

The bibliographic control of music in the digital ecosystem. The case of the Bayerische Staatsbibliothek (BSB)

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ABSTRACT

The BSB's music department (entrusted since 1949 with the management of the national information service on music) is one of the largest music libraries in the world in terms of the size and quality of its collection, but also in terms of the breadth and depth of its collection acquisition policy. The various materials are widely catalogued and indexed in a very articulate way, using a wide range of catalogues and according to specific rules. The BSB currently uses the RDA and MARC21, according to national policies.

The Gemeinsame Normdatei (GND), the authority files of the German-speaking library world, are used both in cataloguing and in subject classification. The GND is nowadays used even outside the library world by archives, museums and other kinds of institutions, as well as for the cataloguing of websites.

The BSB participates in the RISM (Répertoire International des Sources Musicales) international online catalogue of music sources, and, together with the Staatsbibliothek zu Berlin, manages its OPAC.

The presentation will describe these projects, as well as the cataloguing workflow, the application of the RDA in specific cases, the special rules (and cataloguing system) for personal archives and musical legacies (RNA), and finally the futuristic service 'musiconn'. This last service is included in the national service for music information Fachinformationsdienst Musikwissenschaft and has been developed by the BSB: it offers the possibility to search by melody, as part of a project based on Optical Music Recognition (OMR), a software tool that allows automatic recognition of compositions after they are printed.

KEYWORDS

Cataloging music sources in Germany; German authority files in musicology and music sources; Digitization of music sources.

The Bayerische Staatsbibliothek as a big music research library

Subsection title

The Bayerische Staatsbibliothek (BSB) is not only the central state library (national library) of the Free State of Bavaria, but also or in particular a big research library. It disposes of world wide well known and recognised special collections in a couple of science disciplines. One of them regards music and musicology. The library hosts in its stacks 455.000 music editions, 72.000 music manuscripts, 330 composer archives (personal papers), 93.000 non book material/sound carriers, in particular discs and CDs, 164 000 books and journals about music and musicology. Since 1949 the BSB is part of the national special collection programme, especially music, cofinanced by the German Research Society (DFG) and since 2014 the library is responsible for music and musicology within the framework of the Specialised information services programme (FID) also cofunded by the DFG.

Cataloging & metadata management in music and musicology collections

Following the principle that cataloging aims traditionally on two major objectives: on the one hand side on the specificity of the object/material regarded: on the other hand side on the needs (and desires) of the (potential) user leads in the field of music and musicology – at least in the German speaking world – to an especially varied and contemporarily particularly profiled cataloging/metadating in a relatively wide range of different catalogs.

Since the introduction of the online catalogs (OPAC) the German libraries use more and more the in the meanwhile well established standards,

- formed by the national/international cataloging rules together with the special guidelines for music (in former times RAK /Musik now a days RDA and the music specific guidelines – <https://wiki.dnb.de/display/RDAINFO/Arbeitshilfen>); and
- standardised data formats (MAB2 and MARC 21; in the case of personal papers also EAD);
- today libraries use for cataloging, and subject heading (the same) authority files. In Germany in both cases they use the Integrated Authority File (GND).

The integrated authority file (GND)

The Integrated Authority File (Gemeinsame Normdatei – GND: https://www.dnb.de/EN/Professionell/Standardisierung/GND/gnd_node.html;jsessionid=935B36EDCD89249E62A%201BA3000574759.internet531) is a service facilitating the collaborative use and administration of authority data. These authority data represent and describe entities, i.e., persons, corporate bodies, conferences and events, geographic entities, topics and works relating to cultural and academic collections. Libraries in particular use the GND to catalog publications. However, archives, museums, cultural and academic institutions, and researchers involved in research projects are also increasingly working with the GND. Authority data make cataloging easier, offer definitive search entries and forge links between different information resources. Every entity in the GND features a unique and stable identifier (GND ID). This makes it possible to link the authority data

with both each other and external data sets and web resources. This results in a cross-organizational, machine-readable data network.

Cataloging of music editions, books, and audio/sound carrier in Germany

Cataloging of music editions, books and audio/sound carriers in Germany is normally done on a regional level via the academy library system dominating regional and intraregional library networks, however periodicals are cataloged in a nationwide, even transnational database. In the case of the BSB music editions, books (monographs) and audio/sound carriers are cataloged in the Union Catalog (Verbundkatalog – B3kat) of the Bavarian Library Network (BVB): <<https://www.bib-bvb.de/>>. But the periodicals, journals, year books and so on, are cataloged – like the other libraries are doing – in the German National Periodical Catalog (ZDB): <<https://www.zeitschriftendatenbank.de/startseite>> on which are participating also the library systems of Austria and the German Switzerland. By adding a shelfmark at the cataloging record in the union catalog and the national periodical catalog the concerned record is replicated/duplicated – in real time – in the regarded local OPAC: <<https://opacplus.bsb-muenchen.de/metaopac/start.do>>.

In a different way are handled the music sources. They are primarily cataloged worldwide in cooperation via RISM <<https://rism.info/index.html>>. The Répertoire International des Sources Musicales (RISM), International Inventory of Musical Sources, is an international, non-profit organization that aims to comprehensively document extant musical sources worldwide: manuscripts, old music editions, writings on music theory, and libretti that are found in libraries, archives, churches, schools, and private collections. The RISM Catalog of Musical Sources contains over 1.2 million records and can be searched at no cost. RISM was founded in Paris in 1952 and is the largest and only global organization that documents written musical sources. RISM records what exists and where it can be found.

The cataloging happens decentrally via an international cooperation following specific cataloging rules which are primarily oriented on musicological criteria. This catalog in the case of handwritten material offers access to its content also via the cataloging of the so called music incipits. Moreover, this catalog is using an own rather detailed (meta)data format. At least the German editorial staff is also using systematically the (German) Authority File, the GND. The central cataloging tool, the data base, is hosted by the Staatsbibliothek zu Berlin (SBB). The (RISM) OPAC is managed and maintained by the BSB. The BSB-OPAC is updated every half a year with the new records cataloged in the RISM-Catalog via the Bavarian Network Union Catalog (B3Kat).

Cataloging of personal papers (composer archives), publisher archives and manuscripts

Kalliope is a Union Catalog for collections of personal papers, manuscripts, and publishers' archives and the National Information System for these material types (<<https://kalliope-verbund.info/de/index.html>>). Founded by the Berlin State Library – Prussian Cultural Heritage with financial support from the German Research Foundation (DFG) in 2001, Kalliope superseded the Central Register of Autographs (Zentralkartei der Autographen, ZKA), which was established in 1966.

The joint cataloging in Kalliope is based on established archival and librarian description and cataloging guidelines and relies heavily on authority control processes. Kalliope is therefore not just another data aggregation service, but rather a digital environment that establishes and provides new instruments and processes to create, modify, and to access data about personal papers dispersed in many libraries, archives, and museums. But using Kalliope means parallel cataloging and parallel offer of data access. Until today there is no connection, neither an interface nor a data transfer (replication) between the Kalliope data base and the union catalogs of the various regional library networks or the single local OPACs.

Kalliope: History, Development, State of the Art

The initial data base of Kalliope was formed by 1,2 million catalog cards of the ZKA that had been provided by 450 institutions over a period of more than 30 years. The conversion of these cards into a machine-readable format was completed in 2006. Moreover, the catalog service was extended step by step to provide access to collections of personal papers in Austria and Switzerland as well as personal papers of persons from German speaking countries kept in libraries and archives abroad, particularly in the United States of America. Since 2001 cultural heritage organizations can make full use of a client-server based cataloging application including full access to the Integrated Authority File (Gemeinsame Normdatei, GND) of the German National Library. The Union Catalog takes an active role in the operation of this national cataloging resource and adds greatly to it by identifying entities that are only known via unique materials as are described in Kalliope.

The cataloging client conforms to the German Guidelines for the description of personal paper and manuscript collections (RNA – Regeln für die Erschließung von Nachlässen und Autographen) which are in turn compatible with ISAD(G) – General International Standard Archival Description. As of May 2015, 102 organizations use the Kalliope cataloging client – compared to 54 in 2010. Additionally, standardized data (EAD – Encoded Archival Description) from local applications can be made available for retrieval in Kalliope. Currently the database provides access to 19,300 collections with a total of more than 3 million units of description originating from more than 950 institutions, including letters, manuscripts, personal documents, albums, diaries, lecture notes, photographs, posters, movies, screenplays, music editions and even some famous ringlets. The database includes around 600,000 name records, 253,000 of which describe individualized persons distinguished by a unique identifier of the GND, and more than 90,000 records of corporate bodies, with 24,000 of these having a unique identifier of the GND.

Kalliope and bibliographic control

The Kalliope Union Catalog is committed to comply with standards (guidelines, file formats, authority files, ISO norms) of the library and archival community: Encoded Archival Description (EAD): XML schema for encoding archival finding aids; Encoded Archival Context – Corporate Bodies, Persons, and Families (EAC): XML schema for encoding (archival) authority records; GND – Integrated Authority File of the German National Library: uniquely referenced vocab-

ulary for entities such as persons, corporate bodies, places, and subject headings Guidelines for the Description of Personal Paper and Manuscript Collections (Regeln für die Erschließung von Nachlässen und Autographen, RNA); ISO 15511: International Standard Library Identifier and Related Organisations (ISIL): unique identifier code for scientific and cultural heritage organizations; ISO 3166: Codes for Names of Countries, dependent territories, special areas of geographical interest and their principal subdivisions: used for assigning persons and corporate bodies of the integrated authority file to main geographical area; ISO 629-2: Codes for the representation of names of languages – Part 2: Alpha-3 code: used to describe the language within a unit of description. The Guidelines for the Description of Personal Paper and Manuscript Collections are well established and applied by libraries, archives, museums, and similar organizations in Austria, Germany, and Switzerland, and are compatible with the principles of archival description outlined in the General International Standard Archival.

The new Special information service (FID) for music/musicology – musiconn

The introduction of information portals or platforms is a web conform way to put order and structure in rather heterogenous data, but concerning the same scientific discipline; in particular they offer normally a discipline specific unique search possibility on heterogenous information sources. In German this way of presenting information is often called Sekundär-erschließung. The service musiconn.search (<https://www.musiconn.de/>) offers access to 19 relevant data bases/catalogues and other, also fulltext online sources with 6,5 millions single items. A special service of musiconn is the so called melodies search, the musiconn.scoresearch. The prototypical application was developed by the BSB itself, promoted and financially supported by the DFG. The software tool is based on the principles of Optical Music Recognition (OMR) and allows the automatical recognition of melodies in selected digitized music sheets. Actually the melody search is possible in the compositions of the following composers (<https://scoresearch.musiconn.de/ScoreSearch/about>).

Conclusion

The start of the online cataloging pushed the standardization in general and involved a consequent usage of authority file controlled terms in cataloging as well as in subject heading. This applies in principle also to information material regarding music and musicology. In the field of music and musicology cataloging traditionally there is a strong input from the research community itself. The organizational platform for that is RISM, an international body which has established just in the early 50ies its own cataloging database. Today the database is a publicly accessible catalog for the registering (and cataloging) of music sources, in particular manuscripts and old music editions as well as libretti. The RISM-Catalog has its own rules and is based on its own data format. This catalog offers access to its content also via the cataloging of the so called music incipits.

In the German speaking world existing online platform for the cataloging of personal papers & autographs and giving access to them in the internet, called Kalliope, is also used for the catalog-

ing of relevant material in music and musicology. Last but not least the recently introduced special information service (FID) for music, musiconn, offers with musiconn.scoresearch the possibility to find melodies in selected and via the portal accessible digitized music editions. Score search is still a work in progress and not error-free, but it is a decisive step towards a machine learning approach in the field of musicology. It is similar to a full text search in text based sciences and in a near future it can become an very interesting service also for the average user.