29,9% in the 17th century and as many as 44,2% in the 18th century. It is the result of more detailed records on the 18th century fires. Although the fires in Poznan constituted 69,1% and in Warsaw 52,4% of all fires in the 18th century, 70,3% of fires in Gdansk and 46,2% in Cracow broke out in the 16th century.

There were a dozen or so or several dozens of fires in many other towns. Obviously, these are not all conflagrations which happened in them, although the worst disasters were taken into account.

Similarly to the problems encountered when dating particular fires which was often based on the later sources than the disaster itself (inspections, tax exemptions, local parliaments' resolutions), the data referring to the size of a specific conflagration was frequently inaccurate and contradictory. Nevertheless, taking into account the number of burnt houses (respectively in small and big towns) or (following Antoni Walawender's opinion) the number of years during which inhabitants or fire victims were exempt from paying taxes, the disasters were divided into several categories. Out of nearly 2,900 described fires, as many as 1,053 (37%) were qualified as cataclysms during which at least half of the town was burnt and the tax reduction was offered for eight or more years. There were 992 (34,8%) very small fires that destroyed several houses at the most; other conflagrations were of average or big size.

The scale of the analysed fires fluctuated, although out of 649 disasters for which it was possible to establish the number of destroyed housed in as many as 419 (64,6%) from 10 to 60 houses were burnt. There were only 48 (7,3%) disasters in which more than 200 houses were destroyed. This data also reflects the size of particular towns as for the smaller ones even the

loss of several dozens of buildings was catastrophic. When the tax reductions are analysed, the extent of the fires looks different although a certain bipolarity can be seen. 283 (37,1%) victims were exempt from paying taxes for 8 or more years, whereas 211 (27,6%) received tax reduction for two to four years.

To estimate approximate losses in buildings, burnt outbuildings were added to the number of destroyed houses and mansions. In many cases the burnt outbuildings outnumbered houses. Several examples are provided to show how many houses could have been destroyed or damaged while fighting the fire. Only when are these losses added up, the extent of the particular fire can be seen.

Important public buildings were also destroyed – many of them several times – in the fires. During the wars castles were burnt and it is extremely difficult to find a church, monastery, protestant church or synagogue which in the $16^{\rm th}-18^{\rm th}$ century was not destroyed by fire at least once. Town houses, hospitals, schools, bath houses and even market stalls or butcheries were also affected by conflagrations.

Suburbs were also in a tragic situation as they were damaged more often than towns themselves. It was a consequence of military actions, when their own or enemy troops destroyed them. Also, wooden buildings which dominated suburban areas were more at risk of fast spreading fires.

The analysis of frequency of fires which broke out in the same town in the same year shows that usually there were two-four fire disasters recorded in the resources and studies. The fact that there could have been many more such fires is confirmed by the *Little Poznan Chronicle of the Carmelite Order*, which listed 21, 10, 15 and 18 fires for the years 1765–1768 respectively. The monastery chronicler noted down all incidents with fire, most of which involved singular chimneys or buildings.

How long such elementary disasters lasted depended on the more or less favourable circumstances. Sometimes the whole town was on fire in less than an hour, some other time the conflagration lasted very long. Mining towns such as Wieliczka and Bochnia could be on fire for several months. Most often the fires raged for several or dozen or so hours, which was enough to destroy the town completely.

And how did a time of the day, week or month influence fires? Out of 1,707 fires for which it was possible to determine the month when they broke out, most happened in spring: April (175 - 10,3%), May (202 - 11,8%) and June (206 - 12,1%) or in October (207 - 12,1%). Although is difficult to explain this phenomenon, the situation might have been caused by spring droughts and possibly by Tatar incursions. Relatively few fires were recorded in January and December, when inhabitants stayed in their houses and perhaps were more careful when using fire.

Conflagrations usually occurred on Fridays, Saturdays and Sundays – the days of religious holidays and rest. The examined data shows that the most dangerous fires broke out between 10 p.m. and 4 a.m. They constitute 54,5% of all recorded events. Numerous examples reveal that also fires happening during the day resulted in destructions of whole towns and cities.

The work analyses the biggest Polish and Lithuanian cities: Warsaw, Vilnius, Gdansk, Lviv, Cracow, Torun, Poznan and a dozen or so of smaller towns for which there are available sources: Wieliczka, Bochnia, Grodno, Sandomierz, Kalisz, Gniezno, Chełm, Zamość, Przemyśl, Piotrków Trybunalski, Nowy Sącz, Jarosław and Leszno. In their case, the authors concentrated on describing the biggest fire disasters which occurred in the towns. It is interesting that many of these cataclysms happened in the 18th century.

The consequences of town fires were various. Contrary to, for example, epidemics, they caused relatively small demographic losses. Although in big conflagrations many people were killed: burnt, buried alive or suffocated by smoke, usually most fire victims escaped death. The wounded and burnt were taken care of, the dead were buried.

A more serious consequence was migration of big groups of fire victims, who lost all their possessions in the fire. It was mostly the Jews who would leave destroyed towns and settle

down somewhere else. Private owners of towns for whom it meant reduction in their income tried to curb this process.

Contrary to demographic consequences, the economic ones were extremely serious. The burnt houses, mansions and numerous outbuildings were worth tens and hundreds of zlotys. Movables, precious goods, bonds, pawned items, cash and livestock should also be added to the list, not to mention destroyed public buildings such as churches, monasteries, town houses, castles, etc.

Hundreds of harmed people: the owners of burnt properties and their families, bailiffs, merchants and tradesmen became impoverished from one day to the next. It posed an enormous challenge for the owners and town authorities.

What is more, tax revenues declined and the destroyed buildings had to be rebuilt. Another problem that had to be confronted was a big number of empty spaces left by burnt houses, which would not be developed for tens of years.

Destroyed town charters and documents, advisor, juror, mayor and land records, bills, guild records were extremely difficult to reconstruct; sometimes burnt towns would lose their municipal status.

The losses of particular merchants and craftsmen in buildings, goods and movables were substantial. Sometimes the fire would destroy not only the goods of the owner, but also those belonging to other merchants, who kept or gave him their stock for sale. It resulted in many court cases.

On the other hand, a trade in burnt properties would start, new buyers purchased or rented the sites of the fires. It led to major changes in ownership, when some people lost, others became rich.

To sum up, it should be said that a disastrous fire always resulted in decline of many crafts, at the same time spurring building trades to develop. Local and, to some extent, national trade also suffered.

Frequent fires also reduced state revenue, which was the consequence of long-standing tax reductions granted by the monarchs or local parliaments. The owners of private clerical or aristocratic town were also forced to issue tax exemptions.

Conflagrations strongly influenced social and religious relations in towns. On the one hand, they stimulated local authorities, neighbours and even inhabitants of more distant regions to help the victims of fire, on the other hand, they led to conflicts. The latter could be clearly seen in Polish-Jewish relations. The Jews were generally accused of careless behaviour, causing many fires and hindering extinguishing them in Jewish quarters. The Jews, in turn, accused the Christians of robberies committed on the pretext of fighting the fire. Such conflicts provoked numerous mutual complaints to the king and sometimes resulted in temporary removal of the Jews from a particular city or town.

It is worth mentioning that all fires regardless of whether they were deliberate or not, made robberies and thefts of unattended goods and movables easier. People caught stealing were punished by death; less severe punishment was administered to those who did not take part in extinguishing fires.

Another phenomenon connected with fires was a rise in religiosity, which could be seen in belief in God's interventions. God was perceived either as a Creator punishing people for their sins, or as a Saviour, who defended them against fire. He was helped by many patron saints of fire: Saint Florian, Saint Lawrence, Saint Stanislaus Kostka, Saint Agata, Saint Blaise and Saint Barbara. To thank them for help, new churches, chapels or altars were built, paintings done, sculptures made and monuments erected. To prevent fires special masses and processions were organized.

On the other hand, a risk of fire and a terrible fear of a cataclysm resulted in superstitions: more people believed in them and looked for scapegoats, who usually were strangers, vagrants and sometimes alleged witches.

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The dissertation shows to what extent fire disasters influenced architecture, urban development and culture of the time. Fires partly or completely destroyed gothic, renaissance and early baroque buildings. Burnt houses, mansions town houses and churches were replaced by new ones built in accordance with current trends. When private towns and cities were completely destroyed, their owners rebuilt them using more modern urban planning. Narrow streets with many little houses were replaced with wide avenues and much taller buildings.

We cannot underestimate the influence of fires on various fields of architecture, art and literature, which is evidenced by the aforementioned churches, chapels and sculptures devoted to saint patrons of fire as well as plans of the burnt cities and their reconstruction projects, paintings depicting towns on fire, drawings showing firefighting and fire equipment. There are also numerous panoramas showing burning towns or places (town houses, churches), which give evidence of military actions. In literature there are mainly rhyming occasional works commemorating big fires of, among others, Dubiecko, Jarosław, Cracow or Vilnius; threads devoted to fire disasters can also be found in other literary works, church songs and prayers.

The closing chapter discusses fire safety regulations in the First Commonwealth. It explores the development of the relevant legislation, which called for various safety measures since the 16th century. Many recommendations concerned eliminating factors which facilitated spreading fire and organizing town fire services. Such organisations usually included magistrates responsible for fire protection and guild members supplying water or destroying damaged buildings. A very important part was played by different categories of town servants and watchmen, whose responsibility was to observe if inhabitants were careful with fire and chimney sweepers cleaned hearths, stoves and chimneys properly and regularly. Town trumpeters were obliged to inform people about the fire. The inhabitants themselves were also expected to act if a fire started. Standing by idly, avoiding or hampering a rescue operation was judged harshly and often punished.

Much space has been given to stocking up on fire equipment and its typology, particularly new, modern fire hoses, buckets, hooks, ladders, fire hooks, etc.

Unfortunately, even if all the detailed fire recommendations were adopted, it often turned out that there was not enough fire equipment or it was faulty. The organization of fire actions also left much to be desired. This is probably the reason why fires destroyed whole town districts even in the second half of the $18^{\rm th}$ century. Major changes occurred in the $19^{\rm th}$ century, when professional fire brigades were formed and flammable building materials were less frequently used.

The causes, course and consequences of the 16th-18th century fire disasters discussed in the monograph showed how important this elementary disaster was in the life of inhabitants of the First Commonwealth at the time. Many important components of fires were explored and the authors indicated what issues should be analysed and decided. Studies investigating the situation in little towns and in the country, which would support the theses included in this dissertation, would be of immense value.

Translated by Bożena Lesiuk