

Dying of the Plague in the City: A Series of Standardized Datasets of the “Protocol of Plague Deaths” from Hermannstadt, 1738-1739

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Abstract. As opposed to Western Europe, in East-Central/Southeastern Europe the plague still raged throughout the eighteenth and nineteenth centuries. The 1738-1739 plague, which hit the Southeastern provinces of the Habsburg Empire, was instrumental in designing and implementing successful quarantine measures to prevent the ulterior spread of this disease from Ottoman territories during wartime. Nevertheless, very little quantitative substantial work on the impact of plague in these areas has been carried out, owing to inaccessibility of archival sources, limited information concerning population numbers, and the dearth of fundamental data-driven research aiming at creating datasets suitable for wide-scale, comparative research. The current paper seeks to remedy this gap by describing the creation and contribution of a dataset stemming from a historical plague register, kept by the urban authorities of the city of Hermannstadt/Sibiu, between 1738 and 1739. This source chronicled all deaths due to plague which occurred in the city, providing detailed social-economic information at individual, household, and neighborhood level. Standardized datasets were created to enable analysis of plague events recorded per household, as well as individual deaths, and were deposited on the public repository Zenodo (Sorescu-Iudean 2025a).

Keywords: plague, eighteenth century, urban history, historical epidemics, demographic impact of epidemics

1. Background and context of the research project

The 1738-1739 wave of plague was one of the most severe to strike the Habsburg provinces of Transylvania and the Banat during the 18-19th centuries. In Transylvania, some 41,622 individuals perished during this catastrophic epidemic, while an additional 6,632 contracted the disease but managed to survive it (Lenghel 1930: 16). Over 2% of the deaths counted

in province-wide official sources occurred in the capital city of Hermannstadt (Sibiu), thus making it a fertile ground for further historical examination.

Part of the so-called “Second Pandemic”, the 1738 plague was brought on by the war waged by Russia and the Ottoman Empire, which the Habsburg Empire also entered starting 1737. Thus, the movement of armies across borders and battlegrounds allowed the plague to spark firstly in neighboring Romanian principality of Moldova, where the disease was first attested in December of 1737, but where “the dying lasted only briefly, for about a month” (Grigoruță 2017: 51). In January of 1738, the Habsburg administration in Banat received news of the emergence of sporadic plague cases in the Transylvanian districts of Brașov (Kronstädter Distrikt) and Făgăraș (Fogarasch).

Mixed commissions to implement measures against the spread of the plague as well as to monitor its spread were established: one functioned in Kolozsvár, and another was created in Sibiu, by order of the provincial government, at the time in refuge in one of the nearby villages (Lenghel 1930, 18-19). These joint provincial-urban authorities created serial, comprehensive records detailing the progress of the plague in the areas under their surveillance. Apart from Lenghel’s data-based inquiry into the sources created in plague stricken Kolozsvár, which, although dated (1930), offers numerous insights into how the spread of the epidemic was tackled by the urban authorities, other quantitative studies based on data extracted from Transylvanian archival material related to the plague have yet to be published. Given the profound impact of the plague in Hermannstadt and the existence of highly detailed, granular records of the disease’s spread throughout the city, an in-depth examination of this source seemed promising from the vantage point of historical epidemiology and historical demography.

The processing of the protocol-register of plague kept in Hermannstadt into a data format provides a source of data from a European region that is seldom drawn into wider comparative work on historical epidemics that approaches the issue from a quantitative viewpoint. Featuring heavily in the historiographic discourse on epidemics in economic and social history, as well as in historical demography, remain Northern, Western and Southern European regions. It is primarily the extensive source material documenting how the plague affected local societies in Italy, the Netherlands, or England in a differentiated fashion that has been processed by historians, sometimes over the course of several decades, to enable analyses that transcend facile descriptive accounts focusing solely on mortality. This study – geared foremost to present the main plague death register of Hermannstadt kept during the

1738-1739 outbreak and how it was structured into a series of interrelated datasets – is hopefully a first step to remedy this immense gap.

An additional incentive to translate this source into a standardized, analysis-ready dataset stems from recent work into the spread of historical epidemics, the differentiated mortality they engendered on account of individuals' social-economic status (Alfani, Bonetti, Fochesatto 2023; Muurling, Riswick, Buzasi 2021) and their impact on social and economic inequality (Bailey 2021). It also aims to add to the growing discussion of how the plague impacted more than individuals and localities, by restructuring information so as to be able to examine mortality within households, a unit that is not always possible to discern or analyze in similar kinds of contexts (Cohn and Alfani 2007).

This process followed to a certain extent the way in which information on individuals from other contemporary sources has been processed in already extant databases, such as the *Probate Database of Transylvania*, in order to facilitate comparisons and further linkage that would enhance purely demographic analyses.

2. Data and source documentation

2.1. Source structure and content

The main source of the dataset is the “Plague protocol” (*Pest Protocol*) of Hermannstadt¹, where the Sanitary Commission (*Sanitäts Commission*) in the city kept a detailed, daily record of all plague cases within the capital and its surroundings between the 21st of June 1738 and the 6th of March 1739.

The protocol comprises four major sections. The first several folios contain information on measures taken by the Sanitary Commission to prevent the spread of plague, including the appointments made by the Commission of specialized staff to deal with the logistics of burial, cleaning housing space, etc., and have been discussed by Sorescu-Iudean (2025).

¹Sibiu County Branch of the Romanian National Archives, Fund *Colecția de acte fasciculare (1290-1968)*, Subsection *H- Sănătate (1530-1891)*, Record no. 54, *Pest Protocol ab Anno 1738 den 21sten Juny, bis Anno 1739 den 6 Marty*, 134 folios. The complete title page contains the following information: „*Das traurige Denkmabl des erschecklichen Pestilentialischen Gerichts das der gerechte Gott über die Siebenbürgische Hauptherrmannstadt ergeben laßen. Wie dieße aufsteckende Seüche angefangen, wie sie sich ausgebreitet, welche sie angegriffen, welche durch dieselbe dem Todt überantwortet; hingegen aber auch, welche durch Gottes Erbarmung wider gesund worden. Und welcherley Vorkehrung, zu deren aberredung, Linderung, und reinigung, gemacht worden. Der Nachwelt zum Bericht, und Besserung, schriftlich auffgesetzt. Ab Anno 1738 den 21sten Juni bis 1739 den 6ten Marty. Von Samuel Dobosi, p:i: Actuario.*“ Julia Derszi at the Institute for Social Sciences and the Humanities from Sibiu who kindly signaled the existence of this source to me.

This survey is then followed by an extensive *Diarium*, or daily record section, where each plague-related event is committed to paper with a significant degree of detail. This section, which occupies most of the register (f: 7r-92r), also lists those individuals who were suspected of carrying the disease, those who were exposed and thus isolated (whether in their own homes or in the Lazareth), as well as those who managed to recover from the disease. However, the recording is not as systematic as the tabular overview which has been processed into a dataset, sometimes lacking complete nominal information on the individual. Likewise recorded are deaths which occurred during this interval (June 1738 – March 1739), which had been judged by the Sanitary Commission as being suspect, and therefore potentially due to the contagion, even if no clear signs of plague had been exhibited by the deceased.

A third section of the register details the agreements between the urban authorities and the specialized staff hired to prevent the spread of the plague, the oaths the latter swore to the Commission and the city, as well as detailed lists concerning their forms of payment (f: 92v – 106v).

The final section of the register has been completely transcribed and translated into a relational database format. This final section, entitled “General Pest Tabel”, comprises all confirmed plague deaths in the city of Hermannstadt, or, in certain cases, in areas outside the city proper: the *Lazareth* erected outside its gates to house infected persons; the so-called “Mayr-Hoffen”, or the gardens belonging to the city’s more well-off inhabitants; one death recorded in the nearby village of Neppendorf (Turnișor). In total the dataset comprises 938 deaths of individuals from several categories.²

The “General Plague Table” contains information on individuals who perished from the plague, on several levels. This section will survey this information, how it was structured in the original source, and how it was then re-structured and standardized in order to obtain a dataset that might lend itself to quantitative analysis or linkage to other datasets from contemporary sources. Reconstructing the identity of each decedent entails going through the entire array of fields in order to create a complete composite image; reading the information sometimes requires reading in reverse order, from the final column to the first, or from right to left. Although each row generally records

² One individual recorded at fol. 103v, the unnamed female child of a „German woman”, whose mother worked as a cook in the Lutsch family house in the Great Square, is added to the total of the category of “Foreign inhabitants” who had perished as a result of the plague, but not to the grand total. Therefore, according to the final count of the source, only 937 individuals perished of the plague.

the death of one individual, in 60 cases more than one person's death is recorded per row/event.

The first three columns contain the date of the plague event, the neighborhood³ (*Nachbarschaft*) where the event had occurred, and likely the house or household (*Häußer*) in which the deceased had passed away.⁴ The household was generally identified by the first and last name of the household head, although on occasion only the last name was recorded.

Under the "Häußer" column, institutional settings that were very clearly not individual homes/households were also recorded. The most common is the *Lazareth* or quarantine facility established outside the city walls, where individuals were isolated following an exposure to a known plague case. Sometimes, even if a death had occurred in the *Lazareth*, the household from which the deceased had stemmed was also recorded. This allows the better tracing of mortality clusters based on household location.

The following two columns contain nominal information on the individuals who had passed from the plague, depending on their status within the city: the first lists "propertied citizens" (*Possessionierte Bürger*), while the second lists "propertied widows and women" (*Possessionierte Wittiber und Weiber*). The only information recorded in these two columns is either "himself" (*Er selbst*) or "she herself (the widow)" (*Sie selbst vidua*). Thus, this piece of information must be considered in conjunction with the information provided by the "Häußer" column, as it refers to the household head already named, or his spouse/widow. In these cases, the deceased had either been a full-rights citizen, possessed of property in the city, or a female relative, generally a spouse but sometimes also a mother, sister, or mother-in-law, who shared in

³ Neighborhoods were urban organizations comprising varying numbers of houses within certain streets in the city, which held collective responsibilities and served numerous functions in the day-to-day administration of the city. During the plague, the neighborhood heads were meant to announce to the Sanitary Commission those deaths which had occurred within houses under their watch. Generally, neighborhoods bore the name of the streets where they were located. Lengthier streets, with more numerous houses and inhabitants, such as the Heltner GaÙe (Upper City) or the Elizabeth GaÙe in the Lower City, could be divided into several neighborhoods, each exerting control over the houses on the upper, lower, or middle part of the street.

⁴ Whether the deceased had also stemmed from the same household in which they had perished is a question that can be definitively answered only by taking into account their particular status; it may be assumed that the majority of household heads' direct kin who perished also stemmed from the same household. For those who had a temporary residence in the city, the household/house where they had passed away was not necessarily where they had resided since birth. In the absence of further records that can supplement information on these more transient individuals, I have decided to treat this column as "house(hold) where death occurred".

the possession of the piece of real estate. For instance, on the 22nd of September 1738, the scribe registered the passing of Thomas May, household head who owned property and lived in a house located in the “Neüstiff” neighborhood (*Pest Protocol*, f: 122v).

Figure 1. The entry for the death of Thomas May, a full-rights burger and household head, located in the Neüstiff neighborhood

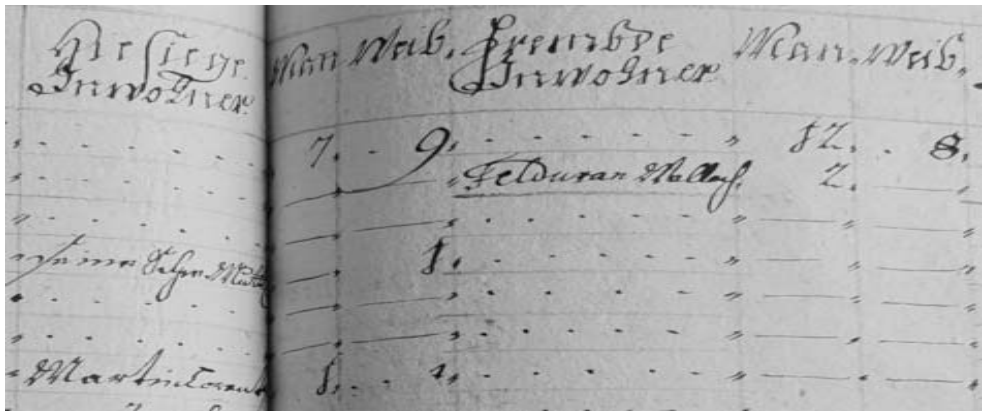


Source: SJANSB, *Colecția de acte fasciculare*, H- Sănătate, Register 54, *Pest Protocol ab Anno 1738 den 21sten Juny, bis Anno 1739 den 6 Marty*, f: 122v.

The following columns register individuals who had perished from the plague and belonged to two different categories: either “Hiesiger Inwohner” (local residents) or “Fremde Inwohner” (foreign residents or inhabitants). Each of these columns contains nominal information related to the deceased, while the number of deceased for each category is recorded in a separate sub-column according to gender. Thus, the passing of a wife of a local resident might be recorded as her husband’s first and last name, with the figure “1” entered under the respective gender column. Local residents (“hiesiger Inwohner”) were individuals who lived in the city, had likely obtained “settled” status (the first rank of the burgher franchise), but had not (yet) managed to come into property in the city. The information related to individuals in this category is generally less complete than that related to propertied full-rights citizens, and ranges from full names to descriptions such as “ein alt Weib” (“an old woman”), “ein alter Mann” (“an old man”). Other supplementary information was added, to help localize the individual in the urban milieu, especially in the case of female decedents. These individuals were generally referred to in relation to their closest living male relative, whose ranking in the urban social order was the highest; thus, for instance, on the 29th of September 1738, the scribe recorded the passing of “ein alt Weib Bolkescher’s Schwieger Mutter”,

in one of the houses belonging to the neighborhood of “Klein Erdt” (*Pest Protocol*, f: 124r). Nevertheless, there are very few instances wherein the identity of the deceased person is so summarily described: only 22 out of 938 records list a variant of “ein alt Weib/ein alter Mann”, pertaining to an individual who had been part of the “local resident” category.

Figure 2. Detail view of “Hiesiger Inwohner” and “Frembde Inwohner” columns



Source: SJANSB, *Colecția de acte fasciculare, H- Sănătate, Register 54, Pest Protocol ab Anno 1738 den 21sten Juny, bis Anno 1739 den 6 Marty*, f: 112v-113r.

However, the completeness and verifiable character of the information recorded decrease the further away one was located from the core of the urban society; the “foreign residents” (“Frembde Inwohner”) who perished of plague were very rarely recorded with full names, or any nominal information at all (Figure 2). Precisely what information needed to be recorded in this field seems to have been unclear, to the scribe as well as to the authorities. Most often the individual figuring under this heading was merely referred to by their gender and early “ethnicity”/“nationality”, in the eighteenth-century sense specific to Transylvania (see Sorescu-Iudean 2020, 27-35). Under this category were included all who had been deemed “foreign” by the urban authorities. It included most of the German migrants to the city from other Protestant urban areas in the Holy Roman Empire, the Romanians from the surrounding villages who worked in the city or in the gardens located closely outside the walls (“Mayerhoffe”), which belonged to the Transylvanian Saxon elite, as well as members of the Habsburg military quartered in the city’s homes. The alterity of the individuals listed under this heading could be either confessional (i.e. a religion other than Lutheran), linguistic (stemming from a non-German-

speaking milieu), geographical (from outside the Transylvanian Saxon *Royal Lands*, a distinct political sub-unit of Transylvania), or simply “ethnic” (non-Transylvanian Saxon, even if the deceased had been a German-speaking Lutheran).

The final category of individuals who were recorded as having perished due to the plague were children, or younger individuals who were not considered to be of age: “Junge Leütte und Kinder, Männ. und Weiblichen Geschlecht”. It is also accompanied by a sub-column listing the number of individuals in this group who perished, per each event recorded. Unfortunately, this category also seems to be the least comprehensively recorded. Although individuals of both sexes were registered under the same heading, it is possible to ascertain whether the deceased was male or female in more than half the cases: out of 390 minors who perished due to plague and were recorded under this category, for 227 (58%) the term used by the scribe allows for the identification of either girls (“Tochter”, “Töchterlein”, “Mädl”) or boys (“Sohn”, “Söhnlein”, “Jung”).⁵ In the remaining 163 cases, the decedent was referred to only as “Kindt”, therefore ascertaining the gender proves to be impossible without linkage to further sources, such as baptismal records. The register also includes 37 recorded deaths of female house servants (“Dienstmagd”, “Dienstmädl”), as well as 22 male decedents who were either referred to as “Lehr Jung” “Lehr Knecht”, or “Gesell”. However, not all the minor-aged staff or children were listed under the main heading of “young persons and children”; several were instead allocated to the “foreign inhabitants” category, by virtue of having parents who were part of this socially peripheral group.

How were individuals further identified, apart from allocation to one social-legal or age category? A highlight of the present source is the fact that for the great majority of plague deaths, either the deceased individual, the household head from which the deceased stemmed, or even both, are identified in terms of social-occupational status. One of the final columns in the source, entitled “Officia” (from Latin *duties, offices*), contains German-language status and occupational descriptors. Based on the recurring character of the entries and the clustering of deaths within households, the occupation listed – or equivalent descriptor – can be assumed to be that of the head of the household wherein the death had occurred, or where the decedent stemmed from. This relationship can be verified seeing as in most cases, each household where plague struck experienced more than one death, thus allowing the

⁵ This count excludes all individuals referred to as “Lehr Jung” or “Dienst Mädl”, who fall under a different categorization.

reiteration of the same “household head name” – “occupation” pair. The addition of the neighborhood name also makes it easier to clearly identify one particular household head’s occupational status. For instance, the source records three entries of deaths which occurred on the 1st, 11th, and 12th of August 1738 in the household of one Johann Franck, household head in the Fleischer Gaße neighborhood (*Figure 3*). In all three records, the “Officia” column includes the term “Czismenmacher” (bootmaker). It is clear in these cases that the deceased were not bootmakers themselves, as the individuals who were recorded as having passed away were designated as “Mädl” or “Söhnlein” and listed under the “young persons or children” column.

Figure 3. Death record of one minor individual, son of Johann Franck, a bootmaker and household head in the Fleischer Gaße neighborhood, dated 11th of August 1738 (third entry in the image).



Source: SJANSB, *Colecția de acte fasciculare, H- Sănătate, Register 54, Pest Protocol ab Anno 1738 den 21sten Juny, bis Anno 1739 den 6 Marty*, f: 110v-111r.

However, in other cases the occupational descriptor noted in the “Officia” column did not pertain to the household head, but rather to the deceased themselves or to their closest identifiable adult relative (when the deceased was a minor). When the deceased was not the offspring of a household head (and full-rights citizen) but rather had been sired by a “local resident” or “foreign inhabitant”, the entry normally included both the name of the household head, as well as that of the deceased individual’s closest surviving relative. This could be the father, or, presumably when the father was absent or had already passed away, the mother’s name might be recorded instead. Thus, for entries listing the death of a minor individual, which contain information both under the “household head” and under the “local resident”/ “foreign inhabitant” columns, the occupational status recorded under “Officia” was taken to be that of the decedent’s closest relative, and not that of the household head. This inference was then verified when different instances of plague events were unified under a single household ID, during the linkage process. It is also clear that for instance, when the deceased was referred to as a “Dienstmägđ” or “Mayrer” (tenant farm/garden worker), that these occupational descriptions did not pertain to the respective household head, but rather to the plague

victims themselves. The same was the case for descriptions such as “Spittaller” or “Arrestant”, or when the deceased was employed in some capacity in the household, private bake house (“Beckhaus”) or in the suburban gardens (“Mayerhoff”) owned by a member of the Saxon elite/nobility. Thus, for instance, on the 28th of October 1739, the register records the passing of a female baker and her daughter, who worked and presumably resided in the bakery of one “Herrn Fabritius”, located in the city’s Small Square (“ein Weib Becklerin und ihr MädI”) (*Pest Protocol*, f: 130v-131r).

The final columns of the source provide the grand total of deceased per each plague event („Tode”), as well as the symptoms they exhibited during their examination by the plague surgeon (“Signa”). The pathology of each infected or presumably infected individual is more fully described in the narrative section of the source, while only a few general terms are provided in the tabular part of the register. These include “Bubon.[es]”, “Pet.[echien]” and “Carb.[uncle]”, combined in various ways. Because it is unclear how reliable these symptom descriptions are in terms of epidemiologic value, they were not included in this version of the dataset.

3. Data collection and processing

3.1. Plague events

As the survey of the source structure and informational content has shown, an individual’s identity was a composite, requiring a combination of several fields to be more closely discerned. Additionally, more than one individual’s death could be recorded per row. This meant that standardization and further linkage were required in order to determine each decedent’s identity with a greater degree of certainty. The present section offers an overview of the process of translating the plague table into a relational database, composed of several interlinked datasets, currently hosted on *Zenodo*.

Owing to the overlapping layers of information present in the source, the choice was made to separate data entry first into two tables: *Plague events* and *Individual deaths*. Each plague event corresponded to one or several individual deaths, thus allowing the analysis to take into account both dimensions of the epidemic.

The “Plague events” table focuses on recording precisely as it the original source when the event occurred (d-m-y), where it can be found in the source (folio numbers), as well as where it occurred in the city’s topography - the neighborhood, as it was written in the source. It also lists the information under the “Häußer” column, that is, the household where the event had occurred. This is a significant distinction, as over the course of the epidemic,

individuals from various households were gradually relocated to the *Lazareth* once a household member became infected and the sickness spread. This means that individuals who might have been recorded as household heads earlier on in the source, when one of their dependents had passed away due to plague, could later on appear as having died in the *Lazareth* and not in their own homes. In this case, the *Lazareth* appears in the source – and was therefore entered in the table – under the “neighborhood” column. At the same time, the “Häüßer” is left blank, to confirm that the death did not occur in a family home. This distinction was maintained during data entry, as it enables analyses that examine how deaths clustered according to household, as well as the tracing of individuals who perished in the isolation facility.

The information under this column was split during data entry into two columns: a description of the household head or homeowner, that contained generally nominal information (which could in some cases be fragmentary); the second column was created to record information on the household head/homeowner’s occupational status, as it appeared in the source. Finally, the number of deceased per event was computed based on how many individuals were mentioned in the “Individual deaths” table and could be linked to one “Plague event” ID. Each event ID is unique and was further used in the remaining tables as foreign key.

3.2. Individual deaths

The second major table is that of “Individual deaths”, which further breaks down the information recorded the General Plague Table, while also offering a minimal layer of standardization that makes it possible to discern patterns in the categories afflicted by the epidemic. Like the “Plague event” table, each individual death has a unique ID and is linked to one plague event from the previous table. Several columns from the “Plague event” table have been repeated in order to facilitate analysis: the date of death (concatenated day-month-year of death), the register page number, the neighborhood (original, non-standardized), and the household/homeowner description.

A composite column that gives the description of the deceased individual in full was created based on the information recorded in the “Häüßer” column and the remaining columns that distinguish a decedent’s legal category (propertied citizen, spouse or widow of propertied citizen, local resident, foreign inhabitant, young individuals of male and female sex), and the “Officia” column. This was meant to provide a clear overview of all information that could be used to identify a deceased individual. For instance, for a male, propertied individual, the entry in the “Description” column would

read merely “Georg Artz Kirschner – er selbst”. For a spouse of a propertied individual, the entry could read “Christian Baußmert sein Weib”. The offspring of this category of individuals would be listed as “Johann Mellas Knopfstrickers Neugeboren” or “Johann Thurner Fenstermacher sein MädI”. The accuracy with which one can identify the decedent, especially in case of minors, depends on how clearly or completely the closest male or female relative was described in the source: for instance, on the 18th of September, in the Salz Gasse, one individual nicknamed “the blind Waldhütter” lost his grandchild to the plague. This is recorded in the database “Description” column as “Blinde Waldhütter sein Kind”.

When two or more deaths were recorded in one event, the entire description containing information on all individuals was repeated for each individual death, with standard columns that break down this information being used to separate each decedent and assign them the correct information from the wider description. For instance, on the 3rd of September 1738, a surgeon’s wife and his daughter (“Feldschererin Frau und Tochter”) were listed as having passed away in the Lazareth. One death entry was created for the surgeon’s wife, who was listed as an unnamed individual of female sex, with the status/occupation of “Feldschererin Frau”, and the legal status of “Frembder Inwohner” (the column where she had been listed). A second death entry was created for her daughter, who was likewise listed as an individual of female sex, with the status/occupation of “Feldschererin Tochter”, and the legal status “Junge Leute und Kinder Mann und Weibgeschlecht”. Individuals’ legal status was listed precisely as in the source in a separate column entitled “Individual legal status”, which had values for “possessionierter Burger”, “possessionierter Wittiber und Weiber”, “Hiesiger Inwohner”, “Frembder Inwohner”, “Junge Leute und Kinder Mann und Weibgeschlechts”.

Finally, the recording of raw data was completed by adding the information recorded in the “Officia” column into a separate column entitled “Status/occupation of the deceased individual”. Where no information at all pertaining to an individuals’ potential occupation, relation to another individual who had such a title, or any description that might help to distinguish them among those who perished was listed, the value “no occupation listed” was recorded. Otherwise, precisely as in the “Description of individual” column, several types of information appear in this catch-all column: occupational titles proper, occupational titles with the designation of a kinship tie (e.g. a furrier’s son), an occupation with an ethnicity (“Wallachian Mayrer”), an occupation with a further distinguishing term (“Emigrantisches Magd” – a female house servant, possibly from the German Empire, or a forced Protestant exile from

the Austrian Crownlands)⁶, an occupation with an ethnicity and a place of provenance (“ein Teutsch Weib auß der Wallachey” – a German wife/woman from the neighboring Principality of Wallachia). This information underwent a further process of standardization. Several columns were created to be able to split up the data on each individual decedent to the highest possible level of granularity. Firstly, a column was added in order to distinguish between those deaths that occurred in households in the city and those that took place in the city’s *Lazareth* or other institutional contexts, such as the city hospital or that run by the local Jesuit order. This makes it possible to treat deaths in institutional contexts separately from deaths which occurred within the home.

Secondly, several columns were created to break down information on the individuals themselves. Nominal information was split up into “first name”, “last name”, and “nickname”. Decedents’ gender was inferred based on which column they had been allocated to, or from specific terms such as “wife”, “widow”, “daughter”, “son”, etc. Civil status could only be inferred for those women who were listed as “widow” (*Vidua*). While women listed as “Weib” or “Frau” might have had living spouses at the time they passed away, this was not clearly signaled in the source. Male individuals did not any such information listed, as civil status was not a primary concern in their case: they were identified primarily through an occupational title. Only 18.5% (N=174) of individuals had a first name recorded, while 74.17% (695) had a last name recorded. Given the high share of young individuals who passed away and the clustering of deaths within households, most offspring were recorded only as “the son of...” or “the daughter of...”, without further identifying information. The same was the case for individuals of foreign extraction (especially Romanians – “Wallachen”), who were in the overwhelming majority unnamed in the source. Finally, several columns were created to further increase the granularity of the individual data. Any occupational or status titles proper, even if they were in the form of a “occupation + kinship term”, i.e. “a butcher’s son” were encoded first into HISCO, and then into HISCLASS⁷. While this goes against the protocol employed for coding relatives of individuals who had a historical occupational title, which relegates them to a “no code” category, the assumption was made that direct offspring and

⁶ On these distinctions, see Sorescu-Iudean 2020: 27-35.

⁷ Historical occupations and/or status markers were encoded using the latest version of the HISCO release. Because of the very limited range of occupations, and the encoding of children/spouses according to their closest male relative's position, columns for “relation”, “product”, etc. were not used, rather only those for the code of the occupation itself. Standardized, HISCO-coded and classified occupational titles, release 2020.02, hdl: 10622/88ZXD8.

spouses would have been assimilated to their fathers'/husbands' eventual social standing as measured by HISCLASS. It was also deemed extremely significant in potential analyses that trace whether plague mortality affected different status/occupational groups in an unequal manner, an issue for which there is not yet a tremendous amount of publicly available data.

Two other fields were created to encompass the entire range of information on individuals' distinguishing characteristics: the ethnicity of the deceased, and their provenance. Although there is little information on geographical provenance, this field can aid in linkage to other sources which list this type of characteristic more often, such as contemporary parish records.⁸

Two standardization tables were created in order to help structure the information further: a standard neighborhoods table (*Neighborhoods standard*), and a standard households table (*Households*). Neighborhood names were deduplicated after being entered in the raw, source-faithful version, and then allocated standards in German, based on various later sources that discuss the range of this type of urban organization in early modern Hermannstadt. Street names, where these were known from other sources, were also added to the respective neighborhoods, in order to aid further, more precise localization of households and plague deaths. A second step in standardizing the information involved creating a separate household table (*Households*) that would contain all the households mentioned in the source only once and thus systematize information on this type of unit. To increase the legibility of the data, beyond the unique household ID, other identifying fields were added: the neighborhood ID, the standard neighborhood name (German), the household head's first and last names, as well a separate column that recorded the description of the household in case this was owned by a collective entity (a family, a group of heirs). The presumed occupation of the head was also added, to further distinguish the household due to the limited range of first and last names in the city (Sorescu-Iudean 2020: 288-289). A further standard column was created in order to distinguish between family-owned households and various other subsets of residential or coresidential spaces, such as bake houses, hospitals, mills, gardens, etc. In total, there are 227 identifiable and distinct households (including coresidential, collective institutions such as the *Lazareth* or the Jesuit hospital) where plague deaths were recorded to have occurred in the 1738-1739 plague outbreak. A final table links households and

⁸ As a side note, there are unfortunately no burial parish registers for this period for the city of Hermannstadt. For more information on burial parish records for eighteenth-century Hermannstadt/Sibiu, see Sorescu-Iudean 2020: 282-285.

plague events (*Households_plague_events*). Along with the ID of this relationship, the Household ID (from the *Households* table), and the plague event ID (from the *Plague_events* table), a further field computes the number of deceased recorded in each household by summing up the number of deceased individuals recorded for each event. While not all individual deaths or plague events could be located in a separate household in a clear, verifiable relationship, as the information on where the death had occurred is not always clearly recorded, a surprisingly high share of the deaths were accounted for in this way: 755 out of 936 (937) events could be attributed to one of the 227 households identified. Thus, a little over 80% of all deaths could be located quite precisely in the topography of the city on the basis of this source alone, which will hopefully enable further, more detailed analyses of how mortality was clustered and how the plague spread among the city's inhabitants.

4. Conclusions

The paper has offered a detailed overview of the source entitled “General Pest Tabell” – general plague table – drafted during the plague epidemic that struck the city of Hermannstadt (nowadays Sibiu) between the summer of 1738 and the spring of 1739. One of the most devastating plague epidemics to hit the province of Transylvania during the first half of the eighteenth century, this outbreak prompted authorities to maintain – as they had before, in 1719-1720 – a detailed record of daily deaths, specifically locating them within the topography of the city as well as within households. The paper documents both the source material, as well as how it was translated into a relational database framework, that consist of several interrelated tables, which has been made publicly available on Zenodo.

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