The Potsdam Grievance Statistics File

new data on quality of life and political participation for the German Democratic Republic 1970–1989

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Fabian Class, Ulrich Kohler, and Marian Krawietz
Faculty of Economics and Social Sciences, University of Potsdam

ABSTRACT
The newly collected "Potsdam Grievance Statistics File" (PGSF) holds data on the number and topics of grievances ("Eingaben") that were addressed to local authorities of the German Democratic Republic (GDR) in the years 1970 to 1989. The PGSF allows quantitative analyses on topics such as participation, quality of life, and value change in the German Democratic Republic. This paper introduces the concepts of the data set and discusses the validity of its contents.

KEYWORDS
Potsdam Grievance Statistics File (PGSF); German Democratic Republic (GDR); Eingaben; Participation; Quality of Life

Introduction

The data heritage of the GDR is lacking for large-n quantitative historical research on sociological concepts such as subjective well-being, quality of life, value change, or participation. As it stands, the available data comprises official statistics, survey data, and several special purpose data collections (c.f. Best and Hornbostel 1998; Bundesarchiv 2003; Statistisches Bundesamt 1999; Steiner et al. 2006). Official statistics were published in the GDR’s Statistical Yearbook, which is publicly accessible on the website of the German Archive for Digital Journals. The yearbook contains aggregated information about the population, the labor force, and a state-socialist variant of the economic total account. The survey data has been made publicly available by the German Data Archive of the Social Sciences (Datenarchiv für Sozialwissenschaften, DAS). However, the archive’s GDR and New Federal States data pool predominantly contains data that is either limited in the topics covered or samples polled. National representative surveys were conducted by the Institute for Opinion Research of the Central Committee of the Socialist Unity Party of Germany (Institut für Meinungsforschung beim Zentralkomitee der SED). Unfortunately, the research program closed in the 1960s, and the collected data was lost (Niemann 1993). A number of surveys were conducted by the Central Institute for Youth Research (Zentralinstitut für Jugendforschung) on topics including "historical awareness" or "political behavior concerning the use of media", but respondents were only sampled from the young population. Then again, in the years 1954, 1964, 1971, and 1981, the GDR conducted four national censuses, but they contain little more than data on housing quality and social status. Consequently, the GDR’s data heritage lacks comprehensive information on topics such as quality of life, social inequality, value change, political participation, or social engagement that can be considered representative of the entire population.

To ameliorate the limitations of the data available for historical social research on the GDR, we have compiled the “Potsdam Grievance Statistics File” (PGSF). Grievance statistics (Eingabestatistiken) are the state authorities’ accounts of a specific form of grievances, so-called Eingaben. These Eingaben were the official way for citizens to air their discontent about specific conditions in their immediate environment. Hundreds of thousands Eingaben from citizens, cooperatives, and institutions reached the state authorities every year.

Eingaben in the GDR have been a repeated topic among historians (Betts 2010; Bruns 2012; Elsner 1999; Gentz 2006; Kästner 2006; Mühlberg 2004; Reuter-Boysen 2010; Samson 2013; Schroeter 2012; Streubel 2007). These contributions predominantly rely on a small number of selective Eingaben. Quantitative accounts of the evolution of grievances and their interplay with historical events are a rare exception. The only study we are aware of is a recent paper by Thomson (2017), which indirectly...
measures the amount of economical grievances using economical shortages and political autonomy. The main reason for the lack of studies based on direct measures of the amount of grievances is that the bulk of original sources of Eingaben were eliminated in most East German archives. However, we have recovered a hidden footprint of the Eingaben in form of the above-mentioned grievance statistics. Based on these documents, we compiled the PGSF, an exhaustive data set for a well-designed sample spanning 1970 to 1989. The purpose of this paper is to describe the PGSF at length.\textsuperscript{9}

We proceed as follows: Section 1 describes grievances and grievance statistics. It starts by explaining the legislative origins of the Eingabenkultur (grievance culture), the way Eingaben were processed, and how the grievance statistics emerged from that.\textsuperscript{9} It then goes on to describe the archival sources for grievance statistics and their typical contents. The final part of this section discusses the validity of the numbers published in the grievance statistics. Section 2 documents how the grievance statistics for the PGSF were selected. We argue here that the selection process justifies making statements about the entire population of GDR’s counties. Section 3 describes the data collection process, and Section 4 describes the digitization of the archival material. Section 5 gives a rough description of some of the PGSF’s key variables. Finally, Section 6 places the PGSF into the broader context of historical and sociological research.

The broader theme of this article is the validity of the PGSF data. We address four main questions about the data’s validity. First, we discuss whether the GDR’s authorities correctly collected the data and did not manipulate the reported numbers of grievances. Second, we investigate whether the observed grievance statistics in the PGSF allow valid inferences to a broader defined target population. Third, we describe how we checked for correspondence between data entered into the PGSF and the original archival material. This is mainly an issue of correct transcription from print to digital format. Finally, we discuss whether the grievance system in its entirety was open or exclusive for all themes and citizens in the GDR.

Grievances and grievance statistics

Starting as early as 1945, East German citizens began to express their discomfort with living conditions, hunger, lack of housing, and the psychological consequences of war and defeat in a growing flow of letters to administrative bodies. This common practice was later institutionalized by a number of legislative acts, including the constitutional right to write grievances to the authorities and several statutes that regulated officials’ reactions and obligatory documentation requirements.

The following section documents the legislative acts\textsuperscript{10} that eventually bore the fully established institution of grievance processing (Eingabewesen), including the establishment of a standardized way to report the frequency and topics of grievances. It also describes typical contents of the archival material and discusses the internal validity of this material. A summary of the ongoing debate on the scientific value of Eingaben and its impact on the data in the PGSF is presented in Section 6.

Legislation

Presumably, under the impression of a large number of grievances in the years after 1945, Article 3(4) of the GDR’s first constitution of 1949 granted all citizens the right to file complaints with the representative body of the people:

“Jeder Bürger hat das Recht, Eingaben an die Volksvertretung zu richten.” (DDR 1951, Art.3; “Every citizen has the right to submit petitions to the popular representative body.”\textsuperscript{11})

Soon thereafter it became apparent that the constitutional right required further specification by statutory order. One of the major problems was that a huge number of petitions were not directed to the representative bodies but to the GDR’s president, Wilhelm Pieck. Acting as a “problem solver”, Pieck first took advantage of the petitions to strengthen his political influence (Mühlberg 2004, 80). But when the president’s scope of responsibility returned to representational tasks after 1951, Pieck publicly stated numerous times that the president cannot act as the local administration’s supervisor (Mühlberg 2004, 82). However, the political debate and fast-rising amount of Eingaben led to the passage of the directive and statutory order for the examination of suggestions and grievances of the work force on February 6, 1953.\textsuperscript{12} According to its preamble, the goal of this first grievance order was then to “advance critique” and to demand “more respect” for the citizens’ concerns from the authorities. Among others, regulations required incompetent agencies to forward petitions to the relevant agency and petitions be processed within 10, 15, or 21 days, depending on the relevant authority. Authorities that were ineffective in processing the petitions could be called into account (Mühlberg 2004, 85).

In spite of the first grievance order, people, however, continued to address their petitions to Wilhelm Pieck. The president of the GDR remained the main addressee of written grievances until Pieck died in September 1960 (Mühlberg 2004, 115). From September 12, 1960 on, the State Council (Staatsrat) replaced the presidential office of the GDR. Unlike the president, the State Council was equipped with far-reaching competences. It passed
resolutions with legislative power, called elections for the people’s chamber, and pronounced pardons. In fact, the chairman of the State Council was more or less considered the president of the GDR. It is thus plausible that people expected help and change from the State Council and correspondingly the State Council quickly became the new major addressee for the citizens’ petitions. Motivated by direct exposure to the petitions and in relation to a larger debate about the role of judicial power in the GDR, the State Council passed the second grievance order on February 27, 1961. The new grievance order explicitly stated that no one should be subjected to prejudicial treatment as a result of submitting a petition. It bound the site administrator and all staff members of government bodies to help citizens overcome personal difficulties, and it even bound certain societal organizations to process petitions. Last but not least, it determined the office hours of the administrative bodies and established reporting duties: According to §11 of the second grievance order, the State Council was obliged to report about the petitions once a year, the Council of Ministers (Ministerrat) twice a year, and subordinate authorities such as county councils even four times a year.

Aside from adjustments in the office hours and exemptions from reporting duties, the second grievance order remained effective until 1969, when passage of the new constitution in April 1968 made extensive revisions of the grievance order necessary. The new constitution reformulated Article 3 of the constitution of 1949 and added two articles to regulate the responsibility for grievances. Article 103 of the new constitution granted the right to submit Eingaben not just as citizens but also as organizations and communities. It stated that Eingaben could be addressed not just to the people’s chamber but also to every member of the people’s chamber and to any state or economic authority. The second grievance order’s claim that nobody should be subjected to prejudicial treatment as a result of submitting a petition elevated into constitutional status. Last but not least, the term “Eingaben” was defined as any kind of “suggestion, hint, concern, or grievance” (Vorschläge, Hinweise, Anliegen oder Beschwerden; Art. 103.1.1). Article 104.2 declares the State Council to be responsible only for complaints against decisions of the Council of Ministers, the supreme court, and the attorney general. For all other complaints, an originator principle was established. That is to say, the Council of Ministers was made responsible for all complaints against decisions of its central authorities (Article 104.1), and each local authority was made responsible for all complaints against their decisions (Article 105.1.1). Note that due to the originator principle, most grievances ultimately arrived at local authorities, and this eventually made the PGSF in its present form possible. This is also the reason why the PGSF starts in 1970.

Consequently, the third grievance order incorporated the constitutional changes and further clarified its definitions. As Article 105.1.1 of the constitution assigned responsibilities for the petitions to the local level, the third grievance order further regulated the duties of the local authorities. Being the basis for the PGSF, it is of particular importance that the local authorities had to report the contents and reactions to the petitions to superordinated institutions, such as county councils, district councils and representative bodies of the people (§10.4).

The main purpose of the third grievance order, however, was to clarify the tasks and duties of the newly established grievance committees. It should be mentioned though that Mühlberg (2004) concludes that the grievance committees were rarely used and never played the role envisaged by the legislation; by 1975, they were already disestablished.

So far, we have seen that the right to submit Eingaben to the authorities was established in 1949, and that this right was strengthened on several occasions. At the same time, Eingaben became the dominant form to carry out conflicts with the administration and superseded formal legal formats of conflict solution almost completely (Mühlberg 2004, 152). As Mühlberg reports, Eingaben were even used to protest court decisions and situations in which all legal remedies were exhausted. The relationship between citizens and the public administration can be thus characterized by “private” negotiations between the petitioner and the state agent instead of a judiciary and, therefore, publicly traceable act of law. In the early 1970s, the political debate slightly favored the normative standpoint of a rule-of-law state and, therefore, considered the private nature of the Eingabewesen unfortunate. This led to two further legislative reforms. The first reform was a new law on legal remedy against decisions of authorities. It restricted the Eingaben to predefined topics and required they be processed like formal legal remedies. The legislation, however, had little practical relevance until the passing of the next grievance law in April 1975. As stated above, the grievance law disestablished the grievance committees and removed the regulation of office hours. Most importantly, however, the grievance law ruled out Eingaben for all topics where other legal remedies existed. Specifically, the use of Eingaben to protest decisions of the highest level of jurisdiction in the topics protected by the law on legal remedy against decisions of authorities was no longer possible.

Ultimately, the reforms of 1971 and 1975 created a situation in which—at least for some topics—the informal Eingaben became a formal legal process. In that sense,
the Eingabenkultur became fully established. For the larger proportion of the Eingaben, the constitution of 1968 and procedural rules implemented in the third grievance order and adopted in the grievance law of 1975 established the normative practice. This lasted until the breakdown of the GDR in 1989/90.

**Process**

In the previous section, it was mentioned that §11 of the second grievance order imposed reporting duties on the authorities. While those reporting duties were slightly reduced in 1966, the reporting duties were further extended in §10 of the third grievance order in 1969 and maintained in §10 of the grievance law of 1975. Hence since 1969, all relevant authorities had to report regularly about the contents and the status of the Eingaben. The starting point of the PGSF in 1970 is rationalized by the above-mentioned reporting duties, which substantially improved quality and quantity of the historical material which is accessible in the archives today.

In order to fulfill the reporting duties, it was necessary to formalize the informal process of handling the grievances. To this end, a standardized process evolved after 1969 (see Figure 1). The majority of the heads of organizational units created a department to register each incoming grievance and check if it had been sent to the responsible authority. Grievances sent to the wrong institution were then transmitted to the responsible authority—according to the originator principle of the GDR’s 1968 constitution, this frequently meant that grievances were transmitted from the national level to local authorities. If the grievances were transmitted, the responsible authority registered the incoming grievances, examined them, and sent the decision to the petitioner. The results of the process were also registered.

To register grievances and decisions, the authorities used grievance books (Eingabebücher) (Stadtarchiv Potsdam 1971). The Eingabebuch was a handwritten list holding the relevant information for all incoming grievances. It contained the kind of individual data used by the local authority to create current accounts for their reporting duties.

The reporting duties did not stop with local authorities. The grievance law bound the county councils and city councils to report the focal points of the grievances to the representative body of the people. It was thus necessary to compile the current accounts of all the counties’ or cities’ local authorities into one single report. This task was often done by the Organisations- und Instrukteursabteilung (OIA), a special unit of the Socialist Unity Party of Germany (SED), which was mainly responsible for personnel decisions of the political elites (Glaeßner 1977, 294). The OIA merged the various registers of the local authorities into one document and created a yearly account of it, the so-called Eingabenanalyse. The Eingabenanalysen usually contained about 10–15 pages of text with some statistical material, the grievance statistics. The grievance statistics were commonly organized as an appendix of one to two pages at the end of the document’s text. The Eingabenanalysen were sent to the local councils and became a topic at one of the councils’ sessions; commonly, a given year’s data was reported at the beginning of the year that followed. Finally, the Eingabenanalysen and the results of the discussions were transmitted to the district level and from there to the Council of Ministers.

**Availability**

The process of handling Eingaben described in the previous section created a number of potential archival material. While the original letters of the petitioners, the Eingabebücher of the various authorities, and the decision letters to the petitioners were mostly destroyed, Eingabenanalysen and their statistics are retained in most East German archives.
The file of each grievance case had to be stored by the responsible authority for five years after the decision (Mühlberg 2004, 191). Afterward, it was common practice to eliminate the entire file. With this, the original letters of the petitioners and the authorities’ decisions disappeared. This is also true for a lot of grievance cases that were submitted shortly before 1989 or not yet closed at that time.

A further loss of grievance letters took place in the years after 1989. Impelled by the shortage of space many archivists took Eingaben to be nugatory for the years after 1989. Impelled by the shortage of space at that time. that were submitted shortly before 1989 or not yet closed disappeared. This is also true for a lot of grievance cases that stand out by the individual benchmarks of the archivists. With all due caution, we would say that these are predominately complicated or very special cases of Eingaben highlighting the failures of the GDR’s authorities.

Aside from such single curiosities that can be found in nearly every archive in Eastern Germany, there are also some larger collections of grievance letters available. The largest is at the Federal Commissioner for the Records of the State Security Service of the Former German Democratic Republic (Der Bundesbeauftragte für die Unterlagen des Staatssicherheitsdienstes der ehemaligen Deutschen Demokratischen Republik). Many letters of complaints written by ordinary citizens and addressed to the GDR’s state security service (the Stasi) can be found here. Furthermore—as we discovered in our fieldwork—some local archives offer collections of original grievance letters. However, as the selection process that brought these files together is unknown, these documents cannot be used for making valid inferences on the population of grievances.

As an aggregated imprint of the lost original, Eingabenanalysen and their statistical material offer a way to make valid inference. Since they were part of the very well-archived counselors protocols (Ratsprotokolle), we today find Eingabenanalysen nearly in every East German archive. Furthermore, we find them not only in the minutes of the council but in the archival provenances of the high-ranking members of the council as well. Thus Eingabenanalysen can be found in the archival records of the mayors, the deputies, the county or city councils, the OIA and in super- or subordinated state-owned companies and institutions. On this broad range of archival provenances, we built our data collection process to create the PGSF. It has become a collection of data from a large number of grievance statistics. Particularly, it contains the number of grievances by addressee and topic. The selection of the grievance statistics used for the PGSF is described in Section 2.

**Contents**

Figure 2 shows the grievance statistics for the county “City of Potsdam” in 1983. It is used here as a template to guide the reader through the contents of grievance statistics. However, it must be noted that the variety of available grievance statistics is enormous. The type of grievance statistics reported varied over time, between districts, and within districts between counties. For the compilation of the PGSF, the low standardization of the grievance statistics was a tremendous undertaking—which was somewhat unexpected, given the GDR’s usual characterization as a centralized autocratic state. The harmonization strategies used for the data are explained in Section 4.5.

As is commonly the case, the grievance statistics for Potsdam in 1983 is divided into two sections. Section 1 provides the total number of grievances for the specified period, divided into delivery mode and addressee. Overall the City of Potsdam received 2,047 grievances. The vast majority of them (1,787) were delivered by mail, and 260 were delivered orally. A number of the grievances processed by Potsdam’s local authorities were originally not addressed to them. Actually, 20 grievances were addressed to the Central Committee of the SED (Zentralkomitee der SED), 144 to the State Council, and 16 to the Council of Ministers.

Section 2 starts with Eingaben which were addressed to the mayor of Potsdam, Brunhilde Hanke (2.1) and her deputy (2.2) in 1983. The document shows that she received 672 and the deputy 160 Eingaben. The mayor herself only processed 8 grievances. 664 of them were transmitted to the so-called Fachorgane. Similarly, the vice mayor transmitted 57 of 160 grievances to the lower ranked administrative bodies. The remainder (66) was transmitted to the regulatory agency ("Stadtinspektion") or processed directly by the vice mayor (37).

From category 2.3 onwards we find numbers of grievances by topics. The topics thereby are defined by the responsibilities of the local authorities, the above mentioned Fachorgane. As it has been reported before, the GDR’s constitution of 1968 implemented the originator principle so that each grievance is appointed to the responsible local authority. The numbers listed for the Fachorgane thus also include the grievances addressed to superordinated units such as the State Council or mayors.

In the example, there are 17 categories for the topics, which suggests that the City of Potsdam administration had 17 Fachorgane. The highest numbers of grievances (966) were appointed to the Fachorgan responsible for housing (section 2.11 “Wohnungswesen”), which has always been the most frequent topic of Eingaben. Other
topics attracted lots of grievances in 1983, either. Focal are the three catch-all categories, “environmentalism, water, tourism and farming” (2.13) with 195 grievances, “energy, traffic and telecommunications” (2.7) with 131 grievances and the slightly more specific category, “trade and supply of goods” (2.6) with 146 grievances. Apparently, the catch-all categories are unfortunate for analyses. But in this case, they are further subdivided into categories with clearer meanings. Certainly, this level of detail is not present for all available grievance statistics and thus a major challenge for harmonizing the PGSF (see Section 4.5).

As even the simple reconstruction of the overall sum of 2,047 grievances is not as easy as it seems, we offer here the solution for this task: First the mayor’s (8) and deputy’s (37) processed grievances should be summed up. In the next step the amount of 66 grievances transmitted to the Stadtinspektion must be added. Finally, adding the grievances from the Fachorgane, 1936, produces the overall amount of 2,047 Eingaben. It should be

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**Figure 2.** Grievance statistics for the City of Potsdam 1983. © The Brandenburg Main State Archive. Reproduced by permission of The Brandenburg Main State Archive. Permission to reuse must be obtained from the rightsholder.
noted though that Potsdam’s statistics are in comparison to others easily to reconstruct, so that the reader may get an impression of the challenges the original sources implied.

**Validity of grievance statistics**

So far the material in this section suggests that the GDR’s authorities had an interest in the grievances. They invited the citizens to contact state authorities with grievances, and they implemented a reporting system to track their frequency and content. The grievance analyses and statistics were used to support political decisions or adjust them. The GDR officials regarded the Eingabenkultur as a means to foster societal and economic development, and political scientists from the GDR considered them an “effective instrument of socialist democracy” (Weichelt 1986). Therefore, there is little reason to believe that the administrative bodies on the county level had an interest in literally fabricating the statistics.

However, it should be mentioned that the authorities’ benevolence toward the Eingabenkultur was not constant over time. According to Mühlberg (2004), it eroded when Erich Honecker, First Secretary and later General Secretary (1971–1989) of the SED’s Central Committee, started to interpret Eingaben as critique of socialism instead of a dialog between the citizens and the state. Measures to strengthen the rule-of-law state in the early 1970s can be interpreted as a step towards rolling back the Eingabenkultur. Increasingly, the authorities measured socialism’s success by the lower frequency of grievances, which motivated local authorities to downplay the number of grievances.

Whether these measures succeeded in reducing the (reported) number of grievances cannot be answered without quantitative data, however. Preliminary analysis of the PGSF in Section 5 suggests that this was, in fact, the case.

**Sampling design**

This section describes the selection of grievance statistics compiled into the PGSF. It should thereby be noted that the case selection had to fulfill two conditions: First, the aim of the data collection was to ascertain the amount of discomfort citizens perceived in their immediate environment. Basically, the idea was to compile an aggregated measure of subjective well-being. To validate this measurement hypothesis, it was regarded as absolutely necessary that the PGSF be able to merge with external sources containing alternative measures of subjective well-being. Second, the PGSF should allow analyses whose results are valid for the Eingabenkultur for the entire country.27

In order to meet these conditions, the selection process of the PGSF applies the sampling design of the East German sample of the “German Socio-Economic Panel” (GSOEP).28 As it turned out in the archives, additional observations could be sometimes easily ascertained. In these cases those observations were collected as well and added to the PGSF. Users of the data set therefore have to decide whether or not they should use these additional observations. The following section provides guidance for this decision.

**Target population**

To determine the target population, it is necessary to clarify our use of the terms “community” and “county.” A community is a geographic unit with officially defined borders and an administration that is responsible for all matters that concern the own community. Communities have a mayor, and a community council, and frequently some finer graded administrative subdivisions. Communities can be of any size. They may be big cities, such as East Berlin, Leipzig, and Dresden, or small villages with less than 1000 inhabitants. It is thus not the mere size of a place that constitutes a community, but the fact that it is an officially constituted community. The German language often uses the terms “Stadt” (city, town) for larger communities and “Gemeinde” for the smaller ones, but this differentiation does not matter here. Note that each single housing unit belongs to exactly one community because very small settlements are incorporated into the community of a larger town or village in their neighborhood.

A county then is a geographic unit with officially defined borders and an administration that is responsible for specific regional policies, i.e. for matters that concern several neighboring communities. Specifically, counties have a county commissioner and a county council, as well as some finer graded administrative subdivisions. A county regularly consists of several communities, which are all located inside the border of the county. However, large cities are often a county on their own and are thus both, a community and a county.

As both, counties and communities had their own administration, regional matters can be handled on either the community or the county level. Correspondingly, grievances on regional matters might have been addressed to (or appointed to) the county administration, or the community administration. One therefore has to distinguish between grievances counted at the county administration (“administrative county level”) and grievances counted at the
communities’ administration (“administrative community level”). In practice, however, most preserved sources report the sum of the grievances sent to the county administration and the grievances sent to the administrations of the communities within a county. In this case, the grievance statistic refers to all grievances addressed or appointed to any of the administrative bodies that act within the geographic border of a county; these are the grievances on the “geographic county level”.

Because the grievance statistic on the geographic county level is the sum of the administrative county level and the administrative community level, it can be easily calculated from the figures of the two other levels. However, it is not possible to infer the grievance statistics on the administrative levels from the geographic level alone. As most grievance statistics refer to the geographic county level, it was decided that the grievance statistics on the geographic county level for a given year is the unit of analysis of the PGSF.

Having clarified the unit of analysis, the target population of the sample are the grievance statistics of all counties of the GDR for all years of the period 1970 to 1989. East Berlin is thereby considered as one single county. The overall size of the target population is then conceptually the number of counties times the number of years observed. However, as the number of counties varied slightly over time due to administrative reforms, the size of the target population is the sum of county-years for periods during which the number of counties is stable. According to the calculations shown in Table 1, the size of the target population is $N = 4372$.

**Designed case selection process**

It is relatively easy to compile a sampling frame of the target population, i.e. a list of all counties for each year of the observation period. Using this sampling frame, a simple random sample could have been drawn. Nevertheless, while simple random samples have two highly desirable characteristics, it was not used. Instead, the PGSF used a design that facilitates the record linkage to aggregated survey data of the GSOEP. To understand the PGSF design, it is thus necessary to first describe the design of the GSOEP.

The GSOEP is a longitudinal survey of private households and persons living in Germany. It started in 1984 with a sample of West German households. A few months before the German re-unification in spring 1990, the GSOEP drew a two-stage sample of East German households to be added to the existing sample. In the first stage, 360 communities were selected according to a probability proportional to size scheme with the sizes being the number of residents of the communities. The communities are thus selected with probability $P(S_C) = \frac{360 \cdot M}{M}$, with $M$ being the population of the community in spring 1990 and $M$ being the total population of the GDR. In the second step, an address in each of the 360 primary sampling units was randomly selected. Starting from that address, 10 households were selected using a so-called random route. Within each community, the probability to be selected as respondent therefore was $P(S_R | C) = \frac{10}{M}$ so that the joint selection probability for each respondent was approximately $P(S_R) = P(S_C) \cap P(S_R | C) = \frac{360 \cdot M_c}{M} \cdot \frac{10}{M} = \frac{3600}{M} \cdot \frac{M_c}{M}$.

Hence, all GSOEP respondents are selected with an equal probability selection method (epsem).

The sampling design of the PGSF selects the grievance statistics of all years of those counties that contain at least one starting address of the GSOEP sample of 1990. These were 163 counties, which leads to a target sample of 163·20 = 3260 county-years. While this selection process ensures that there is GSOEP data available for each selected unit, it is clearly not epsem. This is because the selection probability of the county is a function of the selection probability of the GSOEP’s starting addresses, which is not epsem by definition.

However, the selection probabilities of each county can be easily derived. The probability that a county is being selected into the sample is the probability that the county contains at least one starting address. So, the selection probability is equal to the probability that the starting address is either in “community one” of the county (C1), or in “community two” of the same county (C2), and so on. Formally, this can be

<table>
<thead>
<tr>
<th>Period</th>
<th>Number of counties</th>
<th>Years</th>
<th>$N_{\text{period}}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970–1973</td>
<td>191 26 1</td>
<td>4</td>
<td>872</td>
</tr>
<tr>
<td>1974–1987</td>
<td>191 27 1</td>
<td>14</td>
<td>3066</td>
</tr>
<tr>
<td>1988–1989</td>
<td>189 27 1</td>
<td>2</td>
<td>434</td>
</tr>
</tbody>
</table>

4372
written as

\[
P(S_{C1}) \cup P(S_{C2}) \cup \ldots \cup P(S_{Ck}) = \frac{360 \cdot M_{C1}}{M} + \frac{360 \cdot M_{C2}}{M} + \ldots + \frac{360 \cdot M_{Ck}}{M}
\]

\[
= \frac{360}{M} \sum_{i=1}^{k} M_i,
\]

with \(i\) being the index for the \(k\) communities of a county. As \(\sum_{i=1}^{k} M_i\) is the population size of the county, this can also be written as

\[
360 \cdot \frac{M_{\text{County}}}{M},
\]

implying that the selection probability of each county is 360 times the proportion of the county’s population to the total population. The reciprocal value of this selection probability can be used as a weighting variable for inferences on the target population of the 4372 county-years. This target population of 4372 county-years should not be confused with the 3260 county-years of the PGSF’s sampling design (target sample). However, as this variable sums up to the population total of the GDR’s inhabitants, we propose to rescale the variable to sum up to the PGSF’s target population of \(N = 4372\) county-years, i.e.

\[
\omega_{\text{County}} = \frac{M}{M_{\text{County}}} \cdot \frac{4372}{\sum_{j=1}^{J} \frac{M}{M_{\text{County}}}}
\]

with \(j\) being the county-year \(j\) of the \(J\) observed county-years in the sample. The result of \(\omega_{\text{County}}\) has been created as a variable weight in the PGSF.

**Additional counties**

While we were not able to collect data on all sampled research units (see Section 2.4 for details), the PGSF contains 635 research units from 40 counties that are not part of the target sample. There are two reasons for this:

- At some archives the grievance statistics of the sampled county were not available, while the grievance statistics of one or more neighboring counties were available. Usually, prior to discovering the absence of grievance statistics in the sampled county, data collectors traveled to the archive and spent several hours or even days searching for the material. Instead of returning empty-handed, the data collectors were advised to gather data available for neighboring counties.

- On some occasions, there was a source available that already compiled the grievance statistics of several counties, including counties that are not part of the sample.

When compiling the PGSF, it was decided to include the additional observations in the data. However, researchers should note that the selection process of these additional research units is obscure. Unlike the case selection of the GSOEP sample, there might be a self-selection process that is correlated with a researcher’s variable of interest. In such cases, the additional observations should rather not be used.

One advantage of having the additional counties in the PGSF obviously is that they allow analyses of differences between these research units and the sampled ones. More importantly, the 40 counties move the PGSF closer to a collection of the entire population—in fact, with 635 additional county-years, the PGSF contains \(\frac{3134}{4372} \approx 72\%\) county-years of the target population. This has some highly desirable side effects. First of all, note that the nonresponse bias of a statistic in a sample is

\[
\text{Bias}(\hat{Y}) = (Y_{\text{Observed}} - Y_{\text{Not observed}}) \cdot \left(1 - \frac{n}{N}\right),
\]

where \(Y_{\text{Observed}}\) is the value of the statistic for the observed part of the population, \(Y_{\text{Not observed}}\) is the corresponding value in that part of the population that is not observed. \(N\) is the size of the population and \(n\) is the sample size (Levy and Lemeshow 1999, 394). Taking the 72\% from above, the second term on the right-hand side of equation (4) becomes \(1 - 0.72 = 0.28\) so that even a very large difference in the grievance frequencies between the observed and unobserved population of, say, 50 percentage points would lead to a bias of only 14 percentage points.

Another argument stems from the “finite population correction” (fpc). Statistical software assumes infinite populations for estimating the standard errors of statistics. However, for finite populations, the standard errors have to be multiplied with

\[
fpc = \sqrt{\frac{N - n}{N - 1}}.
\]

Taking again \(n = 3134\) and \(N = 4372\) the fpc for the PGSF is \(\sqrt{\frac{4372 - 3134}{4372 - 1}} = 0.53\). Assuming that the additional 635 research units are selected completely at random, all standard errors reported by statistical software can be divided by 2, as opposed to just 1.5 when using the GSOEP sample only.
Finally, it must be stressed that it is completely at the discretion of the data users whether or not to use the additional research units. They should decide in light of their own research question. Besides, data users must note, that the weighting variable described in the previous section is zero for all observations of the additional research units, meaning that they will not be used in weighted analyses.

**Unit nonresponse**

Unit nonresponse is defined here as a county without any information on the grievance statistic for a given year. There is another form of nonresponse when the grievance statistic is in some way incomplete for a given year. This will be discussed in Section 2.5 below.

The total number of county-years of the GSOEP sample is 3,260, stemming from 163 counties observed for 20 years. The PGSF has information on 2,499 county-years (77%), stemming from 155 counties, covering on average around 16 years of the observation period 1970–1989. Around 20 percent of the counties have observations for all years of the observation period (see Figure 1A, 2B in the appendix for a list of the response patterns of all counties).

As mentioned above, there are 635 additional research units from 40 counties that are not part of the sample. Just like for the research units of the GSOEP sample, these research units cover, on average, 16 years of the observation period, and 10 percent of the counties contain the full information for the entire observation period.

The yearly response rate (i.e., the proportion of observed units to the sampled units) varies slightly over the observation period. Figure 3 shows that the number of observed counties of the GSOEP sample varies between 83 in the year 1970 and 142 in 1986; the response rates thus vary between 51 and 87 percent. In terms of the entire target population, the response rate varies between 46 and 82 percent.

**Item nonresponse**

Item nonresponse is defined here as an incomplete grievance statistic for a given year, whereby incomplete at this point means that the available figures in the grievance statistic do not refer to the entire year. Item nonresponse in the sense of missing information on some specific entries of the grievance statistic is not discussed here.

A grievance statistic is incomplete if the observation period of a grievance statistic of a given county does not refer to the entire year. This is the case, for example, if a county reports the grievance statistics semiannually or quarterly and some of the archival materials were lost.

In order to provide an overview on the frequency of counties with item nonresponse, Figure 4 shows a sequence index plot (Brzinsky-Fay, Kohler, and Luniak 2006; Kohler and Brzinsky-Fay 2005) of the PGSF. Using a horizontal line for each county, the figure shows for each of the 240 months of the observation period whether the grievance statistic of a given county includes that particular month. A horizontal line that is all black from January 1970 to December 1989 is used for counties without any unit or item nonresponse. Periods with unit or item nonresponse are plotted by inserting bright regions into the horizontal line. A bright area in a horizontal line that spans exactly a calendar year is unit nonresponse, and a bright area that is shorter than one calendar year is item nonresponse. Hence, dark areas stand for counties and periods without nonresponse,
while bright areas represent counties and periods with unit or item nonresponse.

The PGSF data is rather dense for the huge majority of counties, yet shorter periods of nonresponse within each county are not an exception. Users of the PGSF thus have to deal with nonresponse in some way. A simple way to deal with nonresponse is illustrated in Section 5, but more advanced techniques such as multiple imputation might be considered as well.

**Data collection**

The PGSF resulted from an intensive data collection process. It started in 2013 with initial spot tests on grievance statistics availability, data collection strategies, and possibilities for digitization. Data collection ended in spring 2016 with collection of the last grievance statistics and finalization of the PGSF in its present form. This section describes the data collection process and related crucial decisions.

**Exploratory work**

After discovering the principal availability of grievance statistics, exploratory work was done to prepare data collection. Term papers in advanced seminars were assigned to examine the situation in the archives. Students searched for Eingabenanalysen and its statistical appendix in pre-selected county archives. It became clear from this work that there are a number of alternative storage places to those mentioned in Section 1.3. Schultz (2016) found out that annual grievance statistics usually appeared in the first quarter of a year, which allowed us to focus our search on this time frame. Furthermore, the time needed for data entry and digitization was tested, helping us to estimate the personnel for the project application. It became apparent already at this stage that data entry using electronic documents is error prone. It was thus decided early on to always print the collected material.

**Training program**

The experiences gained in this exploratory step yielded a training program for data collectors. This program included visual aids, slides, and checklists given to the data collectors. An important part of the training program included a simulated fieldwork in the archive of the City of Potsdam. During this simulation, the data collectors got a thorough briefing of the archives’ storage logic and the tools needed to find and read the archival documents. The data collectors could search for alternative storage places for Eingabenanalysen, and they learned how to write copy orders and how to use microfiche readers.

Whenever possible, the data collection strategy was to take digital photos of the Eingabestatistiken and to upload the files into a cloud computer system. This procedure allowed the project management team to control the quality of collected material while the collectors were still in the archives. To implement this strategy, it was, however, necessary that the training program introduced the technique. The data collectors were equipped with cell phones specialized on digital photography. They learned and tested how to combine several functions of digital cameras, like focal ratio (f-stop), exposure and flashlights, to ensure readability of the photographed documents. Finally, the interplay between cell phone and cloud application was explained and practiced.

**Fieldwork**

All archives in the 163 selected counties with traces of Eingabestatistiken were contacted by e-mail and phone in January 2015. About five weeks later, the data collectors got in touch with the archives to arrange their personal visits along their individual itineraries. The fieldwork took place soon after, divided into two collection waves in March and April 2015. As this was the term break, it allowed our data collectors, who were all master’s students at the University of Potsdam, to spend several full consecutive days in the archives to collect the data. The first wave was one week in duration; the second was two weeks. Between the two waves, there was a five-day feedback break to improve data collection strategies and project management.

A lot of archives were located in rural environments and were not reachable via public transport. The project management thus decided to rent cars for use by the data collectors. The territory of East Germany was divided into segments of a circle around Potsdam to minimize driving distances. Each segment was assigned to one data collector. A positive side effect of this set-up was that data collectors who finished their duties could help the data collectors assigned to neighboring regions.

During data collection, the project team in Potsdam was the central office. In case of problems, data collectors contacted the central office. On most occasions, problems with data collection could be resolved. Unfortunately, some county archives around Leipzig in Saxony refused cooperation completely with reference to an order of higher authority. Intervention by the project team was unable to resolve the situation in due time. It later turned out that the coordinating institution of
Saxon counties (Sächsischer Landkreistag e.V.) received incorrect information about the research project’s aims from one of the archivists in Saxony. Due to the delay in data collection, the data for the affected counties is not as detailed as for others.

**Digitization**

The step of transferring data from the printed document to the digital data predominately followed the so-called source-oriented approach (Greenstein 1989). That is to say that we tried to be as close as possible to the original document. However, it should be mentioned that the digitization process also comprised elements of goal-orientation (Thaller 1993). The source-orientation is evident in manifold variables for single and aggregated topics, which aim to copy the originals’ content as authentically as possible. Pure goal-orientation was practiced during data entry when the source contained very detailed subcategories of the major grievance topics. As a rule of thumb we singled out only up to four subcategories. When working with documents containing more subcategories, which was often the case in the district of Karl-Marx-Stadt, we only entered the main category. Besides, goal-orientation influenced the data cleaning for the final preparation of the PGSF: Although the number of grievances on the administrative community level and the administrative county level were originally entered whenever they were available, the published version of the PGSF only contains data for the geographic county level. Finally, a combination of source-orientation and goal-orientation becomes visible by a set of variables that show the difference between the main category and the sum of subcategories. These variables point to inconsistencies in the original source and help data users to deal with these inconsistencies.

**Preparatory work**

The collected grievance statistics (comparable to Figure 2) arrived in various formats: as tagged image file formats (tif) from the project’s digital cameras, as files from scanners at the local archives (mostly as pdf), or as paper copies. All these incoming materials were neither machine readable nor formatted for data entry. Thus, the following steps had to be performed before data entry.

The first step was to convert the electronic format of the incoming files to JPEG and digitize the printed material to the same format. All the files were then saved into a repository, where each file received a unique registration code that was formed from an identification number for the county, the start date of the reporting period of the grievance statistic, and an identifier for the page of the original document. The digital repository is stored on a server at the Chair of Methods for Empirical Social Research at the University of Potsdam, and individual documents will be made accessible upon request.

For the second step, all grievance statistics of the electronic repository were printed. This was necessary because of the low degree of standardization across individual reports. For printing, the quality of the electronic materials were optimized using “David’s Batch Processor” (DBP) of the “GNU Image Manipulation Program” (GIMP); the optimization was particularly successful in rescuing documents with bad resolutions or low contrast. The print-outs of grievance statistics constitute a complementary type of archival material for the project.

**Data entry**

The greatest challenge in the course of data entry was the heterogeneity of the available statistics. The first problem was item nonresponse as defined in Section 2.5. A similar problem was that some counties shifted the reporting period away from the calendar year. It was thus decided to organize the actual data set as so-called “spell data.” That is to say, each observation (row) of the file refers to a period for which a start date and an end date is reported (“spells”). It is thus possible that the information of one research unit (the grievance statistic of a county for a given year) is split into several spells. Organizing the data as spell data is the most parsimonious way to keep all the information of the reporting period in the data, but it must be noted that the number of observations in the PGSF is not equal to the number of observed research units. The number of spells is higher than the number of research units to the extent that the information of a research unit had to be split into several spells. In the PGSF, the number of spells is \( n = 3830 \), while the number of research units they represent is \( n = 3134 \) county-years. This suggests that it took, on average, 1.2 spells to record one research unit.

In addition to the nonuniform reporting periods, the grievance statistics may refer to the geographic county level, the administrative county level, or the administrative community level (see Section 2.1)—or a combination of levels. Moreover, the categorization of grievance topics frequently varied considerably from one county to another and within the same county over time (see
also Section 4.5 below). Due to the complexity of the original documents, some of these variations were only discovered during the data entry process. It was therefore necessary to develop a standardized data entry mask that ensures sound data entry, while capturing the complexity of the original documents and allowing a certain level of flexibility to adjust for exceptional sources. This data entry mask was realized using the open source survey application LimeSurvey.\textsuperscript{41} In fact, the entry mask resembles a regular online survey.

At the outset of the survey, the coders entered the unique and previously generated passcode to access data input for a specific grievance statistic. The token is a simplified version of the identifier used for the file names of the electronic repository (see Section 4.1): It is the concatenated numeric county identifier and the starting year and month of the reporting period.

In the first section of the entry mask, the coders had to check and confirm that they wanted to input data for this specific observation. After that, they provided basic information, such as the document signature, the name of the archive, and the reporting period. Next, the coders specified the level to which the grievance statistic referred (see Section 2.1). Based on this input, they were directed to one of several predefined scenarios for further data entry. These scenarios were implemented using the very flexible and powerful branching functionality of LimeSurvey. The scenarios could be divided into three main types with several subtypes. First, grievance statistics referred to the geographic county level. Second, the document contained separate numbers for the two administrative levels. Third, some numbers, such as the total number of grievances, referred to the geographic county level, while, for example, a categorization of the grievances into topics was only available separately for the administrative county and community level or one of them.

Quality checks at data entry time

A sophisticated system of consistency checks was implemented in LimeSurvey to prevent entry errors. The focus of these checks was on detecting differences between the reported total number of grievances and the sum of all grievances by topic. This was more difficult than it might seem since the numbers in a single grievance statistic frequently referred to different administrative levels. Hence, checks for various scenarios had to be implemented. In the simplest case (see Section 4.2: scenario type one and two) the total number of grievances and the grievances by topic referred to the same administrative or geographic level. In other cases, the reported total number of grievances referred to the geographic county level, while the grievances by topic were only available separately for the administrative county and community level. Conversely, other documents reported the total number of grievances separately for the administrative county and community level but the grievances by topic only for the geographic county level.

In a first step, routines in the background determined which numbers were entered for what administrative or geographic level. If necessary, numbers for the administrative county and community level were added and then used to compute the difference between the total number of grievances and the sum of all grievances by topic. If this difference was unequal to zero, the coders were presented with an individual error message containing the total number of grievances, the sum of grievances by topic, and the respective difference. For grievance statistics containing numbers that refer to the whole geographic county level and one of the two administrative levels, the respective numbers for all levels were displayed.

The error message further asked the coders to go back and recheck their entries. If, after rechecking the numbers, the difference remained unequal to zero, the coders could state that the difference resulted from the original document. In addition, they had to enter a short, predefined keyword specifying the nature of the difference.

Some of these keywords carried information as to whether the calculated difference was positive or negative. Others carried additional information regarding the reason for the difference, for example, whether pages in the section grievances by topics were missing or whether only a subset of topics was reported. These keywords are used to generate variables for the quality of the respective data.

Moreover, a few less complicated checks were implemented to, for example, ensure that the entered start date of a grievance statistic preceded its end date.

Quality checks after data entry

The data entry was mainly checked in two ways. The first way was a system of feedbacks between coders and controllers. The second way was to double-check for unusual fluctuations in time series graphs. Both techniques are described in the following.

The coder-controller feedback system was organized as a sequence of three steps, namely control, correction, and checkout:

- Control: After an original document was entered into the data set, the coder passed the printed document in one of three boxes with different colors:
black, red, and transparent. Documents in the black box marked readiness for control. The controllers picked out the original document and compared the entered data of the first and every fifth year with the original document. If no problems or mistakes were found, the original document was passed to the transparent box. From there, the document was filed away in a binder organized by county and year.

- Correction: In case of irregularities in the control step the entered data for all years for the particular county was double-checked. If the error turned out to be a particular case, it was corrected by the controlling team. Mistakes arising in several years were described in an Online Google Spreadsheet. In the spreadsheet, the respective cell was marked with red, and the case was assigned to a coder. The original document was passed into the red box, and the coder was notified.

- Final check: The final check of a conspicuous document required correcting the tagged mistakes, changing the red flag in the online document, and taking the original document to the transparent box.

The second control mechanism took place after all of the data was entered. A Stata do-file was written to show time series graphs of grievance densities (see Section 5) for each county and each topic separately. Visual inspection of the graphs for unusual fluctuations was done. For conspicuous cases the entered data was again compared with the original document and corrected if necessary.

**Clearing of grievance topics**

As explained in Sections 1.2 and 1.4, the grievance statistics contain information on the number of Ein-
genben addressed or appointed to specific local authorities. Assuming that this allocation process was a function of the grievance topic, these numbers may carry information about people’s most urgent troubles. Unfortunately, however, the allocation process, the designation to local authorities, the reporting rules, or any of these, were not highly standardized. At the point of data entry, this leads to a huge amount of different designations for related or even identical topics. It was thus necessary to further harmonize the list of topics for the public release version of the PGSF. The general rules applied for this harmonization are documented in the PGSF’s codebook (Krawietz et al. 2018), and each individual decision can be reviewed in the supplementary Stata do-files.

However, the issue of grievance topics cannot entirely be resolved by the data provider. As it stands, the PGSF has 34 variables that contain the number of grievances about unique topics, whereby uniqueness refers to cases when the local authority responsible for the grievances was uniquely designated. In addition, the PGSF has another 92 variables containing the number of grievances on aggregated topics, such as, “road construction and construction” (Straßenbau und Bauwesen). The values of these aggregated variables are only defined if the archival material did not designate the unique topic. Obviously, it is easy to merge the unique topics—such as road construction and construction—into a joint topic by simply summing up the grievance numbers. However, due to the low standardization of the archival material, this is only possible to a certain extent. The reason for this is that the aggregated topics are not consistent for all research units.

Table 2 shows an example using road construction, construction, and traffic: 1,180 spells in the PGSF designate numbers of grievances about road construction; 2,791 spells have information on construction; and seven spells designate the number of grievances on the aggregated topic road construction and construction. Merging the two unique topics and the aggregated topic leads to a joint topic that is defined for 3001 of the overall 3830 spells. Note that the number of spells for the joint topic is not the sum of spells for the two unique topics and the aggregated topic. Some spells have information on road construction as well as construction. These spells must not be counted twice. 829 spells do not have any information to this joint topic.

The reason for the missing information is that some counties merged road construction and construction

<table>
<thead>
<tr>
<th>Category</th>
<th>code</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road construction</td>
<td>19</td>
<td>1180</td>
</tr>
<tr>
<td>Construction</td>
<td>29</td>
<td>2791</td>
</tr>
<tr>
<td>Combination 19 ∪ 29</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Road constr. ∨ constr. ∨ comb. 19 ∪ 29&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
<td>3001</td>
</tr>
<tr>
<td>Road construction</td>
<td>19</td>
<td>1180</td>
</tr>
<tr>
<td>Traffic</td>
<td>18</td>
<td>1381</td>
</tr>
<tr>
<td>Combination 18 ∪ 19</td>
<td></td>
<td>291</td>
</tr>
<tr>
<td>Road constr. ∨ traffic ∨ comb. 18 ∪ 19&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
<td>1804</td>
</tr>
<tr>
<td>Traffic</td>
<td>18</td>
<td>1381</td>
</tr>
<tr>
<td>Communication</td>
<td>17</td>
<td>401</td>
</tr>
<tr>
<td>Combination 17 ∪ 18</td>
<td></td>
<td>648</td>
</tr>
<tr>
<td>Traffic ∨ commun. ∨ comb. 17 ∪ 18&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
<td>2073</td>
</tr>
</tbody>
</table>

<sup>4</sup> In Boolean algebra “∨” denotes the logical operator “OR”. Using this logical operator “OR”, we count the number of spells that have information on at least one or more of the listed categories. The operator ensures that spells with information on road construction as well as construction are not counted twice. Hence, the number of spells for the categories combined by “∨” is not the simple sum of the spells in the single categories.
with other categories. In 291 spells we find, for example, the joint combination of road construction and traffic. It would be thus sensible to create a more general topic “construction, road construction, and traffic.” Leaving aside that such a broad classification would be harder to interpret, it would still not be possible to create a variable that is defined for all spells, because traffic was also frequently designated in the aggregated category traffic and communication.

Unfortunately, it is again not possible to merge all four categories into a broader category, because communication was also reported together with topics such as energy, water, environment protection, or recreation. In fact, it is generally not possible to create a consistent categorization of topics for all spells, aside from a very broad differentiation between housing and all others. The solution realized in the PGSF is thus a compromise that gives the researcher high flexibility to merge topics for the research question at hand without inflating the numbers of variables to infinity.

Marginal distributions

A thorough description of the marginal distribution of all 176 variables of the PGSF is beyond the scope of this article. This section thus only shows an arbitrary selection of marginal distributions with some statistical trickery. The results shown here are by no means meant as a decisive answer to a specified research question. Instead the analyses are meant to illustrate potential uses of the PGSF and to provide some inspiration on the research questions that might be studied with it.

Figure 5. Grievance density by district and time. Results are based on n = 3813 spells from 196 counties. District and time explain 33% of variance in grievance density (Do-file: srlt_an02V3_margins.do).
**Grievance density by district and time**

To start, Figure 5 shows the grievance density defined as

\[
\text{Grievance density}_{ip} = \frac{\text{Number of grievances}_{ip}}{\text{Pop. (in 1000)}_{ip} \cdot \text{Spell duration (in weeks)}_{ip}}.
\]

where the subscript \(ip\) refers to county \(i\) for the spell period \(p\). The grievance density is an estimate of the number of grievances per 1000 inhabitants reaching the authorities in county \(i\) in one week. The figure shows the grievance densities of all observed PGSF spells by district and time, whereby time was defined as the midpoint of the spell period. The lines show the results of Lowess, a variant of a non-parametric regression analysis, (see Cleveland 1979). In addition to the line for the district level, a second line was drawn for the county level to ease comparisons between districts.

It can be read from Figure 5 that the number of grievances decreased over time. At the same time, it also becomes clear that the grievance density varied between districts in an interesting way. It was higher in Berlin than in any other district and rather small in the districts of Magdeburg and Leipzig, especially in the 1970s. The decrease of the grievance densities was also particularly strong in these two districts. Finally, one can also see that the grievance density varied substantially within each district. The within-district variation tends to be stronger at the beginning of the observation period, but the district of Rostock is an exception here.

As it stands, we do not offer any explanation for these observed patterns. While possible explanations certainly include measurement error, local authorities’ reporting strategies, and historical changes in the quality of life or participation behavior, such exploratory hypotheses should be tested in future analysis.

**Overall amount of grievances by year**

The grievance densities can also be used for a rough estimate of the total amount of grievances at the county level. As it stands, the only data-based estimate of this total amount can be found in Mühlberg (2004). The estimation there is based on a variety of sources, including accounts from the district of Magdeburg for 1961–1962, and time dispersed figures of the numbers of grievances sent to the State Council. According to this, the yearly numbers of Eingaben were between 779,000 and almost a million.

Using the PGSF’s data on grievance densities, one can calculate the weighted mean of the grievance densities for the research units of the GSOEP sample. This figure is 0.6082734, which indicates that the local authorities received around 0.61 grievances per week and 1000 inhabitants. Multiplying this grievance density with the number of weeks and the average population size (in 1000 inhabitants) suggests that the overall amount of grievances in an average year was

\[
0.6082734 \times 52 \times 16,769.754 \approx 530,431.
\]

The above number, however, only reflects the quantity of grievances that end up to be counted on the levels of communities and counties. The figure, therefore, misses the grievances that were solely counted at other institutions, particularly the Council of Ministers and the State Council. The best source for the number of grievances sent to the Council of Ministers is the file of individual grievances provided by the “Eingabenprojekt” of the German Federal Archive. For the 15-month period from July 1988 to September 1989, the file documents 13,734 grievances, and hence approximately 10,987 per year. Approximately 43 percent of grievances were transmitted to the county and community level, so that one could estimate the yearly number of grievances not already counted at the local level at 6,293.

According to Staadt (1996), the average number of grievances per year addressed to the State Council was 58,284 for the period of 1976 to 1984. This number, however, includes grievances that were transmitted to or from the local level and to or from the Council of Ministers. Adding the number of grievances addressed to the various authorities will thus be an upper limit for the true number of grievances:

\[
530,431 + 6,293 + 58,284 = 595,008.
\]

While this is an impressive amount, it is substantially smaller than the number estimated by Mühlberg (2004). As of today, it seems that the published estimations must be adjusted downwards.

**Grievance topics**

The PGSF contains information on the number of Eingaben addressed or appointed to specific local authorities (see Section 1.2 and 1.4). This may carry information about the topic of people’s most urgent troubles. Before studying the frequencies of these topics, the methodological issue discussed in Section 4.5 needs to be resolved. The solution used here can be studied in the Stata do-file that produced Figure 6.

Figure 6 shows the topic-specific grievance densities by time. Thereby the individual graphs for the specified topic were sorted from the topic with the lowest mean
density up to the topic with the largest mean density. Similar to Figure 5, superimposed non-parametric regression lines were used to illustrate the evolution of the grievance densities and to ease the comparison between topics. The number in the right-hand corner refers to the number of spells shown in the respective figure.

The figure confirms the finding (Mühlberg 2004; Staadt 1996) that grievances about housing—which include quality of dwellings, assignment of housing space, and housing policies in general—were by far the most frequent topic of the Eingaben. Another frequent issue was trade and supply of goods. A less known finding shown in the figure is that grievances about housing decreased substantially during the 1970s, and a closer look reveals that they became somewhat more frequent again in the last years of the GDR’s existence. There are indications in the figure of a slight increase of grievances concerning environment protection, water, and recreation, as well as energy, communications, and traffic. Last but not least, there are quite a number of cases with unusually high numbers of grievances on a specific topic, which require additional attention.

The meaning of grievances

The value of grievances as a source for scientific research is discussed basically among social and legal historians. There are two main debates about the value of grievances. First, the normative debate addresses whether the grievance system was a good and effective participatory institution. This debate does not have an impact on the validity of the data in the PGSF. It is thus described briefly in the following. The second debate deals with the question of whether the internal logic of the autocratic regime led, first, to a specific selection of themes...
advanced in the grievances and, second, to a specific selection of citizens who used the system. Such selection processes challenge the usability of PGSF data research on concepts like quality of life or well-being and must thus be elaborated in more detail.

In the normative debate, the Eingabewesen is sometimes considered positively as a “willful public opinion model” (Merkel 2000; Mühlberg 2004) or as a valve to air discontent concerning the “economy of scarcity” (Kästner 2006; Schröder 1996). Other benevolent interpretations saw the Eingabewesen as a crucial possibility to intervene against assaults by state and party (Samson 2013). In this perspective, grievances exhibit the participatory character that was also stressed by GDR’s authorities and contemporary commentators (Weichelt 1986). More negative views associate the Eingabewesen with the nepotist network system or with a poor man’s substitute for a functioning administrative jurisdiction in a rule-of-law state (Bernet 1990). While such views are undoubtedly important, they do not challenge the validity of the PGSF data. To be clear, the system might have been flawed, but this does not necessarily imply that the number of grievances is uncorrelated with the amount of discomfort.

The aforementioned theme and group selection hypotheses are more challenging to PGSF data validity. If correct, these hypotheses imply that the grievance data underestimates the amount of discomfort in the GDR and questions whether the historical evolution of grievances contains valid evidence about the GDR citizens’ attitudes towards their country. In the following, we first describe the two hypotheses separately. We then briefly discuss the empirical evidence for their validity and finally, comment on the consequences for interpreting results from the PGSF data.

Regarding theme selection, researchers argue that the contents of the grievances were predetermined by the regime’s ideals, intentions, and restrictions (Zatlin 1997). According to this argument, grievances that were too critical were passed to the Stasi and led consequently to all kinds of restrictions against the petitioner (Fulbrook 2011, 302). Grievances on themes such as freedom of assembly, freedom to travel, the lack of a pluralistic multiparty system, the lack of human rights, wishes to strengthen the churches’ position, opinions against the militarization of the GDR, or gender issues were therefore probably not written.

The group selection argument is slightly more complex. It starts with the observation that the Eingabewesen channeled the petition culture into private exchanges (Betts 2010; Lindenberger 1999). A petition and the decisions on it could not be controlled. On the contrary, the success of a grievance was bound to the willingness of the authorities to act in accordance with the wishes of the petitioner. This non-public process likely facilitated a specific culture of presenting grievances. Investigations of conserved original grievances repeatedly show that petitioners tried to increase the probability of their grievances’ success using an artful and servile style of complaining in conformity with the authorities’ semantic (Gieseke 2015). Therefore, petitioners could be perceived as comparable to subjects in premodern principalities who knelt down in front of their lordship, prince, king, or other rulers (Staadt 1996; Zatlin 1997).

The empirical observation that grievances are written in a certain style implies two hypotheses about the selection process of those actually filing a grievance. First, it may well be that people who were not willing or able to act in accordance to the regime’s semantic excluded themselves from the Eingabewesen. Second, the system appeals to a group of citizens that are more loyal and more politically involved.

With respect to the data stored in the PGSF, the theme and group selection hypotheses suggest the data may under-represent the views of specific people and themes. The potential for theme selection bias in the PGSF data is particularly plausible. This is because the grievances with more fundamental topics were not registered at administrative bodies on the county level but at the Stasi, or at other central organizational bodies. One piece of evidence for this is that categories on tourist traffic (Reiseverkehr) and exit visas (Übersiedlungen und Ausreiseanträge) can be found in grievance statistics for the State Council (Rathje 2006; Staadt 1996, 72, 87, 95) but not for the county level.50

While being quite plausible, there is, as it stands, not much empirical evidence for the group selection hypothesis. Specifically, comparing the socio-economic status of the Eingaben writers to the population average is not yet possible. Therefore, the possibility of group selection should be taken into account when interpreting results based on data from the PGSF. Notwithstanding, the PGSF may offer the possibility to analyze implications of the group selection hypothesis. Specifically, if data on conformity with the state was available, it would be possible to study the correlation between grievance density and conformity, thus providing one assessment of the group selection hypothesis.

The overall recommendation to deal with selection processes is to restrict the scope of results obtained with PGSF data: The PGSF data portrays private, vertical, and conventional voice raised in small regional, identifiable entities in the former GDR. At the very minimum, this data should thus provide information about the amount of everyday problems in the
people’s immediate environment (c.f. Fulbrook 2011). In fact, preliminary analyses by Class (2016) sustain the notion that grievance statistics contain valid evidence on the amount of subjective well-being in a county, and this is further supported by research on the conserved original grievance letters (Bruns 2012; Gentz 2006; Kästner 2006; Maaß 2005; Reuter-Boysen 2010; Streubel 2007). Whether the grievance statistics carry information on broader concepts, such as loyalty or conformity in general, remains an open question. Different answers may be given depending on the research question at hand. However, we are certain that the PGSF offers the possibility to study questions on the nature of the Eingabewesen much better than we could before.

Acknowledgments

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Notes

4. The Socialist Unity Party of Germany (SED) was the ruling party of the de facto one-party regime; see Hadenius and Teorell (2006).
5. DAS study number ZA-6000
6. DAS study number ZA-6025
7. The terms grievances and Eingaben are used interchangeably throughout this article.
8. PGSF is publicly available at the German Data Archive for the Social Sciences (DAS) of the Leibniz Institute for the Social Sciences (GESIS). The archive number is ZA6413; see https://doi.org/10.4232/1.12916.
9. With Eingabenwesen we mean here the cultural practice of writing grievances in an idiosyncratic rhetorical style and the specific handling of incoming grievances by the officials. We address with the term culture not the legal and bureaucratic system but how people used the constitutionally fixed possibilities for their individual purposes.
10. See Mühlb erg (2004) for a thorough treatise on the legislation history.
12. The original German name was “Verordnung über die Prüfung von Vorschlägen und Beschwerden der Werkträger.” It can be obtained at the German Bundesarchiv, archive number is BArch, DR 2/2644.
13. The original German name was “Erlaß des Staatsrates der Deutschen Demokratischen Republik über die Eingaben der Bürger und die Bearbeitung durch die Staatsorgane”. The full version is online accessible at http://www.verfassungen.de/de/ddr/petitionserlass61.htm.
14. See the changes in the second grievance order of February 18, 1966.
15. The constitution of April 6 is online accessible at http://www.documentarchiv.de/ddr/verfiddr1968.html.
16. With the Eingaben law of 1975, it was formulated more narrowly in that only organizations which were authorized by the state were allowed to write grievances. In that way, spontaneous group collaboration was suppressed (Schoeter 2012).
17. The original German name was “Erlaß des Staatsrates der Deutschen Demokratischen Republik über die Bearbeitung der Eingaben der Bürger”. The full version is online accessible at http://www.verfassungen.de/de/ddr/petitionserlass69.htm.
18. The original German name was “Gesetz über die Neufassung von Regelungen über Rechtsmittel gegen Entscheidungen staatlicher Organe” (June 24, 1971, GBl I/1971, S. 49–54, cited from Mühlb erg (2004, 152)).
19. Fire prevention, fishing, marital status, postal system, telecommunications, food law, pharmaceutical law, and police law.
20. The original German name was “Gesetz über die Bearbeitung der Eingaben der Bürger”. Online accessible at http://www.verfassungen.de/de/ddr/petitionsgesetz75.htm.
21. We are not aware of a proper translation for this German term.
22. The institution is commonly termed as the “Stasiunterlagenbehörde”; see http://www.bstu.bund.de/EN/Home/home_node.html.
23. Brandenburgisches Landesarchiv, Rep. 401 Rat des Bezirkes/Bezirkstag Potsdam Nr. 27662 (page 1 only).
24. The Stadtsinspektion was a subordinated authority responsible for public safety and order. The modern German name is “Ordnungsmajt”. 
25. As a general rule, one-third of the grievances listed for a subordinated body were actually transmitted through higher ranked organs, while two-thirds of the grievances were sent directly to the responsible Fachorgan. This indicates a good knowledge of the administrative structure by the petitioners.
26. The PGSF contains various identifiers for the counties. Using these identifiers, the PGSF can be merged to geodata provided by the Max Planck Institute for Demographic Research, to aggregated data of the GDR’s censuses from 1971 and 1981 and to all historical data sets that contain the regional classification determined by the Council of Ministers. In addition, the PGSF ships with identifiers for districts (Bezirke), which can be used to merge a broad range of data collected by the GDR’s statistical office.
27. Less formally, the sample should be representative for the GDR. The term “representative” is avoided here, because it has lost its proper meaning due to widespread improper uses of it.
28. See http://www.diw.de/en/soep
29. The numbers of counties of a given year were taken from the county lists of the respective Statistical Yearbook; see https://www.digizeitschriften.de/en/dms/toc/?PID=PBN514402644.
30. Statistics calculated in a simple random sample are on average correct ("unbiasedness") and have a relatively small uncertainty ("efficiency"); see Levy and Lemeshow (1999).
31. It was not always possible to select 10 households belonging to the target population on the random route that started from a selected address. The true selection probability is thus a bit smaller; see Spieß (2005).
32. Seven of the selected counties were the result of boundary reforms in the years between 1970 and 1989: Instead of the two separate counties “Greifswald (Land)” and “Greifswald (Stadt)” there was only one county “Greifswald” until 1974. Secondly, the counties “Stendal” and “Wolmirstedt” were enlarged in 1988 by communities of the former county “Tangerhütte”. Thirdly, the counties “Gardelegen”, “Osterburg” and “Salzwedel” were also enlarged in 1988 by communities of the former county “Kalbe”. We therefore considered the counties “Greifswald”, “Tangerhütte” and “Kalbe” as part of the sample also they did not exist in 1990.
33. See Section 5 for a definition of a variant of the grievance frequency.
34. Figure 3 was produced with Stata using the Stata do-file srl_an01V3_sample.do. This other do-files are online accessible at http://www.uni-potsdam.de/soziologie-meth
doden/dbp.html. In the following we always mention the name of the do-file that produced a result. See footnote 42 for an explanation of what a do-file is.
35. The second grievance order of 1961 required semiannual and quarterly reports for local authorities. While such obligations were already nonexistent in 1966, such reports were still not uncommon.
36. Samsung Galaxy S4 Zoom
37. Please refer to Section 2.1 for a definition of “administrative community level”, “administrative county level”, and “geographic county level”.
38. As the copyright of the individual grievance statistic remains at the archives, it is not possible to make the electronic repository publicly available on the Internet.
40. https://www.gimp.org/
41. https://www.limesurvey.org/
42. A Stata do-file is a simple text file with commands for the statistical software “Stata”. Running the commands one after another reproduced the results of an analysis from scratch; see Kohler and Kreuter (2012).
43. See Section 4.2
44. Or, more precisely, 1,180 spells designate numbers of grievances addressed or appointed to the local authority that was responsible for road construction.
45. The population data was taken from Class (2017). The joint population of “Greifswald” before 1974 was divided into “Greifswald (Land)” and “Greifswald (Stadt)” proportional to the proportions of the population in 1974.
46. Remember that the research units are county-years. The weights are derived in Section 2.4.
47. BArch, DC 20 MD/2
48. Grievances to the Council of Ministers kind of exploded in the revolutionary period after September 1989 and are thus not used for the estimation.
49. srl_an02V3Margins.do
50. An exception are the grievance statistics of Leipzig, presumably due to Leipzig’s exhibition site.

References
Fulbrook, M. 2011. Ein ganz normales Leben: Alltag und Gesell-


### Appendix

#### A Figures

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<th>Altenburg</th>
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**Figure 1A.** Response by county and year, part 1 (Do-file: srlt_an03V3_overv.do).
Figure 2B. Response by county and year, part 2 (Do-file: srlt_an03V3_overv.do).

Grievances refer to...
- entire year
- shorter period
- missing