

Stimulating Cultural Awareness in Collaborative Virtual Environments

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Michelangelo, *David with Goliath's Head*, 1501-02, oil on wood panel, 119 x 172 cm, London, National Gallery.

David with Goliath's Head
1501-02, oil on wood panel, 119 x 172 cm, London, National Gallery.

This painting is a copy of Michelangelo's original work, which was destroyed in 1656. The original was a large-scale work, and this copy is a smaller version. The painting shows David, a young man, holding the head of Goliath, a giant, in his right hand. David is looking towards the viewer, and his left arm is extended. The background is dark and indistinct.



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Back Issues

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What is this?



Modern Warfare and Technological Development



KHM, Wien

David with the Head of Goliath, by Michelangelo Merisi da Caravaggio.

THE END OF ASYMMETRY: FORCE DISPARITY AND THE AIMS OF WAR

by Doctor Peter H. Denton

Print PDF

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Asymmetry is no longer a useful concept in the analysis of 21st Century warfare. A more accurate analysis emerges from recognizing the fundamental disparity between opposing forces and the system implications of such a disparity in force. This in turn leads to a plausible redefinition of the structure and mission of the Canadian Forces (CF) abroad.



1048 F. Francken d. J. (1581-1642)
Ein Kunst- und Naturalienkabinett





Second Life

File Edit View World Tools Help Dresden Gallery 212, 105, 39 (PG) - Dresden Gallery powered by SECOND INTER 12:47 AM PDT L\$600 Search











Jacopo Tintoretto

Adoration of the Kings

Adoration of the Kings

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Paolo Veronese
und Werkstatt
und Werkstatt

Adoration of the Kings
1589-1590

In the painting, Veronese depicts the Adoration of the Kings, a scene from the Bible. The Virgin Mary is seated in the center, holding the Christ Child. To her right, Joseph is kneeling in adoration. Three kings are present: one on the left offering a gift, and two on the right, one of whom is a young child. A donkey and an ox are visible on the left. In the background, a figure of a saint or prophet is seated on a high ledge. The painting is characterized by its detailed composition, use of light and shadow, and the presence of a small dog in the lower left corner.

The painting is a masterpiece of Baroque art, characterized by its detailed composition, use of light and shadow, and the presence of a small dog in the lower left corner. The painting is a masterpiece of Baroque art, characterized by its detailed composition, use of light and shadow, and the presence of a small dog in the lower left corner.

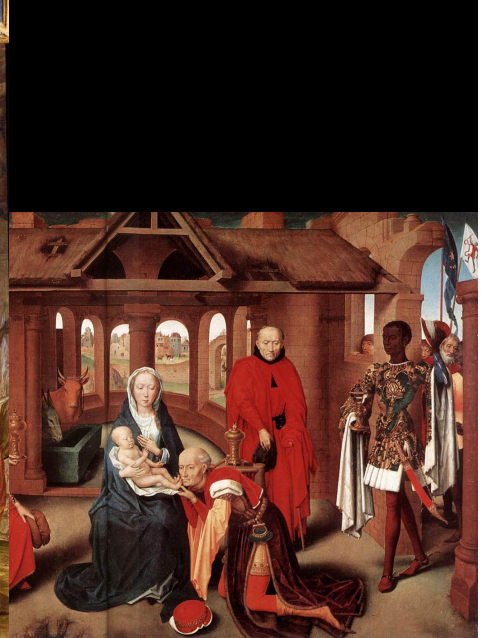
Veronese, Paolo















General Observation

- Dominant narrative in art presentation in museums is time chronology
- Sometimes extended with geographical aspects
- Seeing artworks of the same topic requires walking between different rooms
- Seeing artworks of the same topic helps in identifying iconographic detail
- Seeing artworks of the same topic helps in understanding iconographic tradition and the expectation of the viewer

The Goal

- Provide an environment for studying art history
- Allow the visitor to explore the environment along various narratives
- Involve the visitor in collaborative description of the artworks
- Continuously expand the collection of artworks
- Enrich the environment with information from various Web sources
- Eventually: Provide the central entry point for exploring art history on the Web

Explore Art History from a Network of Relations

- Relations in tradition, influence, style and technique
- Relations between people (teacher/student, patrons, collaborators, etc.)
- Relations in reception of artworks
- Geographical influences („Dutch Light“ ...)
- General historical influences (wars, different reigns etc.)
- User-generated associative relations

Relations as Virtual Museum Layouts

- Use existing semantic relationships;
- Organize them to form narratives; and
- Use them as basis for automatic graph layouts

Data Source

Web Gallery of Art: www.wga.hu

- Provides information on
 - ~17,000 artworks
 - ~2,200 artist
- Structured information
- Free form text
- Images

Data Source

Web Gallery of Art: www.wga.hu



- Giotto
- b. 1267, Vespignano
- d. 1337, Firenze
- Adoration of the Magi
- 1304-06
- Fresco, 200 x 185 cm
- Capella Scrovegni, Padua

- With camels and gifts the three kings have followed the comet along the narrow rocky path to the stable at Bethlehem. On the fresco, this stable really does seem to be the end of the road. The oldest king has taken off his crown, and kneels before the baby Jesus. All present watch what is happening quietly and reverently. Only one vividly depicted secondary figure, the camel driver, prefers to attend to his animals. Giotto uses this contrast to increase the effect of the main scene.

Data Source

Controlled Vocabularies

- Getty Union List of Artist Names (ULAN)
Structured vocabulary of artist names and biographical information
- Getty Arts & Architecture Thesaurus (AAT)
Structured vocabulary of concepts relating to the fine arts, architecture and decorative arts
- Getty Thesaurus of Geographic Names (TGN)
Structured vocabulary of geographic names for indexing art and architecture

Additional Data Source

OpenCalais: www.opencalais.com

- A Thomson Reuters initiative
- Launched in January 2008
- Processes unstructured text and returns RDF triples identifying
 - Entities
 - Facts
 - Events

WGA text -> OpenCalais

Documents indicate the this tondo may have originally belonged to Lorenzo de' Medici, ruler of Florence and patron of Renaissance artists. Following the three kings a splendid procession, symbolizing all the races of mankind, waits to pay homage to the new-born Christ. The peacock is a symbol of Resurrection. Some scholars believe that Fra Angelico laid out the composition and painted the Virgin and Child and at least some of the figures at the upper right; then his associate and fellow monk Fra Filippo Lippi completed the work.

- Christian Art
- Visual Arts
- Lorenzo de' Medici
- Florence
- House of Medici
- Italian Renaissance Painting
- Fra Angelico
- Dominicans
- Painting
- Italian Renaissance



Additional Data Source

Flickr: www.flickr.com

- Search for name of artist and title of artwork
- Extract tags associated with the artwork
- Fra
- Angelico
- Filippo
- adoration
- magi
- 1440
- peacock
- lippi
- <http://www.flickr.com/photos/maulleigh/4242163076/>





System Architecture

Unity Game Engine

ClioPatria Server

WGA

ULAN
AAT
TGN

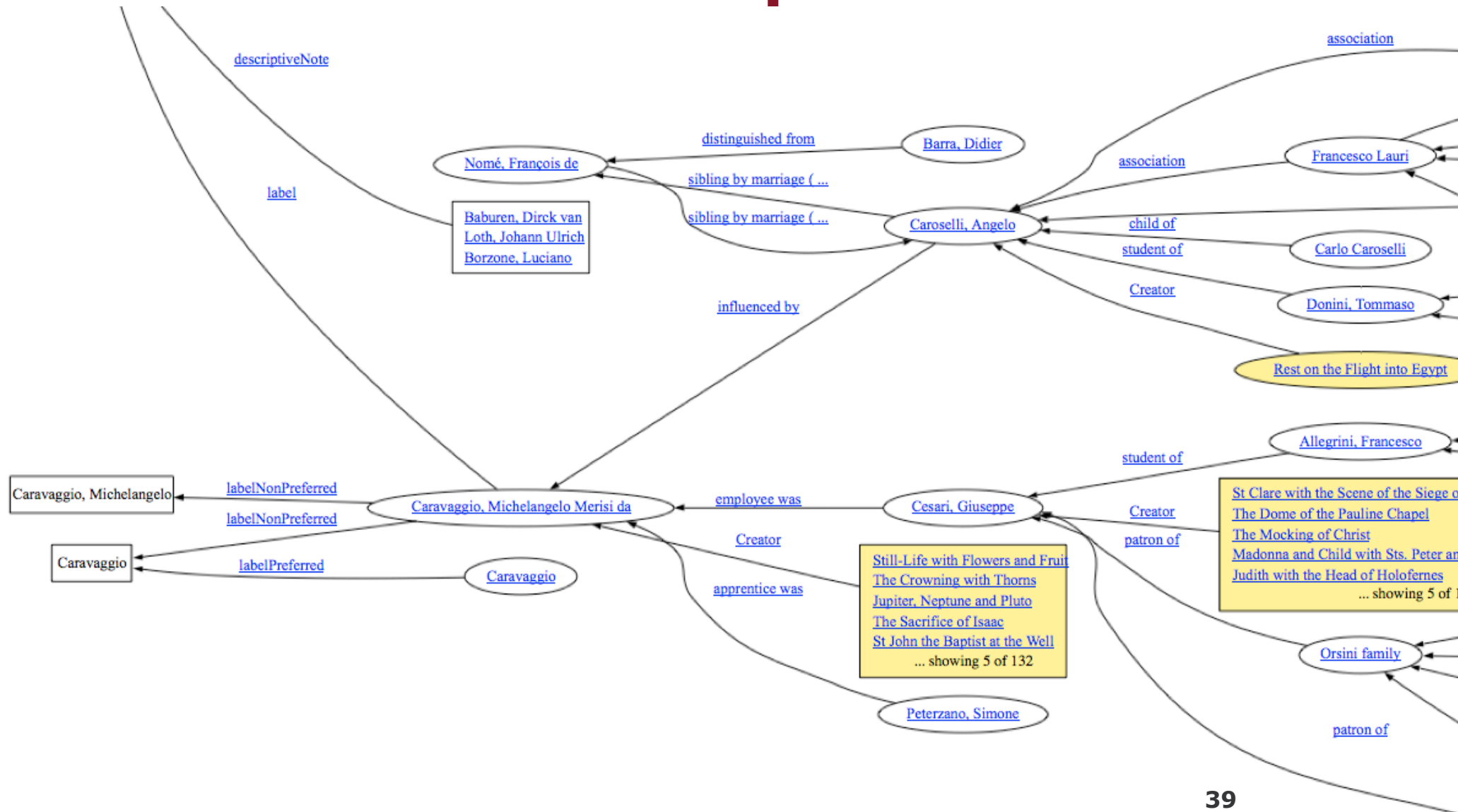
OpenCalais
Flickr



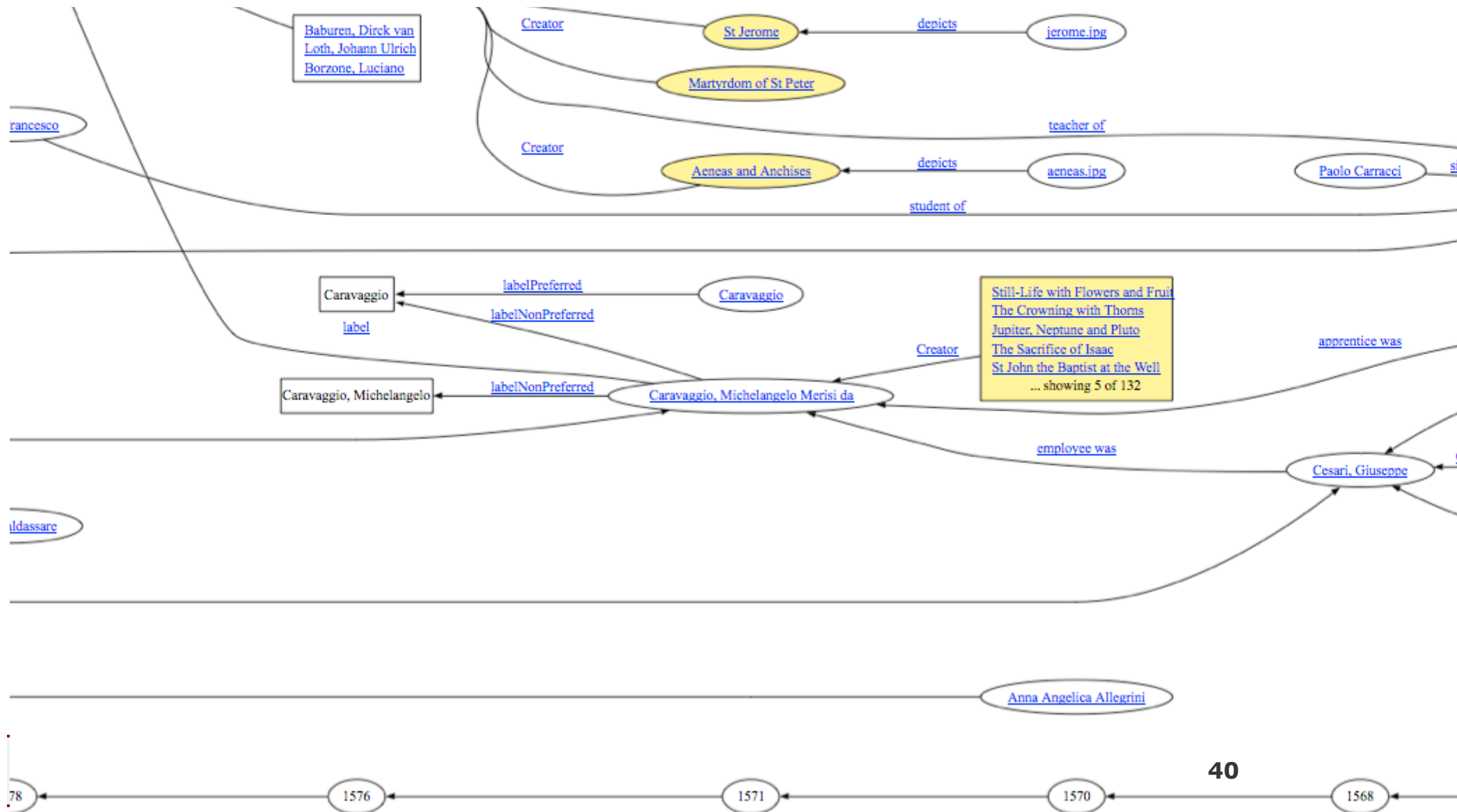
The ClioPatria semantic search web-server

- <http://e-culture.multimedien.nl>
- First prize: Semantic Web Challenge,
5th International Semantic Web Conference,
Athens, Georgia, USA, 2006.
- Available under the GPL-2 license.

Search Graph ...



... Becomes a Timeline Graph



Current Demonstrator

- Translate the timeline graph into a 3D representation
- Use additional dimension to represent “influence”
- Code rank of artist node as height value
- Show relations as differently colored curves
- Show images and related metadata

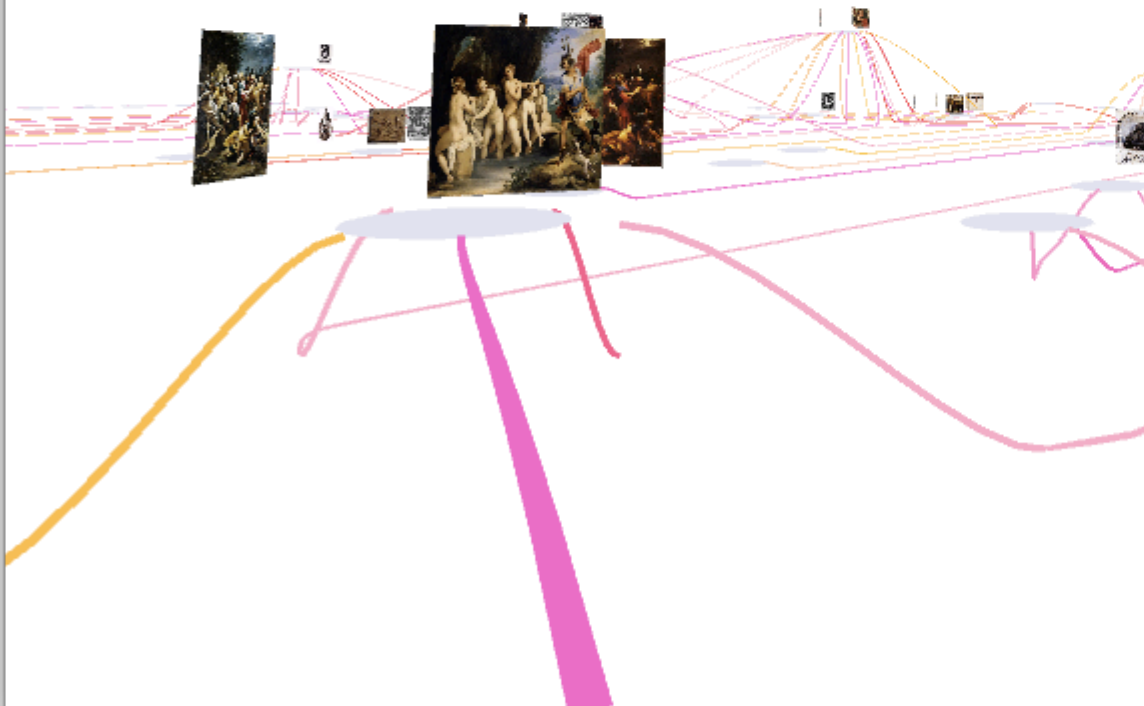
1568

Loaded 77 of total 77 Images



1571

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mythology

Sick Bacchus

1571

Loaded 77 of total 77 Images

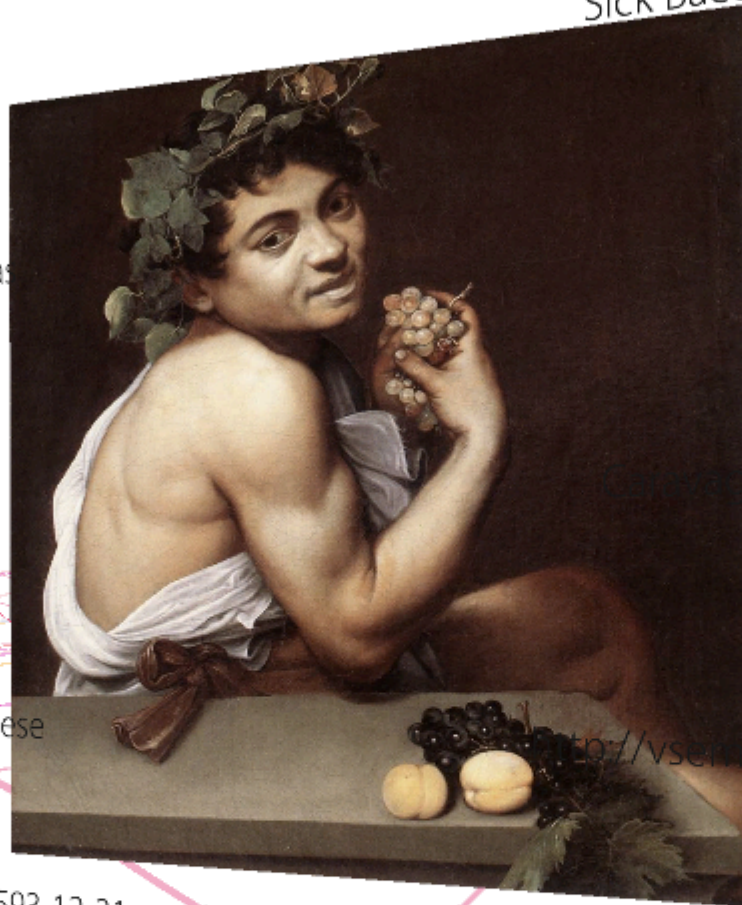
Oil on canvas

paintings

Caravaggio, Michelangelo Merisi da



Galleria Borghese



1593-12-31

<http://vsem.ec.tuwien.ac.at/art//c/caravagg/01/01bacch.jpg>

1593-01-01

Italian

Next Steps

- Dynamic Graph Drawing
- Multi-User Visualization
- Integration of Information from the Web, Flickr, OpenCalais, Twitter, Youtube
- Additional (semantic) datasources like Freebase and DBpedia

Thanks for the attention!



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