



Silk dress from ca. 1900

Lippisches Landesmuseum - Inv.Nr: 1996/0575/1996

The creation of www.museum-digital.de was directly inspired by the Athena project. In January 2009 six museums of all kinds and of all sizes in Saxony-Anhalt (one of the federal states in Germany) came together to discuss digitisation. A common aim was defined to find out how it might be possible, under the prevailing circumstances in the museums, to publish museum-object information of every description and of all kinds of museums collectively and to do this in a form that the information can be delivered to Europeana easily. With this intention, "museum-digital" came into being. Meanwhile some insights were gained which might help to understand some hidden dimensions of digitisation.

The very first undertaking was an analysis about what kind of information related to a single museum-object is generally published by museums and about the information Europeana is publishing. A "set of basic information" was determined. Twenty museums in Saxony-Anhalt were asked to create and send such information for 5 of their objects. They were also asked to report the time it took to create or gather the information and how they gathered it. The reports were surprising.

Some museums only had "scientific names" for their objects and no further information (e.g. vernacular name) in their database(s). Others relied on MS-Excel files (calling it databases). Still others used one big MS-Word file with one page per object (and again considering this to be a database). Some still used dbase2 or Paradox antiquated and outdated software, without updates for many years. Some still relied on record cards. Many had their information distributed with the object-name in a database but the object-measurements only on a record card. Those who used self-made databases or databases



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Porcelain plate from Meissen, Germany ca. 1850
Schloss Wernigerode GmbH - Inv.Nr: Kg 000221



given to them by local authorities often did not know how to export their data.

Images showing the objects most often did not exist. Rather, they had to be created, often by taking the object from the depot, cleaning it, taking a photograph, and bringing the object back into the depot. Some museums did not have a camera and it took some time to organise one.

The reports revealed that no museum had the defined "set of basic information" (name of object, kind of object, description, material, technique, measurements and production information) at hand and in one place. The duration for the collation was anywhere from 3 minutes to 3 hours (!) per object. At the same time it became evident that a lot of the information was not up-to-date (some entries in the record cards were more than 40 years old!), was not recorded at all, or contained abbreviations only comprehensible for specialists.

A clear line of distinction was drawn and the aim was more clearly defined: there are worlds between inventories (created for internal use)

and publication. The initiative would focus basically on the latter, even if this meant putting special effort into creation of the information (for the public). Only in very few cases did it seem to be advisable to take publication-information directly from an inventory-database.

As a next step it was analysed how to bring the collected information online, since only content that is accessible online is of use for Europeana and other portals. Because the museums were of many different kinds an understanding had to be developed. Archaeological museums speak of time periods like "late Neolithic". Some art museums would write "early Baroque," while others would write "1620". Some museums would write "World War 1" others would prefer "WW1". Some museums record the place of the creation of an object using the name of the place at the time of creation (e.g. Karlsbad instead of Karlovy Vary), while others use the modern name only. A multitude of different practices! A database was created which can handle all these possibilities because it is impossible to impose a strict set of rules on all the museums participating. There are traditions which have to be respected. An intelligent data management was the solution.

While it was easy to come to the conclusion that each object needs a photograph and a description, it was not so easy to define the requirements for such a description (how long should it be, who shall be the addressee, ...). The simplest solution was accepted: each museum writes the descriptions as it thinks best, in a minimum of 20 characters. Again there are a lot of traditions involved: the description of a work of art written by an art historian looks very different from the description of a technical object (e.g. a camera) written by a technician - even if both have the

intention to write for a broader audience. In many smaller museums, which often belong to a city or a county, there is only a very limited staff; the director plus one or two aides are running the museum. Such museums are very common in Germany and many of them have been in existence for many years. These museums have very diverse groups of objects collected over time. If, for example, the current director is an archaeologist, he nevertheless might have many thousands of butterflies or old and modern valuable paintings in the museum. The result is a description of a butterfly or a modern painting by an archaeologist! Or in other cases it might be the description of a stone-age-axe by an art historian or the description of a pit lamp by a biologist. It does not have to be a wrong, bad or incomplete description; quite often such descriptions are more than sufficient to inform a broader audience about the objects. The main obstacle is that in most cases the director is not comfortable with publishing such information that he himself considers unprofessional or amateurish! A lot of discussions were necessary to convince them, and in the end most agreed to give it a try. The information was then published (like it is now in www.museum-digital.de) and the feedback was observed. In nearly all the cases it was positive and the hesitation decreased.

None of the originally participating museums has an IT department - not even the big ones. The work with digital material (images, files containing data, etc.) had to be done by non-specialists. And, most important, in nearly no museums is there someone whose work focuses exclusively on the handling of digital museum-object-data. In all cases the creation of digital material for publication is an additional task. The response of the initiative was to keep the requirements low: no one is forced to publish all information about all of

Baroque cabinet from ca. 1750
Stadtmuseum Zweibrücken - Inv.Nr: 1305



the objects in the museum. Respect the limitations and do only what is possible! If a museum wants to publish all objects, that is fine, but there is no rule that it must be done. In addition, the initiative created a software tool for data ingestion which can be used by everyone without the slightest knowledge of IT. A museum can insert its objects into the common database one-by-one or it can import its data from its inventory database and adjust it to the requirements of publication with the initiative's software tool.

Only a few weeks after the inauguration of the initiative in Saxony-Anhalt a second initiative was created in Rhineland-Palatine, another of the federal states. This initiative did very much the same as the first one and the results were similar. Meanwhile more and more museums from a growing number of federal states are using the museum-digital. The software is in a permanent state of development whenever a museum has ideas for improvements the





Girl portrait from ca. 1800
Unknown painter from Netherlands
Oil on canvas
54 cm x 42 cm
Museum Schloss Moritzburg Zeitz - Inv.Nr: VI / a 02 - 4



Portrait of a blackamoor with turban
Carl Steffek (1818-1890)
Oil on canvas
51 cm x 41 cm
Stiftung Moritzburg - Kunstmuseum des Landes - Inv.Nr: MOI 00038



software is adjusted. So the museums are directly involved in optimising the software.

There is only very little money involved. The maximum cost per month for a museum shall never exceed one Euro! This is a very important prerequisite, which assures that really all museums can participate. All software is free. It is only the server that has to be paid plus the enhancement done in the background by connecting person names and geographic entities to authority files. This enhancement enables museum-digital to work with so called *linked data*, which make it possible to present information about people and places without any research. If, for example, a museum wants to publish a painting showing Johann Joachim Winckelmann, all it has to do is to note that the painting is showing him. In the background this is connected to the authority files of the German national library and to dbpedia. As a result the painting is shown with automatically enriched information about the person in many languages (e.g. [\[digital.de/san/index.php?t=objekt&oges=805\]\(http://digital.de/san/index.php?t=objekt&oges=805\) just click at "\[Info\]" behind Winckelmann's name\). This makes it possible to get maximum output with minimum input: a technical solution which makes publishing easier for the museums.](http://www.museum-</p></div><div data-bbox=)

The first object from one of the originally participating six museums went online in June 2009. By October 2011 more than 15 400 objects were online and 187 museums from 6 of the 16 federal states were participating. The latest data-ingestion brought more than 5 400 objects to Europeana. This is not a really large number of objects - that is not the aim of the initiative. The initiative is successful because it proves that every museum can find a way from content production to publishing in Europeana and that this is possible even under poor conditions and without any special knowledge. Many museums still have to assure themselves that it is worthwhile to publish object-information on the Internet. If they decide to do so, www.museum-digital.de will help them.