Dynamic Drawings in Enhanced Publications

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NIAS-workshop
Public-Private Initiatives in Digital Humanities
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Dynamic Drawings in Enhanced Publications

How can descriptions of scientific processes and the working of instruments in printed historical sources and secondary literature be visualized dynamically on the web and made accessible in a user-friendly way to enhance understanding?
Dynamic Drawings in Enhanced Publications

Project leadership
Research
Advise

Development

Editorial content
Business
Online platform

Co-applicant
Web publishing
Archiving
<table>
<thead>
<tr>
<th>Instrument/Process</th>
<th>Domain</th>
<th>Demo</th>
<th>Interactive</th>
<th>Dimensions</th>
<th>Brill</th>
<th>English</th>
<th>Re-use/edu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astrolabe</td>
<td>Astronomy</td>
<td>*</td>
<td>*</td>
<td>2D or 3D</td>
<td>Yes</td>
<td>Yes</td>
<td>strong</td>
</tr>
<tr>
<td>Semts triangulation</td>
<td>Land surveying geometry</td>
<td>*</td>
<td>*</td>
<td>2D</td>
<td></td>
<td>Latin</td>
<td>strong</td>
</tr>
<tr>
<td>Stevin Sterctebouwing</td>
<td>fortification</td>
<td>*</td>
<td>*</td>
<td>2 or 3 D</td>
<td>Yes</td>
<td>low</td>
<td></td>
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<tr>
<td>Ramelli - mill</td>
<td>Mechanics</td>
<td>*</td>
<td>possibly</td>
<td>3D</td>
<td>Yes</td>
<td>Yes</td>
<td>average</td>
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<tr>
<td>Descartes</td>
<td>Optics</td>
<td></td>
<td>*</td>
<td>3D</td>
<td></td>
<td>Yes</td>
<td>average</td>
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<tr>
<td>Swammerdam</td>
<td>Biology</td>
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<td></td>
<td>3D</td>
<td>Yes</td>
<td>Latin</td>
<td>low</td>
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<tr>
<td>'s Gravesande (bucket)</td>
<td>Archimedes</td>
<td>*</td>
<td>*</td>
<td>3D</td>
<td></td>
<td>Yes</td>
<td>**</td>
</tr>
<tr>
<td>Christiaan Huygens clock</td>
<td>Mechanics/horology</td>
<td>*</td>
<td>*</td>
<td>3D</td>
<td></td>
<td>Latin</td>
<td>**</td>
</tr>
<tr>
<td>Christiaan Huygens telescope</td>
<td>Astronomy/optica</td>
<td>*</td>
<td></td>
<td>3D</td>
<td>Yes</td>
<td>English</td>
<td></td>
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<tr>
<td>Genneté perpetuum mobile/pump</td>
<td>Mechanics</td>
<td>*</td>
<td></td>
<td>3D</td>
<td>Yes</td>
<td>*</td>
<td></td>
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<tr>
<td>'s Gravesande (demonstration forces)</td>
<td>Mechanics</td>
<td>*</td>
<td></td>
<td>2D/3D</td>
<td></td>
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</tbody>
</table>
Cases
Refraction of light in the Cartesian universe

- Variation in source types:
  - text (linear)
  - Illustration (static 2D)
  - Mechanical model (math?)

- Narrative:
  - Linear vs. Step-by-step vs. Selective, …

Descartes, ‘Les Meteores’ in Discours de la Methode (1637)
Dynamic Drawings in Enhanced Publications
Dynamic Drawings in Enhanced Publications

- Source
- Interpretation
- Context
  - Justification of Interpretation
  - Visualization
- Google
Dynamic Drawings in Enhanced Publications

The astrolabe: a portable model of the universe

Adriaan Metius, Astrolabii particularis et catholici descriptio (1632)
Dynamic Drawings in Enhanced Publications
Dynamic Drawings in Enhanced Publications
The Collecting Taste: Italian Case-studies

Brief description of the publication
Descartes
Brief description of the publication
Land Surveying
Brief description of the publication
Rome
Brief description of the publication
Stevin
Brief description of the publication
Swammerdam
Brief description of the publication

BRILL
DEMO

PROJECT DYNAMIC DRAWINGS

PUBLICATION: THE COLLECTING TASTE: ITALIAN CASE-STUDIES

Visualisations

The following visualisations are available.

Animatie Titel
Visualisations accompanying chapter 2.3 “technique”.

Images

The following images are available.

Metadata

Title
The Collecting Taste: Italian Case-studies
Author
M. Minniti
Publication date
1200
Published in
...
Closing remarks

• No single, preferred, transparent path for enrichment of (primary) printed sources
• Therefore, aspects such as audience, reusability, etc. quickly come into play
• Yet, pilot yields workable model for enhanced (scientific) publications, based on 6 cases
• Architecture from print (QR) to dynamic visualisation

• Current point of attention:
  complexity vs. sustainability? Integrated enrichment, incl. context, and persistent links. How far should contextualization go?