The realities of subject indexing in art libraries

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The following analysis is based on the international, KVK-based meta catalogue for art libraries www.artlibraries.net. The analysis is no way systematic in the manner of a survey, but intentionally based only on a choice of practical examples.

One of the major characteristics of a traditional bibliography is consistent subject indexing, normally according to a scheme especially conceived for the bibliographical project. Users are expected to make an effort to ‘learn’ this special subject indexing language. Big library catalogues and all the more meta catalogues as artlibraries.net lack this feature, because the application of a consistent subject indexation scheme is normally restricted a part of the records only. Most often, the situation is heterogeneous. Anyhow, as for subject indexation, the libraries’ situation can be compared to that of the bibliographies, because libraries are using subject indexation rules perhaps even more difficult to handle and to understand.
As we are currently discussing the future bibliographical role of a meta catalogue like artlibraries.net and the possibilities to develop an improved tool, we have to verify to what extend the needs of the community concerning subject related searches can be met by what the libraries are offering. In this context it is useful to have an at least exemplary look at the way subject indexing is provided (or not) by existing or possible target systems. When doing this, we should not forget the ‘subject indexing potential’ of other informations contained in the databases: title keywords, footnotes, personal names, institutions involved etc. Is a “unified discovery experience” (Jim Michalko, OCLC) imaginable on this basis? Is it possible without the traditional feature of a consistent subject indexing language?

1. Structural concerns

The traditional bibliography model is based on the idea of an exhaustive, consistent indexation of the literature from a defined discipline or field or on a special topic. Given the sheer amount of publications, this model is not reliably functioning anymore for the humanities since the early seventies, I would say. Nevertheless, ambitious commercial bibliographical projects continue to function and to generate huge quantities of records. On the other hand, libraries like the artlibraries.net partners are also providing huge amounts of thematic information. But because of the diversity of methods applied and because of the antagonism between commercial and free access, it has never been able to exchange data between catalogs and bibliographies in order to realize an exhaustive bibliographical tool.

As far as subject headings are concerned, the records in our library catalogs seem to fit into the following typoloy:

- **records produced within union catalogues or by national libraries and using standardized subject indexation rules like LoC subject headings, RAMEAU, RSWK/SWD.** The subject indexing may have been produced by the art library itself or simply have been taken over. This explains why identical subject indexations occur in different artlibraries.net target systems participating in union catalogues. Library networks may also exchange subject indexations. Unfortunately, in Europe this is not done in a systematic manner. The German union catalogues are not even exchanging and aggregating all subject indexations produced on the national scale.
- **records produced according to institution specific subject indexation schemes,** which may be partially compatible with standardized rules and/or using subject authorities. These subject headings may also originate in conversion campaigns of older card catalogs.
- **records using a classification, be it institution specific or national/international.** The systematic use of a classification, where applied, seems to be more or less restricted to LoC classification, Dewey and Regensburger Verbundklasifikation (RVK).
- **records with no subject indexation at all**
- **records with or without subject indexation but containing additional contents information such as footnotes and contents notes**

Of course, some of the above mentioned types may occur simultaneously in a given database or even within a single record, as the following example, taken from the Kunstbibliothek Berlin, shows:
Titel: Die Kartause von Champmol: Grablege der burgundischen Herzöge 1364-1477 / Renate Prochno
Verfasser: Prochno, Renate
Schriftenreihe: Acta humaniora: Schriften zur Kulturwissenschaft und Philosophie
Anmerkung: Literaturverz. S. [379]-398
ISBN: 3-05-003595-1
Schlagwörter: *Champmol / Kloster / Architektur / Geschichte 1364-1477
*Champmol / Kloster / Kunst / Geschichte 1364-1477
*Philip, Duke of Burgundy / Art patronage / Chartreuse de Champmol / Chartreuse de Champmol / Sources / Monasteries / France / Dijon / Architecture, Gothic / France / Dijon / Christian art and symbolism / Medieval, 500-1500 / France / Dijon / Sepulchral monuments / France / Dijon / France / Kings and rulers / Tombs / Dijon (France) / Buildings, structures, etc
Sachgebiete: 20.70; Europäische Kunst: Allgemeines
21.70; Geschichte der Sakralbaukunst
21.71; Geschichte öffentlicher Bauten
Mehr zum Thema: Klassifikation der Library of Congress: NA5551.D5
Dewey Dezimal-Klassifikation: 726.70944426
Regensburger Verbund-Klassifikation: LM 26260 ; NM 9200
Link: http://www.h-net.org/ review/hrev-a0e0x3-aa [Book review (H-Net)]
Schlagwörter: Kloster / Architektur
Kloster / Ausstattung
Skulptur / Plastik
Malerei
Frankreich
1364-1477
Champmol / Kloster
Philippe <Bourgogne, Duc, II.>
Kunstpatronage
Grabmal
Grabplatte
Standort: Kunstbibliothek
Signatur: 8 2003 1164
Ausleihstatus: Praesenzbestand verfuegbar ✨Bestellen
Standort: Skulpturensammlung
Signatur: FrA CHAM 2002
Ausleihstatus: Nicht ausleihbar
Subject indexation has always been an important criterion for participation in artlibraries.net. However, it is hardly predictable whether a potentially interesting title has been indexed in a manner appropriate to what the user is entering in one or more of the search fields. First of all, as artlibraries.net is just transmitting requests without having its own index, the user has no preliminary information as to whether his search term exists at all in the participating databases or which alternative search terms may be recommendable. On the other hand, given the broad coverage of literature realized by the all the artlibraries.net targets taken together, there is high probability that a good percentage of all existing writings on a given subject may be represented within artlibraries.net (with the exception of online resources and of some other specific types of publication). The question is only: Is it possible to identify them in an efficient manner?

A user who wishes to do a search on monastic architecture in France for example may use terms belonging to one of the major languages of artlibraries.net, i.e. German or English, perhaps French. It is evident that he cannot expect adequate results from catalogs using (partially) subject keywords in other languages, as for example Gulbenkian (Portuguese), Vitterhetsakademiens bibliotek Stockholm (Swedish) or Danmarks Kunstbibliotek (Danish).

Test search 1:  German language generic term combined with geographical term:

Test searches in all 36 artlibraries.net targets with the German ‘natural language’ search terms ‘Klosterarchitektur Frankreich’ (monastic architecture France) in the ALL search field and in the subject heading field produced no results except from 3 targets: Union catalogue Florence-Munich-Rome (www.kubikat.org), Kunstbibliothek Berlin and University Library of Heidelberg, i.e. solely from some German libraries: 59 (ALL field) respectively 56 (subject heading field) titles from kubikat, 12 from Berlin and only 2 from Heidelberg. With very few exceptions, the long kubikat hitlist, mainly coming from the Zentralinstitut für Kunstgeschichte library in Munich with its French art specialization, comprises the results of the other two, far less complete hitlists. But the records go only back as far as 1994, with the exception of one title from 1979 in the Zentralinstitut. Already because of this chronological restriction, partly due to the still incomplete conversion of the Munich subject catalogue, we may assume that the results are rudimentary in a bibliographical sense. That there were results at all from kubikat and Heidelberg, is due to the fact that they are using RSWK subject headings based on SWD authorities and that ‘Klosterarchitektur’ is a related term to the SWD authority ‘Klosteranlage’ (= ‘monastery complex’).
SwD authority ‘Klosteranlage’ with related and broader terms (on the left), as represented in the kubikat online catalogue (www.kubikat.org), with additional, kubikat specific classificatory information (on the right).

Although the Berlin Kunstbibliothek is also using SwD, the related term ‘Klosterarchitektur’ is apparently not indexed and the hits are mainly due to institution specific subject indexations containing the terms ‘Kloster/Architektur’.

A special feature in the kubikat catalogue is that it indexes geographical codes contained in SwD authorities and thus allows to take into account results which contain not the term ‘Frankreich’ itself but more specific geographical terms for regions as for example ‘Charente’.
Les fondations de l'ordre de Grandmont / par Martine Larigauderie. – 2005

In: Bulletins et mémoires / Société Archéologique et Historique de la Charente, 161.2005.2/3, p. 41-56

Schlagworte: Charente / Grammontenser
Charente / Klosteranlage

Title record from kubikat

SWD authority record ,Charente’, containing geographical code for France (screenshot from the online catalogue of the Deutsche Nationalbibliothek)

This kubikat feature also takes into account place names, but unfortunately according to RSWK/SWD rules place names have to be combined with the term ‘Kloster’ (monastery), which does not have the related term ‘Klosterarchitektur’ (monastic architecture). A search in kubikat with ‘Kloster Frankreich’ does indeed generate 379 results!
Beyond kubikat, searching in artlibraries.net with the more general term ‘Kloster’ (monastery) combined with ‘Frankreich’ generates additional results, especially from the University Library of Heidelberg. But these additional results are not necessarily relevant to the history of architecture.

Thus, the results of our test search with a German generic term combined with a German geographical term are mainly due to the relatively sophisticated use of SWD authorities file in one of the target systems. The bibliographic information is interesting but apparently far from complete. The system does not inform us whether other target systems not using German thesaurus vocabulary have pertinent materials (which we may suppose). Based on the experience of this first test, we may not say that artlibraries.net provides a satisfying and reliable bibliographic search experience for a German speaking user using a generic term which is only partially corresponding to the terms used by the librarians according to their subject indexation rules. The user does not having any terminological support from the meta catalogue, although he may expect it from the individual targets like kubikat where authorities can be fully displayed. At least the user learns from artlibraries.net that kubikat could be an interesting database for his purpose. But this he probably knew anyway…

**Test search 2: English language generic term combined with geographical term**

**ALL field and subject heading field searches were done in artlibraries.net with the English terms ‘monastery architecture France’ resp. ‘monastic architecture France’. With these English terms we immediately got results from greater number of targets.**

ALL field search = ‘monastery architecture france’ produced:
- 1 result from Kunstbibliothek Berlin, due to the existence of English subject headings
- 1 result from the National Gallery of Canada, due to title keywords
- 10 results from the NYARC – ARCADE network, partly due to title keywords and corporate author field
- 5 results from INHA Paris, due to use of LoC subject headings, but also to full text indexing of extensive footnotes for theses
- 4 results from kubikat, due to title keywords
- 8 results from Centre canadien d’architecture, partially due to contents notes
- 1 result from University Library of Heidelberg, due to title keywords
- 3 results from RIBA London, one due to title keywords, two to contents notes
- 4 results from IRIS Florence, due to keyword indexation of subject headings, but making only partially sense
- 6 results from National Art Library London, partially due to combination of title keyword and subject heading
- 3 results from Bibliothèque d’art et d’archéologie Genève

12 results from the Getty Research Institute, some due to contents notes, not all results making sense, but also presenting some unexpected, interesting materials from special collections.

**We thus get hits from 12 targets (out of 36), but all together only 58 records, some of them concerning of course identical publications. The total number of hits is not even exceeding what we were getting from the sole kubikat database with the German test search using the ALL field.** The few results from Berlin, kubikat and Heidelberg prove that searching with English subject terms is totally inadequate for these targets (and possible others). But also the results from the ‘English speaking’ targets are deceiving. The majority seems to come from title keywords, not from subject indexation. Some results were even not pertinent at all.
Subject heading field search = ‘monastery architecture France’ did not generate better results, but even less. At least it allowed to have twelve hits from the Metropolitan Museum library which is not yet using the ALL field.

The variant, more natural language like, search with ALL = ‘monastic architecture France’ essentially produced additional hits for the publication ‘Monastic architecture in France from the Renaissance to the Revolution’ by Joan Evans, but on the whole even lesser results. Using these same terms in the subject heading field proved to be even more inadequate for a bibliographical search on the subject: almost no results, except for target systems which do not differentiate between title keywords, contents notes and subject headings.

It is only when we realized that the ‘right’ search terms probably would be ‘monasteries France’ (even without ‘architecture’), which is conform to LoC subject headings that we were able to get an idea of what could be expected from ‘English speaking’ artlibraries.net targets. **In fact, a subject heading search with the LoC subject heading ‘monasteries France’ produced results from a dozen of targets again, but what a difference concerning the number of hits: 390 in all!** Among others, we got:

- 33 results from INHA Paris
- 56 results from the Metropolitan Museum
- 45 results from the National Art Library
- 45 results from the Getty
- 212 results from RIBA.

The hits from the British Architectural Library of the Royal Institute of British Architects (RIBA) deserve special attention. They are mostly very pertinent, the search terms appearing in the same subject heading field and not dispersed throughout the record. Names of individual buildings are always added to the LoC subject heading ‘monasteries : France’ and thus become retrievable in this context. The majority of the records pertain to journal articles. Indeed, indexing of periodicals is one of the RIBA library’s major assets.
As was the case for the German language test searches, the user has to realize that his ‘natural language’ generic search terms do not necessarily correspond to the subject indexing language used by the libraries. We may suppose that every time the user is not searching with relatively simple, more or less internationally valid proper names, but doing more complex thematic requests, a simple meta catalogue like artlibraries.net is hardly appropriate to constitute a reliable bibliographic tool.

English search terms may provide a wealth of results from ‘English speaking’ targets and sometimes from targets in other countries using English subject terms. However, they do not allow to get benefit for example from the important bibliographic offer in German systems such as kubikat.

Test search 3: international proper name of a modern artistic movement

As soon as the user is searching with proper names, artlibraries.net is reacting in a much more useful manner. But attention: this is valuable only for relatively modern names without significant variations on the international scale. The situation may quickly become complicated, because for personal names of the Antiquity and the Middle Ages etc., more
complex modern personal names, names of monuments, entering a ‘correct’ search term without terminological help may be more haphazard. But authority files containing huge amounts of synonyms are very helpful in this context, provided the target systems are using authorities and indexing them fully (which is not always the case).

Anyway, our test search with the subject heading ‘Fluxus’ produced abundant hitlists from the vast majority of the targets and apparently allowed to have access to a wealth of informations. The sheer amount of hits may indicate that in this case we could gain from artlibraries.net a very valuable bibliographical basis. Among others, we received

- 243 results from NYARC-ARCADE
- 63 from the INHA
- 116 results from the Metropolitan Museum
- 121 results from the documenta archive
- 328 from the Getty
- 5 results from ART-Guide for websites.

We may suppose that for individual names, most rewarding results are to be expected from the participating libraries, the user’s difficulties with finding correct search terms being much less dramatic than for generic thematic terms. But on the other hand: As soon as the targets are producing long, rich hitlists, the lack of an aggregation of all these results within artlibraries.net becomes clear, because the wealth of results in individual hitlist cannot be handled anymore by the user. Do a test with a keyword are even ALL field search for any well known modern artist!

2. Qualitative and quantitative concerns

It is evident that due to the lack of transparency and co-operation in international cataloging, the quality of the subject headings and the intensity of subject indexation is variable. Many libraries are relying for example on the same LoC or RSWK subject headings, apparently without having the ambition or the means to improve and enrich them in case. Often libraries seem to create similar subject headings without knowing from each other.

The way a short article on Yoko Ono, which is not to be found in any of the artlibraries.net targets, is indexed in the BHA would probably not correspond to current practices in libraries:
Nor would the intense subject indexing practised by the Zentralinstitut library still during the seventies correspond to the current practice in libraries:
Ein Eintrag zu Ihrer Suchanfrage:
Person: Louis <France, roi, xiv.>

La médaille au temps de Louis XIV / Hôtel de la Monnaie, Paris. (Mise en place de l'exposition: Yvonne Goldenberg)

Ausstellung: Musée de la Monnaie <Paris> : 1.-3 1970

Personen: Louis <France, roi, xiv.> / Bildnis [Porträts nach Herrscherhäusern, (passim)]
   Bigot, Jean Paul / Bildnis [Porträt, (Nr. 114)]
   Delamare, Nicolas / Bildnis [Porträt, (Nr. 527)]
   Quinault, Philippe / Bildnis [Porträt; (Abb. 80)]
   Renaudot, Furster / Bildnis [Porträt (Nr. 111)]
   Tourreil, J. de / Bildnis [Porträt, (Nr. 110)]
   Warin, Jean / Bildnis [Porträt; (zusammen mit dem jungen Ludwig XIV., eine Medaille zeigend); Nr. 587]

Künstler: Bernard, Thomas <Künstler>
   Bertranetti, Francesco
   (Le) Breton, Hercule
   Chéron, Francis
   Cypel, Antoine
   Doliu, Jean
   Dufour, Jean-Baptiste
   Falk, Raimund
   Le Clerc, Sébastien
   Mauger, Jean
   Molard, Michel
   Roethiers, Joseph
   Roussel, Jérôme
   Smeltzing, Johannes
   Warin, Jean
Title records from kubikat, with subject indexations converted from the old « Sachkatalog » of the Zentralinstitut

But an increasing amount of full text indexations of tables of contents etc. is probably outweighing in some way the shortcomings of traditional subject indexation by libraries. Anyway, it would be imperative to aggregate subject indexations on a real international scale, regardless of the languages involved, because, as we have seen, only a multilingual approach is able to generate a maximum of results. This will function only with search engine-like catalogs.

Concerning the quantities of publications involved, the coverage of so-called monographic publications by the artlibraries community may certainly be considered excellent. The artlibraries.net targets also provide a real wealth of records for special collections: e.g. archival materials, artists files, architectural drawings, digitized photographs.
The situation is less positive concerning journal articles, electronic resources, auction catalogues and theses.  

**Current indexation of significant quantities of articles and reviews is only done by kubikat (784,000 articles since 1950), the British Architectural Library (RIBA) (330,000 articles) and OLC-SSG (580,000 articles, based on automated cataloguing of tables of contents and lacking subject indexation).** RIBA is apparently covering the field of articles architecture in an excellent manner. Kubikat includes to a certain extent articles from genuine online periodicals, but is also providing links to online versions of print journals.  

*Smaller miscellaneous contributions* in art reviews not fulfilling the criteria of a ‘real’ article (author, own title) are hardly taken into account by kubikat, but are of special importance in the field of modern and contemporary art. Therefore, I suppose that bibliographies like ARTbibliographies modern (ABM) and BHA/IBA are containing a wealth of material not indexed by the art libraries community, and it would be imperative to have a search engine harvesting also these bibliographies, regardless of their subject indexation rules.  

**Auction catalogues** have always been a special problem, because despite of the wealth of holdings present in our art libraries, they request special retrieval features, namely place and date, but these are seldom provided by libraries. Furthermore, it seems that efficient indexation of auction catalogues is more provided by specialized projects like SCIPIO or the commercial databases like artprice.com than by normal library cataloging. Therefore, it seems also imperative to include these specialized databases in any future art libraries search engine.  

**Doctoral dissertations and after theses** are often published as ‘normal’ books or summarized in articles appearing with a certain delay, but theses staying outside these editorial processes are certainly not sufficiently covered. Nowadays, these theses are normally stored in electronic form in repositories. The German National Library is providing title records for German dissertations and these are taken over by kubikat, allowing direct access to the online text. The INHA library is providing astonishingly rich records with extensive contents notes for French theses. North American doctoral dissertations are catalogued and provided by the ProQuest database DAI. We normally do not find them when searching one of our library catalogs, except for cases where a printout has been purchased.  

This finally lead us to **electronic resources** on repositories in general. Praiseworthy projects like the BASE search engine provided by the University Library of Bielefeld (http://base.ub.uni-bielefeld.de/de/index.php) or the OAister database recently taken over by OCLC (http://www.oclc.org/oaister/) are multidisciplinary and have not yet succeeded in providing selective disciplinary search possibilities, for example for the history of art. Judging from arthibraries.net, art libraries are practically playing no role in this context and are in the best case giving access to materials from their own repository, as does the University Library of Heidelberg.  

To conclude, it is almost superflous to mention that, apart from selective directories like ART-Guide, which is an arthibraries.net target, indexation of websites is totally left to Google etc.  

All these materials deserve of course subject indexation, but it seems to be out of question to dream of a unique, consistent solution. Genuine online resources and full text digitizations of printed texts will certainly fall into the domain of automated indexing. But automated full text indexing, as indexing of contents notes, abstracts etc. is beyond the traditional subject indexation approach. We will have to develop totally new procedures of subject indexing in view of future integrated search engine access to materials in art history.
3. Conclusions

What may sound as reproaches to artlibraries.net, does in fact concern above all problems caused by the participating libraries themselves. As the very useful artlibraries.net meta catalogue serves to mediate the richness of their holdings, it also is an excellent way to demonstrate the heterogeneous and deficient cataloging situation. By the way, it is notorious that libraries purchasing big quantities of literature are mostly capitulating in front of the task to provide subject headings for everything.

As artlibraries.net has no proper multilingual search feature and no aggregation of the results, but just a sequence of individual hitlists, the user must be prepared to repeat his request with terms from several languages in order to make sure to get a sum of results as reliable as possible. Even so, the whole process is clumsy, because of the necessary back and forth between the abridged hitlists and the target systems themselves, and because of the timeouts occurring rather often.

Furthermore, the hitlists may vary from one target to another: Sometimes they are chronological, sometimes alphabetical, sometimes in no useful order. Often, the short titles are
lacking publication dates. And the hitlists are always limited, the user having to switch to the target systems in order to be able to see the rest. Considering everything, it may be rather difficult to keep an overview of the results and to use them as a bibliographical list, at least when long hitlists are showing.

As for the completeness and quality of the subject indexations being provided by the important art libraries participating in artlibraries.net, only approximative conclusions are possible without having done a more complete, time-consuming survey or even a comparison with bibliographies like BHA/IBA, ABM, Avery Index etc. It is evident that the bibliographies are indexing lots of publications, especially articles, not taken into account by the libraries. Furthermore, the cataloging and subject indexation of important materials like electronic resources, auction catalogues and doctoral dissertations is not really mastered by the libraries, and therefore these materials are not sufficiently accessible through artlibraries.net.

Thus, the answers to the above questions
“Is a “unified discovery experience” imaginable on this basis?”
“Is it possible without the traditional feature of a consistent special subject indexing language?”
are both yes and no.
No, artlibraries.net is not yet fulfilling some characteristic criteria for an efficient bibliographical search but it probably has already the majority of the relevant materials and it is very good when it comes to locate a known title.
But yes: The bibliographic potential of the artlibraries.net targets’ holdings is immense, even if so far it resembles more to a quarry than to a complete building.
If we provide the users with some features with are urgently lacking: above all a multilingual terminological index suggesting search terms, an aggregated hitlist and the integration of additional databases which remain so far beyond the scope of our library catalogs, and if we are ready to comply with the ideas that the users will never learn our subject indexation rules and that our subject indexation must be co-operative despite the diverging rules, yes, than we may be able to create together this unique discovery tool for art historians.