

Meeting Minutes Vienna 2007.05.08 – Component Model

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Participants

OEAW: Vlad Atanasiu (presiding), Alois Haidinger, Martin Haltrich, Sandra Hodeček, Maria Stieglecker
LABW: Peter Rückert
TUG: Walter Schinnerl
LAMOP: Ezio Ornato, Martha Populin
DNB: Frieder Schmidt
NIKI: Georg Dietz
KB: Marieke van Delft
LU: Claire Llewellyn, Rob Sanderson

1. COMPONENT MODEL QUESTIONS

1.1 Schedule

Information point for ALL

The decision on continuing with the development of the component model will be taken at the general meeting in Fabriano. In Fabriano a prototype of the search interface of the component model will be presented.

Action point for LAMOP, TUG, KSBM

TUG develops the interface, data is provided by LAMOP (250 watermarks (wm) of motifs Three Mountains, Bull's Head and Letter P) and KSBM (250 of Three Mountains). Various issues regarding the component model were discussed so as to speed up the decision process in Fabriano.

1.2 WM motifs and quantities to catalog

ALL

It was proposed that (1) all components should be identified in the component model database and all ~40 motifs be described in depths (as for the current 3 motifs), while those components considered “Beizeichen” will receive a minimal – if any – description; and (2) that only a limited number of watermarks be catalogued. Thus the conceptual framework and the necessary software will be available for future data input. In the mean time the proof of concept of the usefulness of the component model will be demonstrated with a limited – yet useful for Bernstein users – amount of catalogued watermarks.

Suggestions for motifs to retain for cataloging were (1) a subset of Bull’s Head and (2) a motif spanning in sufficient quantities across all four databases. LABW, KSBM proposed that both dated and non-dated wm be cataloged.

LAMOP, KSBM, LABW, KB, NIKI

How many wm should be cataloged depends on the speed of cataloging. The databases will test this speed after Fabriano, after which the cataloging quantities could be agreed upon. Before Fabriano KSBM, KB, NIKI send Vlad a list of the number of watermarks per motif in their databases to be posted on the TWiki. For quantities of wm/motif in Piccard-Online see: http://www.bernstein.oeaw.ac.at/twiki/pub/Main/DataHarmonization/wm_quantities_per_motif.xls

LU, TUG

Productivity question raised: “How to use the users for cataloguing?” Possibilities where for landmarking and for describing components. Suggestion: allow users to landmark watermarks, check the input validity by comparing entries from different users and then store the data if deemed correct.

ALL

No consensus emerged on how to deal with coat of arms watermarks in Bernstein or if they should be cataloged in the component model.

1.3 Terminology

LAMOP, KSBM, LABW, KB

The mapping terminology and the component model terminology should be harmonized. Vlad send the component model terminology to LABW for modification, as suited to the mapping work done by Mrs. Kämmerer and Van Delft.

TUG

The “description form” of the component model should be extendable.

1.4 Search

ALL

Additional data on the search interface is found at the end of this document as a copy of a mail from Vlad to Walter. Feedback welcome if deemed necessary.

TUG

Two search methods should be available: one by motif, one by components. This implies that there is one tab for each method in the search interface. The user can select a motif and then arrive at the description form of the motif (eg: Bull’s Head), or select the components composing his watermark. He can describe in greater detail the component if there is any such information provided by Bernstein (presently only the component considered “motifs” have a detailed description).

TUG

The components of the three presently described motifs (eyes, ears...) can be used for the description of all motifs (in bull's head as well as in eagle, ...).

1.5 Landmarking

ALL

The landmarking software mark2file was presented. Download from

<http://www.bernstein.oeaw.ac.at/twiki/bin/save/Main/ImageProcessing>.

VISKOM

Landmark matching should work also with a subset of landmarks from the total number of landmarks for a given wm motif. Vlad will check that DUT is not duplicating this particular task.

1.6 Spatial position of components

There are divergent opinions about the usefulness of cataloging the relative position of components. There are also problems with the conceptualization of how to express the relative position. Some of the advanced solutions:

1. VISKOM: interactively identifying the position of components by selecting a component, then clicking on its position on the wm image – a software is then storing the coordinates of the components. The system would be the same for both cataloging the wms and for searching for them. The functioning of the software would be opaque to the user.
2. LU, KSBM: for each component is given only its position in regard to only one other component (however the position in regard to all other components is not identifiable)
3. DNB, NIKI: the heraldic positioning system is used (but then you have to learn heraldics)

1.7 Image processing tools

VISKOM, TUG

DNB proposes that the search and comparison of wms incorporates a new method, based on comparing the length of the watermark wire (or number of pixels for the inline). This is based on the idea that while a wm is deformed during its lifetime, the length of the wire of which it is made doesn't change (article by Theo Gerardy). VISKOM remarks that wms can have parts of the wire which break and some new components can be added by papermakers – the percentage of these changes is unknown. VISKOM will consider the design of a software to support this use method.

TUG

WM searches should be done on the wms as they are presented in the databases as well as their vertically and horizontally flipped versions – since in some databases the 'felt side' is not given. This affects the programming of the database (mirroring values like 'left-left-right' to 'right-right-left' or the landmark coordinates, and doing two searches on each of the mirror versions). Mirroring happens always except for those wms where the felt side is known.

1.8 Storage

TUG, LU

The storage of the component model data was discussed. It should follow the recommendations of the Integration Blueprint document. During the development phase the data will be stored centrally, after which those databases that wish can store the component model data with their other watermark data.

TUG, LU

Supposing that the data in the regular databases is growing, but no new description for this new data is added to the component model database. The users of Bernstein should be made aware of this disparity in dataset sizes with which they interact. For example information should be displayed saying that there are 150.000 watermarks in the integrated databases, of which 30.000 have components descriptors.

1.9 Display

TUG

- Tabs of the search interface modified by the user should be color marked.
- A summary of the choices made by the user should be displayed below the tabs.
- The user should be offered the choice of continually updating the results list (by an option click-box): each time he makes a change in the tabs, the results are updated;
- Display results steps:
 - step 1: display number of wm left after user modifications in the tabs
 - step 2: display list (ref nbr. of wm with hyperlink, date & place of wm if any)
 - step 3: display images & list
- The number of displayed results (images and textual list) should not be limited: a limited number (which can be modified by the user) of results are displayed, followed by a 'more...' link.
- Components should be displayed in the order of their frequency. Each component type (e.g. 'letter') is presented first by a representative ('ABC'), then - when the user clicked to be more specific on that component - again by frequency order ('E' before 'Z').
- A grid (like in Piccard-Online, WZMA) should be superposable to the images for facilitating the description.
- Minimum window width for the workspace should be 800 pixels.

1.10 Documentation

TUG

In the Help/Documentation section to the workspace users should be offered a number of introductions to paper studies (scanned articles on watermarks... (copyrights?)). TUG ask partners to provide this data.

TUG

There should be printable document of search options, motifs, components on the search tabs screen.

1.11 Downloadable database

TUG, LU, NIKI

The downloadable database for new watermark collections should be connectable to both the mapping and the component model. The database is part of the downloadable paper studies kit.

LU

A proposal document for the architecture, existing database fields, functionalities and technical aspects (connectivity, database software) of the downloadable database will be prepared by LU for Fabriano.

TUG

TUG explores legal aspects and their impact on the technical aspects of the workspace regarding new databases: rights, demands, citations.

TUG

Solve: how to upload component data from non-Bernstein databases.

TUG, LU

Prepare a document explaining step by step the technical, usability and legal aspect of how a new paper database and new non-paper databases such as libraries can connect to Bernstein.

2. OTHER QUESTIONS

2.1 Exhibition questions

LU, KB, LABW, NIKI

Investigate possibility of a Bernstein exhibition in the UK, NL, Milano, Florence and report to Emanuel Wenger.

VISKOM

ICPL article should be 2-4 pages long and send to NIKI.

2.2 Bibliography

ALL

Status update on bibliography by DNB. The software programming for the bibliography will be transferred from DNB to LU, with budget shifts from DNB & TUG (total 36.000 euros shift) pending approval from the EU (expected after 14 Mai).

2.3 Fabriano program

ALL

Two hours are reserved in Fabriano (Monday 9 July 16:00-18:00) for presentation of Bernstein to interested parties and discussions on connectivity with new databases and other collaboration possibilities. Please report the number of invitations to VISKOM.

VISKOM

The list of decision to take in Fabriano in regard to the component model will be posted. Idem for the documents to read in preparation to Fabriano and what work-package leader have to present at the general meeting.

NIKI

NIKI tells Pelligrini that the exhibition opening is on Monday 9 July and not Sunday 8 July. See <http://www.bernstein.oeaw.ac.at/twiki/bin/view/Main/Meeting20070709Fabriano> for the program.

3. ANNEX – INTERFACE ADDITIONAL DATA

ALL

Walter,

Hierbei sende ich dir zusatzinformationen zur suchinterface. Nicht alle deine fragen werden aber von den partner beantwortet. Dort must du selbst eingreifen. Wenn du willst können wir uns in wien treffen um losungen fur diese aspekte zu finden. Ich sehe drei teile die man berücksichtigen sollte:

- interface functionalities
- software that supports these functionalities (z.b. wenn in die db GMT zeit angegeben wird und man das UTC format fur display will muss man ein script schreiben fur die umsetzung. Dieses script ist nicht teil der database aber der interface)

- database structure
- interface look

3.1 Terminology

A watermark is made of components. Each component can be in turn be made out of components. There are two type of components: the motifs and the beizeichen. The motifs are considered by historians of paper to be the most important component of a watermark. Beizeichen are of secondary importance. While sometime it is possible for lay persons to identify the motifs it is not always possible. To accommodate the long standing tradition of historians and the requirements of lay users, both search options by motif and components have to be offered in Bernstein.

3.2 List of tabs and subtabs in the search interface

Search

Search by hierarchically organized motifs

Search by components

Search by all components, both motifs and beizeichen

Morphological descriptors

Landmarks (for motifs components only)

Search by components of the motif only

Morphological descriptors

Landmarks

Spatial relative positions of components

Global watermark descriptors (position of wm in regard to the chain lines, shape attributes (orientation, shape brokenness, stroke width...): see *Description form - *** - en.xls*)

Other visible data on non watermark features of the paper reproduction (chain lines data, laid lines data, wooden beams data, countermarks, sticks of the wires, paper paste data...)

Mechanical or chemical features of the paper (thickness, weight, roughness, color, fibers...)

Codicological information (date, place of document, content, conservation collection...)

Expertise

Date watermarks

Compare watermarks

Measure features in the paper reproductions

Cartography

Map the tempo-spatial distribution of watermarks

Bibliography

Support: Help on how to use the workspace and Documentation on how to do paper studies

3.3 Search interface functionalities

Suche durch

- all components of the watermark, i.e. both motif components and beizeichen components
- selected components of the motif component of the watermark
- mapping as done between KB, LABW, KSBM

Suche durch alle components

In diesen tab kriegt der user die komplette liste der components die in allen wz existieren können. The user 'selects' a component by checking a checkbox to express that the component exists in the watermark to be searched; or the user 'describes' the component by clicking on the image or the name of the component which through a hyperlink produces a subwindow containing (1) the list

of subcomponents of that specific component if it has any subcomponents or (2) the morphological shape descriptors with their respective values.

The list of components has two proprieties that the user can influence: quantity of items in the list and order of these items.

Quantity options:

- display all components
 - in a single tab
 - display all components in bunches (amount modifiable by user) with a 'more...' link
- display a classified list of components (using for example the classification given by Ornato: http://www.bernstein.oeaw.ac.at/twiki/pub/Main/DataHarmonization/WM_classification_Ornato_-_fr.xls. note that that list is hierarchisizing only the motifs. Components constructed of subcomponents have also to be described.)

Order options:

- by order of frequency of the components and motifs
- by name
- by number of subcomponents (i.e. shape complexity)

Suche durch motifs components

In this tab the user gets the list of the ~40 motifs in our current databases. He can either (1) select a motif to say that it the watermark to be searched is of that type and then go and give other informations such as distance between chain lines; or (2) describe a motif by clicking it. He then gets two subtabs, (1) one with a list of selected components that he can describe morphologically (as given in the files send by ornato) and (2) a second tab with landmark information.

3.4 Database structure

You will work with following files:

- bezeichnen file giving the list of bezeichnen in all motifs cataloged to this day (Components list 3WM short - en.xls)
- motif files giving the list of descriptors of components of the motif and landmarks for the motif (Description form - *** - en.xls)
- database files providing the description database (Database - *** - en - ***.xls)

To identify all the components in our databases (or as many as were identified zum dato by ornato) you cumulate the components given in the list of bezeichnen with the list in the motif file. To know which specific components are to be displayed in the 'components' subtab of the tab 'search by motif' you use only the motif file. I will ask ornato that the database file receives a new field in which the different components of the described watermark is specified. The field will contain these components separated by commas. The three motif files were updated by me for you to download from the TWiki. The image file in its current state is also available for download and file names modification request forwarded to ornato.

Good work,

Vlad