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# Database of the Research Project Reframed Image: Reception of Prints in the Kingdom of Poland from the end of the Fifteenth to the Beginning of the Seventeenth Century

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## Abstract

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Research project (Grażyna Jurkowlaniec)

While the artistic production of prints in the Kingdom of Poland flourished from the beginning of the seventeenth century, various manifestations of interest in the medium can be traced back to the end of the fifteenth century. Graphic designs were adopted by artists working in different materials and techniques. Impressions were collected, but they were also instrumentally used for examples in confessional disputes and diplomatic actions. The aim of the Reframed Image project (<http://reframedimage.uw.edu.pl/>) is to investigate the intricate links between the intentions of the patrons, artists, and beholders (originally intended and subsequent), thus providing insight into the mechanism of dissemination and reception of prints and the agency in those processes of Poles, active both in Poland and across Europe.

The initial task of the project, which started in February 2016, was to create a working tool: an online database gathering traces of reception of European prints in the Kingdom of Poland before the beginning of the seventeenth century and all *polonica* related to the most significant European printing centers of the time. Ultimately, the database is expected to present a repertoire of printed images that had been available in the past to representatives of various artistic professions and their patrons, and thus to determine the scale and characteristics of collections of prints that once existed in Poland and reveal the place of the Polish art in the reception and formulation of the European print culture.

The database currently contains several thousand entries. These are mainly artworks created in late medieval and early modern Poland and their printed prototypes, but also include people, places and objects related to Poland and reproduced in European prints, as well as references to prints in written sources connected with Poland. The database allows one

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to organize, systematize, and analyze the data according to various criteria. The records are linked through carefully selected and systematically inserted key words, which facilitate categorization and various specialized or broad searches-according to printmakers, designers of the graphic models, iconography, function, chronology, and geography.

#### Database model (Piotr Kopszak)

The accumulation of systematically organized material, hitherto dispersed, is a point of departure for various enquiries. As a consequence, crucial problems arise: every stage of research reveals further aspects of the phenomena under inquiry. Also, the investigators constantly insist on various amendments and modifications of the model of the database in the course of the research.

Such opportunities are offered by adoption of the ISO/IEC 13250 Topic Maps standard as well as TMCL (ISO 19756, now at draft stage) that provides the rules for defining topic types. The conceptual model CIDOC has been adopted as a basic framework of specific types of topics and relationships among them, although it is not an intention of the project to implement the CIDOC model at 100%. Rather, complementing CIDOC with various types of topics or relationships proved indispensable, particularly with respect to the relationship of influence among works of visual arts. Topincs software has been chosen as a tool that enables designing both the model of the database and the user's interface.

While Topincs is used to enter the data into the constantly developed working database, the publicly accessible database (<http://urus.uw.edu.pl/>) is generated by Middleman: a static site generator that downloads the data through services defined in Topincs and shared in the YAML format. Since the granular model of the working database demands expertise, it has been simplified in the public database to make it user friendly.

#### Search engine (Michal Kozak)

Because of limited capabilities of the Topincs software in the area of searching for data, it was necessary to implement a separate solution. Our solution uses the Apache Solr search engine with faceting, which offers users advanced data filtering possibilities. Besides the basic filters such as *type of data*, *materials*, *techniques*, and *date range*, the system allows for filtering by *people* and their *roles*. For instance, it is possible to search all objects in which someone is an *engraver* and then filter by specific engravers. It is also possible to filter data first by *persons* and only then by specific *roles* of these persons (e.g. *engraver*, *purchaser*). Another non-trivial filter is *places*, which have their hierarchy in the database. Thus, filtering by *places* implies that all respective 'subplaces' are taken into account too. For example, if *Paris* is selected, all objects related to *Bibliothèque nationale de France in Paris* will also be included. Similar, but more complex, is the iconographic filter of *topics and themes*, with a more complicated hierarchy of the data structure, as each level of hierarchy can have more than one parent.

To achieve these objectives, the data from Topincs must be indexed in Apache Solr in many nested indexes. Our indexing software also uses data from YAML files downloaded from Topincs. The data indexed in Apache Solr is the only source for our search portal implemented in Java and Play Framework. This search portal is insensitive to diacritics, uses facets as described above, and offers sorting by type of object, lexicographic order, and chronological order.

**Keywords:** printmaking, art history, reception studies, databases, search engines