

# Germania Sacra Online – The Research Portal of Clerics and Religious Institutions before 1810

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## Abstract

The research project Germania Sacra provides a comprehensive prosopographical database, that makes structured and comparable data of the Church of the Holy Roman Empire available for further research. The database contains approximately 31,000 records of premodern persons, new data is continuously added. This digital index of persons is supplemented by the "Database of Monasteries, Convents and Collegiate Churches of the Old Empire". The access through ecclesiastical institutions offers a broad variety of visualization possibilities for the prosopographical data. Together with the digitized reference books of the Germania Sacra those databases constitute a research portal of clerics and religious institutions, which takes into consideration the enormous importance of the Church for the history of the Holy Roman Empire. In order to make as much information as possible accessible for scholarly use the next steps that will be undertaken are cross-institutional collaboration and integration of scientific data resources of other research projects.

**Keywords:** Prosopography, Church of the Holy Roman Empire, Linked Data, Authority files, Cross-database query, Monasteries

## 1. Introduction

Within Europe, the Germania Sacra is a unique research project that deals with the history of dioceses, monasteries, convents and collegiate churches in the Holy Roman Empire of the German Nation. The clerical institutions included date from late antiquity until the Reformation or, respectively, the secularization at the beginning of the 19th century. Geographically, research includes the present Federal Republic of Germany and the border regions of neighboring countries.

The aim of the project is to present the source material of the respective archives in a way that makes structured and comparable data of the Church of the Holy Roman Empire available for further research. A key component of this is the prosopography; specifically an inventory of clerical members of the Roman Empire, not just by name, but with all the essential information that can be collected from local archives and from Vatican sources. Contained within the reference books published by Germania Sacra are short biographies of the clerics in each of the studied institutions. Thus, Germania Sacra provides biographical lists of the bishops of a diocese, the canons or canonesses of individual collegiate churches, the monks and nuns of numerous monasteries etc.

According to current research which considers approximately a thousand years of church history – from the Roman Empire to the secularization – about 10,000 monasteries and convents existed. If we assume that an average institution over time had approximately 500 clerical staff members, this means we are discussing millions of individuals.

Given that the research project Germania Sacra was founded 100 years ago, one wonders if the founding fathers were aware of the sheer mass of material and the necessary human and financial resources needed to cope with such a project. We can assume they were.<sup>1</sup> As part of the scientific community during the late 19th and early 20th century, these scholars were influenced by the widespread optimism and positivism in regard to ambitious research projects in the field of the humanities. Seemingly, they believed that they could manage this enormous task.

Today, about four generations later, the assessment is much more sober. Germania Sacra has existed for almost 100 years, during this time 72 reference books have been published. This, of course, means that only a small amount of the archival material of the religious institutions and clerics has been reviewed. Consequently, the vision of the founding fathers appears to be an illusion. At present the Union of the German Academies of Sciences and Humanities, which funds Germania Sacra since 2008, offers the most comprehensive humanities research programme in Germany and supports long-term basic research projects. Nonetheless resources are restricted. Like all other research projects Germania Sacra

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<sup>1</sup> "Woher die erforderlichen Mittel nehmen und, wenn diese vorhanden gewesen wären, wo die unentbehrlichen zahlreichen Mitarbeiter und Hilfskräfte finden und in eine Organisation auf so weite Sicht, für zwei oder gar für drei Generationen, einordnen? ... So ist es gekommen, daß, sobald wir die ersten Grundlagen für Germania pontificia geschaffen hatten und sahen, daß allen Propheten zum Trotz dieser Versuch gelingen werde, wir daran gingen, die Vorbereitungen für die Germania sacra zu treffen." Preamble of the first volume of Germania Sacra by Paul Fridolin Kehr, in: Abb & Wentz, 1929, pp. VII–VIII.

had to provide a precise and realistic concept and to develop short-term objectives. The aim to collect and publish all the prosopographic data of the Church of the Holy Roman Empire does not seem to be realistic anymore. However the digital revolution might indeed give us another chance.

## 2. Building a research portal

New technologies lead to new possibilities; the networking opportunities in the digital world breathe new life into the vision of a comprehensive prosopographical overview of the Church of the Roman Empire. Today, we are much more involved with the scientific community, and it is much easier to work collaboratively on the collection of research data. We can easily make use of research results that have emerged in quite different contexts, collating a variety of types of research material. Ultimately, we will be able to publish research results much faster and with less effort, reaching a larger audience than we ever could through traditional printed monographs. This also helps us to integrate more external researchers into the process than ever before.

Consequently, Germania Sacra has created a broad portfolio of digital resources in the field of the Church of the Holy Roman Empire in recent years. The key facility of the online portal is a scholarly "Digital Index of Persons" with a focus on clerics. Another primary feature is constituted by the digitized reference books concerning the history of ecclesiastical institutions compiled in the context of the long-term project which began in 1917. A "Database of Monasteries, Convents and Collegiate Churches of the Old Empire" was recently released. All digital offerings of Germania Sacra are works-in-progress; new volumes will be made available 3 years after their publication. The biographical database is continuously updated. Currently, it contains approximately 31,000 records (May 2015). Similarly, the monastic database is a

developing resource with new data continuously added (approximately 1,500 records, May 2015). All digital resources are linked with each other, allowing access through a variety of search options and browsing functions.

In order to enable a deeper examination of the prosopographical information found in Germania Sacra volumes, we have compiled a digital index of persons who appear in the published reference books. This has led to a scholarly database which provides comprehensive information about the clerics of the Church of the Holy Roman Empire and other individuals associated with clerical institutions. Currently, the database comprises approximately 150,000 entries, 31,000 of them already available on the public version of the database. The "Digital Index of Persons" provides targeted access to the biographical and prosopographical information in the reference books. For this purpose, the complex hierarchical structure of the index entries of the printed reference books was transferred into a relational database. As a result, queries for individuals can be made via a variety of search options: name, surname and its variants, personal data, including office data, institutional affiliations, and geographic impact areas. The identification and merging of data sets of identical persons has been done manually so far and is mainly undertaken for high ranking church and secular officials (such as bishops and abbots).

The extensive amount of data contained in the prosopographical database of Germania Sacra enables reliable statistical and empirical studies that were – based solely on the monographic publications – formerly not possible to this extent. Plurality of benefices and offices or family and social networks of church officials can be reconstructed and visualized much more easily by using the data pool. By combining various search criteria,

Vorname	Familienname	Namenszusatz	Sterbedatum	Ämter	Belegdaten	Fundstellen
Adam	Adami		1663	Prior; Regens; Titularbischof; Weihbischof	1610–1663	3. F. 5, Prämonstratenserstift Marchtal 244. NF 37, 4, Diözese Münster, Bischöfe 805-1801 61. NF 29, Benediktinerabtei Brauweiler 63, 82, 133, 147, 214, 296f. NF 5, Klöster der Augustiner-Chorherren, Münster 38. NF 3, Schwesternhäuser Augustinerregel, Münster 74.
Angelo Maria	Querini		1755	Kardinal, Bischof	1727–1755	NF 39, Benediktinerabtei Wessobrunn 20, 24, 33, 67, 109, 201, 207–208, 230, 232, 502–503, 518. NF 28, Benediktinerabtei Benediktbeuern 72, 114, 537.
Anselm	von Canterbury		1109	Erzbischof	1093–1109	3. F. 3, Augustinerchorherrenstift Bernried 71. NF 35, Diözese Naumburg 131, 321, 467, 753–755. NF 13, Würzburger Bischöfe 1455-1617 156.
Bernhard	von Sachsen-Lauenburg		1539	Titularbischof; Weihbischof; Weihbischof; Confessor	1519–1534	3. F. 2, Zisterzienserabtei Marienfeld 182, 463. NF 37, 4, Diözese Münster, Bischöfe 805-1801 29ff., 36. NF 37, 3, Diözese Münster 533.
Gebhard II.	von Urach		1107	Bischof, Abt	1091–1107	NF 45, Eichstätter Bischöfe bis 1535 71. NF 42, 1, Konstanzer Bischöfe 6. Jahrhundert - 1206 230, 239, 251. NF 42, 1, Konstanzer Bischöfe 6. Jahrhundert - 1206 257. NF 20, Hildesheimer Bischöfe 815-1221 306. NF 1, Würzburger Bischöfe bis 1254 125.
Georg	Flach		1564	Weihbischof	1544–1564	NF 40, St. Burkard in Würzburg 21. NF 38, 1, Bamberger Bischöfe 1522-1693 143, 601. NF 26, Stift Neumünster in Würzburg 242, 388. NF 13, Würzburger Bischöfe 1455-1617 123, 125, 147, 149.
Heinrich	von Spiegel zum Desenharn		1380	Bischof, Abt	1361–1380	NF 46, Hildesheimer Bischöfe 1221-1398 414, 574. NF 37, 3, Diözese Münster 434, 436f., 447. NF 37, 1, Diözese Münster 391f.

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correlations can be uncovered which go beyond the information provided in the printed reference books. Fig. 1 for example shows the result of a query for Benedictine bishops.

Alternative forms of access and a broad variety of visualization possibilities for the prosopographical data are made possible by access through the ecclesiastical institutions. For this purpose, we recently released the "Database of Monasteries, Convents and Collegiate Churches of the Old Empire". Through the monastic database, it is easy to get an overview of the abbots of a particular monastery or the abbesses of a particular group of monasteries from the same order in a particular region.

All query results can be displayed on interactive maps that visualize the monastic landscape of the medieval and early modern periods. Temporal aspects as well as regional criteria such as medieval dioceses or religious orders can be modified by the user. In fig. 2 you can see for instance the screenshot of a map based query result for all collegiate churches in the medieval diocese of Halberstadt. Our research data has been used by scholars already, leading to new insights into several research questions (e.g. Röckelein, 2015).

has already been implemented in the research portal of Germania Sacra and achieves more relevance through our rapidly growing databases.

### 3. Collaboration and integration of data

In order to realize the vision of a comprehensive prosopographical database, the preparation and presentation of the Germania Sacra project data achieves only the first step; additionally, cross-institutional collaboration and integration of scientific data of other research projects are essential.

An important building block for reliable networking is the systematic enrichment with authoritative data. For names of persons in German speaking countries, the authority file GND (Gemeinsame Normdatei) of the German National Library is particularly relevant.<sup>2</sup> Automatic generation of links to external data sources by using GND has become an established standard for a large number of scholarly biographical and prosopographical databases. For the Germania Sacra Portal, we utilize this authority file to enrich our data and connect it to external web sources via automated links. Besides from other biographical databases especially library catalogs, inventory overviews of archives, editions of sources,

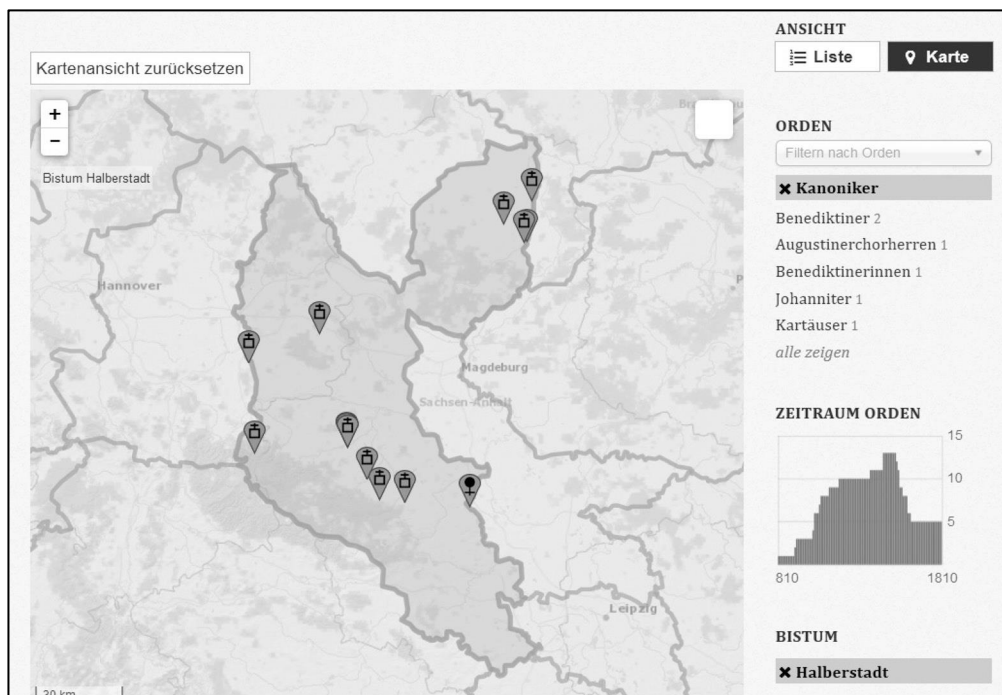


Fig. 2: Map based query for collegiate churches in the diocese of Halberstadt.

The entries of religious houses in this database are linked to those clerics associated with the respective religious houses that appear in Germania Sacra's prosopographical database. For all institutions and individuals, the datasets provide interactive links which lead directly to the corresponding pages in digitized Germania Sacra reference books. Presentation and internal linking of data

bibliographies and portrait collections are relevant sources.

<sup>2</sup> In an international context the Virtual International Authority File (VIAF) gives access to the national authority files like GND (<http://viaf.org>).

In addition to authoritative data for personal names, we enrich our records with authoritative data for corporate bodies such as monasteries, orders and dioceses as well as geographic entities (GeoNames). In order to make structured access to our data available, entries in Wikipedia and DBpedia,<sup>3</sup> the biggest player in the linked data cloud, are referenced. The records of the monastic database are already available in Linked Data format. Data enrichment and semantic web technologies offer a high potential for condensing the information network of the relations of persons and clerical institutions for medieval and early modern times.

Automated linking of individuals mentioned in scholarly databases of medieval and early modern times is, nevertheless, a largely unsolved problem in the field of digital humanities. One reason is that most of these individuals are not recorded in authority files. This situation is most likely not going to change in the near future. For many individuals, we simply don't have enough data to provide reliable authentication (date of birth and death, offices and official data). The identification process is often complicated by name variations, translation and transcription errors, Latinized forms and the late-onset use of surnames.

There are a number of historical databases that are of interest for the prosopography of the Church of the Holy Roman Empire.<sup>4</sup> These provide biographical information about clerics of medieval and early modern times, and information about educational careers or benefice systems. Integrating that data by means of automatic mapping has proved difficult and often the identification of individuals remains hypothetical.

A pioneering contribution to completing this complex task is provided by an international cross-institutional project. Germania Sacra, together with the German Historical Institute in Rome (DHI)<sup>5</sup> and the Repertorium Academicum Germanicum (RAG)<sup>6</sup> is developing a cross-database query. We are developing technical solutions – for example the integration of algorithms or the use of thesauri – to enhance the search for phonetic and orthographic name variants as well as Latinized names. We are going to provide an interactive system, which on the one hand, gives qualified identifying suggestions to the user. On the other hand, researchers are invited to make their own suggestions concerning the identification process of matching individuals to particular records.

<sup>3</sup> DBpedia extracts information from Wikipedia resources and allows users to semantically query the data, including related datasets (<http://dbpedia.org>).

<sup>4</sup> For a detailed overview of historical-biographical online resources for German speaking countries see Ebneht, 2015. See also: Historisch-biographische Informationsmittel, erstellt und bearbeitet von Bernhard Ebneht, [http://www.ndb.badw-muenchen.de/eb\\_www.htm](http://www.ndb.badw-muenchen.de/eb_www.htm).

<sup>5</sup> <http://www.romana-repertia.net/>.

<sup>6</sup> <http://www.rag-online.org/>.

Suggestions can be recorded and, thus, improve the data pool of all partners involved.

#### 4. Conclusion: Digital strategy

Through the use of digital tools, the vision of the founding fathers of Germania Sacra, to provide comprehensive and reliable statistical prosopographical data for further research, appears achievable at last. In summary, the following five points represent our digital strategy:

a) The canonization of material produced by a number of scholars doing research for Germania Sacra leads to a comprehensive, structured, and solid data pool, while at the same time ensuring access to written sources.

b) Using targeted search functions and different forms of visualization ensures a user-friendly presentation of data. Information can be found much more easily.

c) Integration in an institutional repository with the aim to achieve sustainable use and long-term availability of research data. For the Germania Sacra Portal, we use a DINI-certified DSpace repository that has been developed by the Göttingen Academy of Sciences and Humanities.

d) Semi-automatic enrichment with authoritative data increases the value of the data pool. It provides a basis for automated linking to external online resources. The Germania Sacra contributes to the improvement of the authority files of the German National Library (GND) and the CERL Thesaurus and of the semantic web.

e) Germania Sacra together with its partners develops innovative technical solutions for the complex issue of linking heterogeneous data sets of premodern people. The result will be a user-friendly cross-database search tool. It will interlink extant scholarly prosopographical information and help generate and share this knowledge.

#### 5. URLs

Homepage Germania Sacra:

<http://www.germania-sacra.de>

Digital Index of Persons:

<http://personendatenbank.germania-sacra.de>

Database of Monasteries, Convents and Collegiate Churches of the Old Empire:

<http://klosterdatenbank.germania-sacra.de>

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