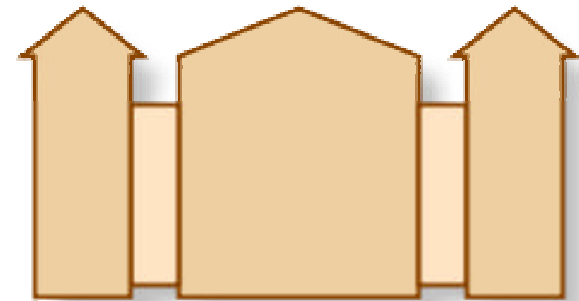


Semantic driven multimedia presentations

prof. dr. Lynda Hardman
CWI, TU/e

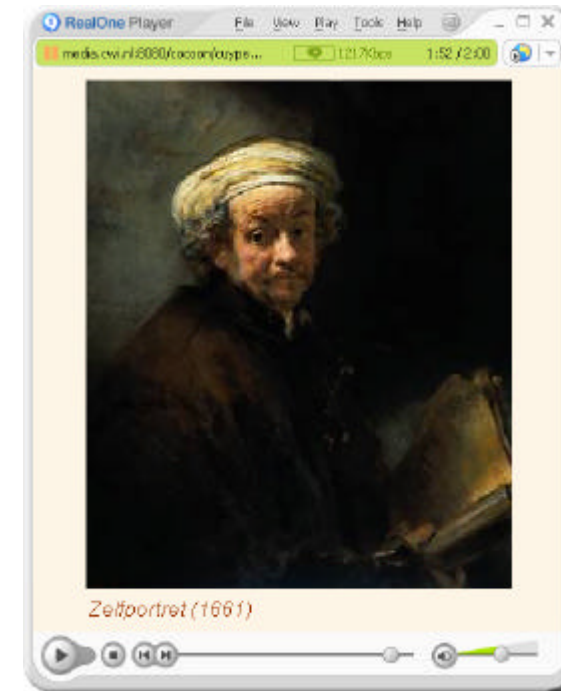
Multimedia and Human-Computer Interaction



User-tailored Multimedia

- Large amounts of multimedia information stored in databases
- Accessible via the Web
 - Presentation more than a list of URL's
- In the future – part of the Semantic Web
- Application areas
 - Digital libraries
 - Cultural Heritage
 - Online training

One size *doesn't* fit all

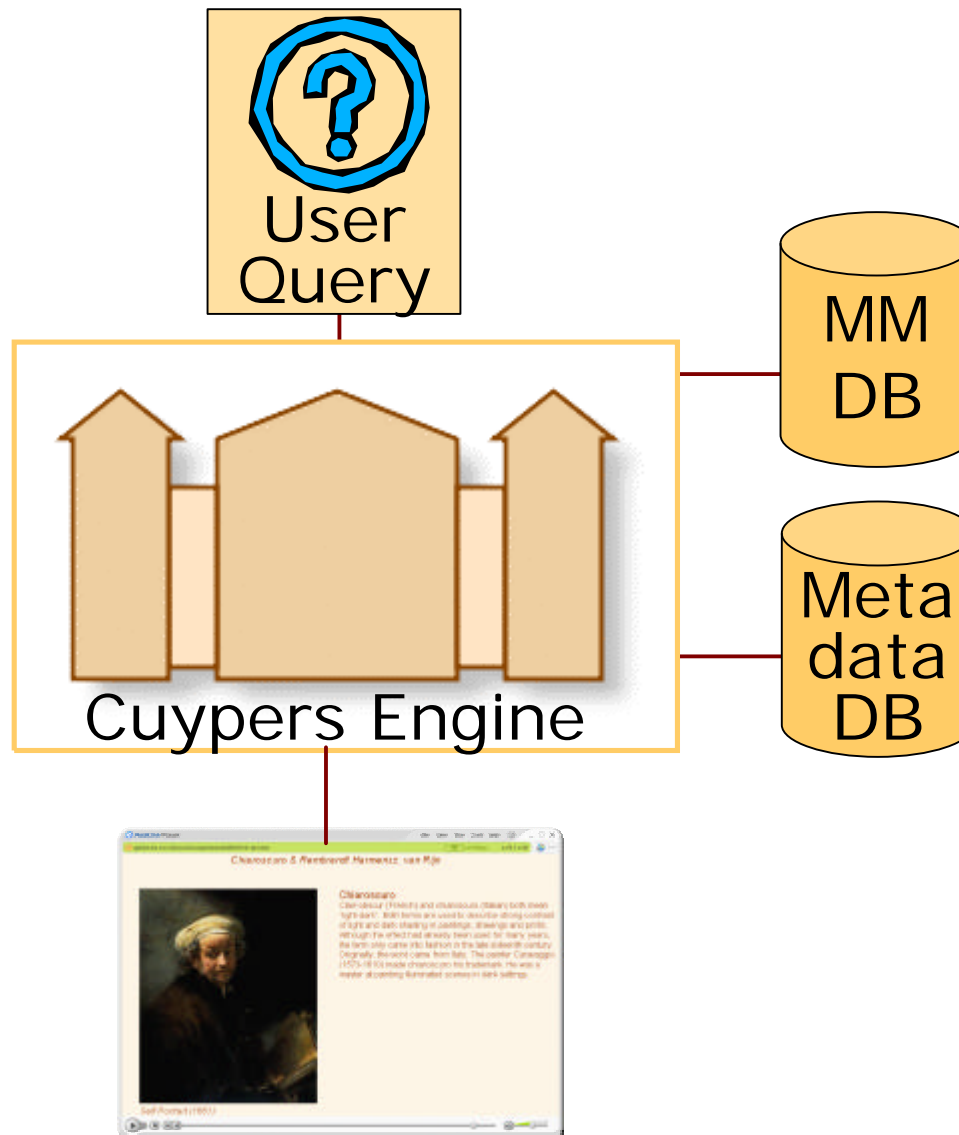


Media design is expensive

Need to tailor presentations, but there are

- too many users, differing in
 - language, abilities, level of expertise, task, ...
- too many devices
 - PC, PDA, mobile, voice-only, no audio, ...
 - bandwidth and other QoS parameters

Cuypers Engine



Chiaroscuro & Rembrandt Harmensz. van Rijn



Self Portrait (1661)

Chiaroscuro

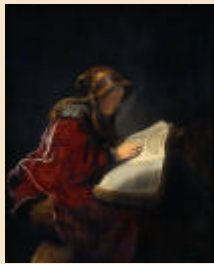
Clair-obscur (French) and chiaroscuro (Italian) both mean 'light-dark'. Both terms are used to describe strong contrast of light and dark shading in paintings, drawings and prints. Although the effect had already been used for many years, the term only came into fashion in the late sixteenth century. Originally, the word came from Italy. The painter Caravaggio (1573-1610) made chiaroscuro his trademark. He was a master at painting illuminated scenes in dark settings.

Demo

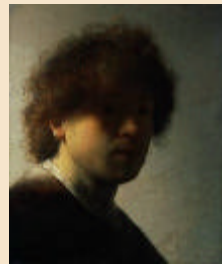


Presentation structure depends on content

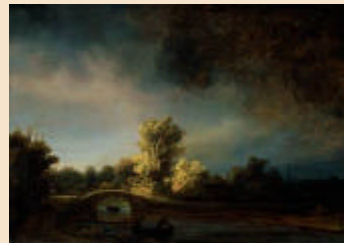
Clair-obscur



1631



1628



1638

Rembrandt

Caravaggists

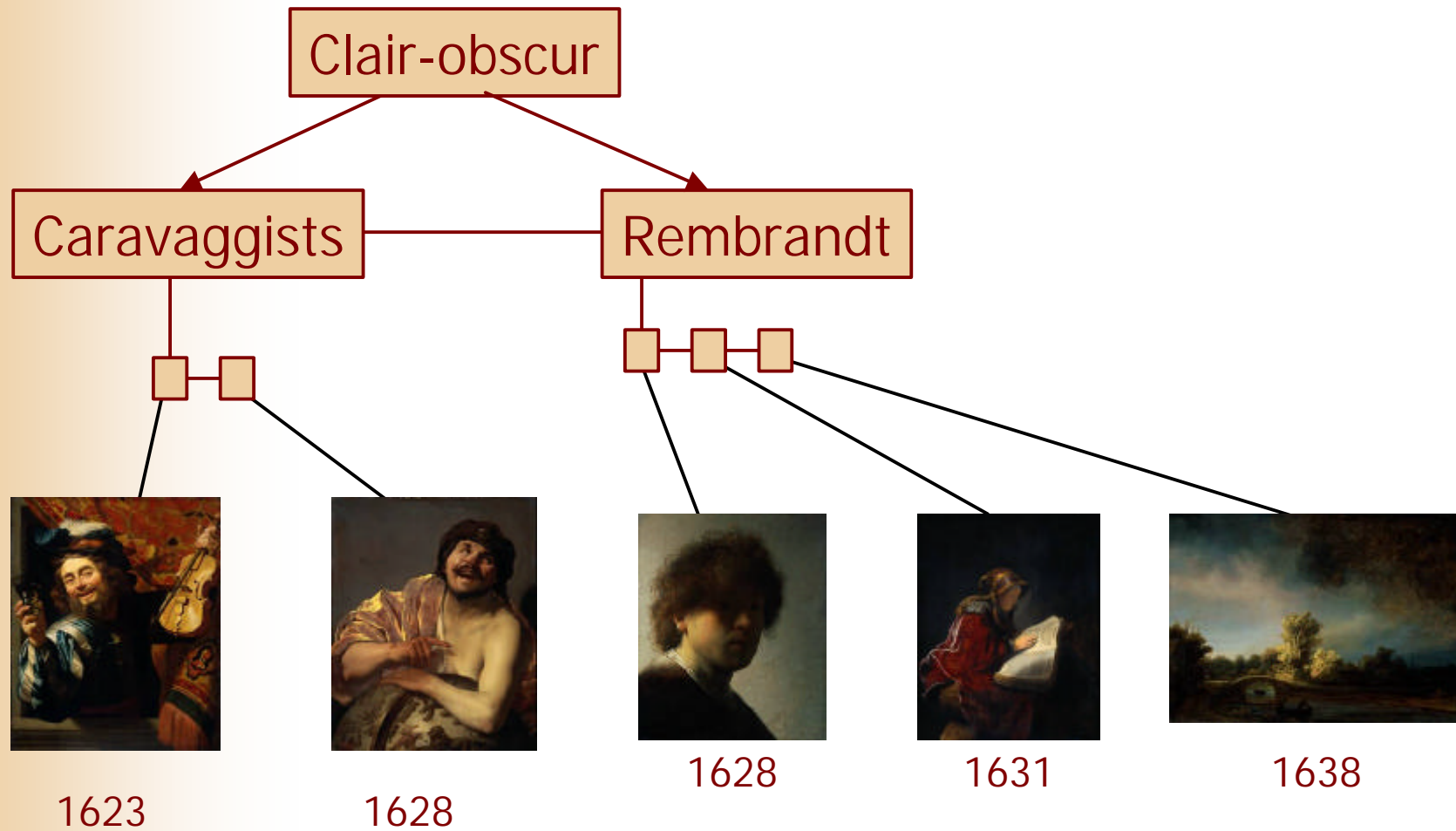


1623

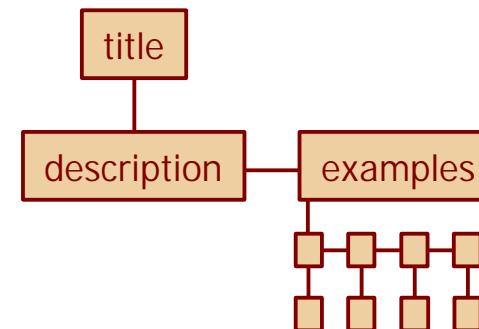
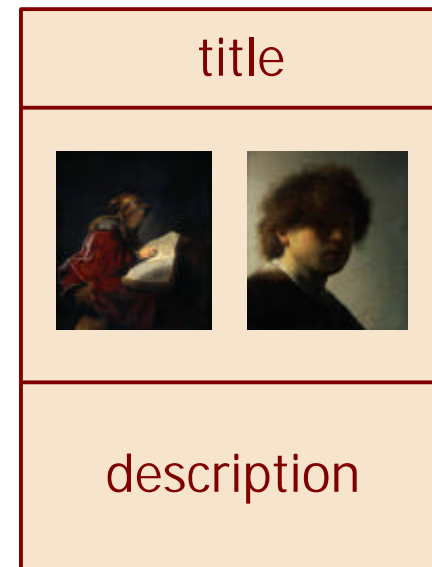
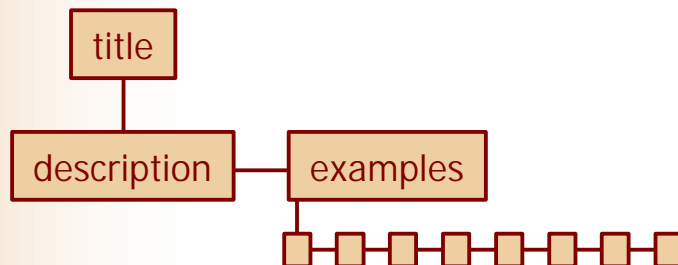


1628

Example Presentation Structure



Presentation Structure depends on Style



Style Depends on Content

Chiaroscuro & Rembrandt



The Stone Bridge (1638)

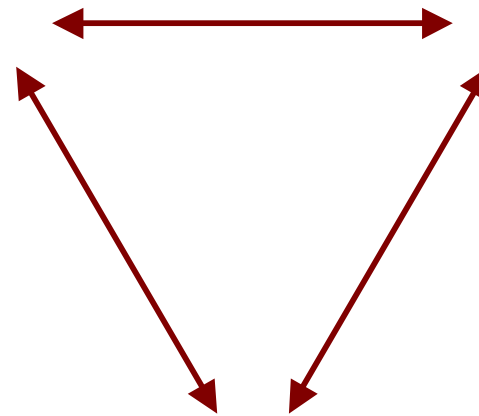
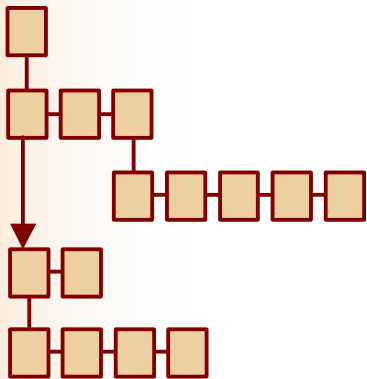
Chiaroscuro & Rembrandt



The Stone Bridge (1638)

Design dependencies

Presentation structure



Style

abcdefghijkl

abcdefghijkl

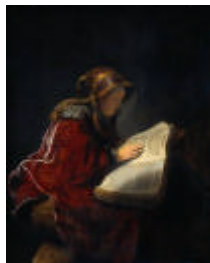
abcdefghijkl

ABCDEFGHIJK

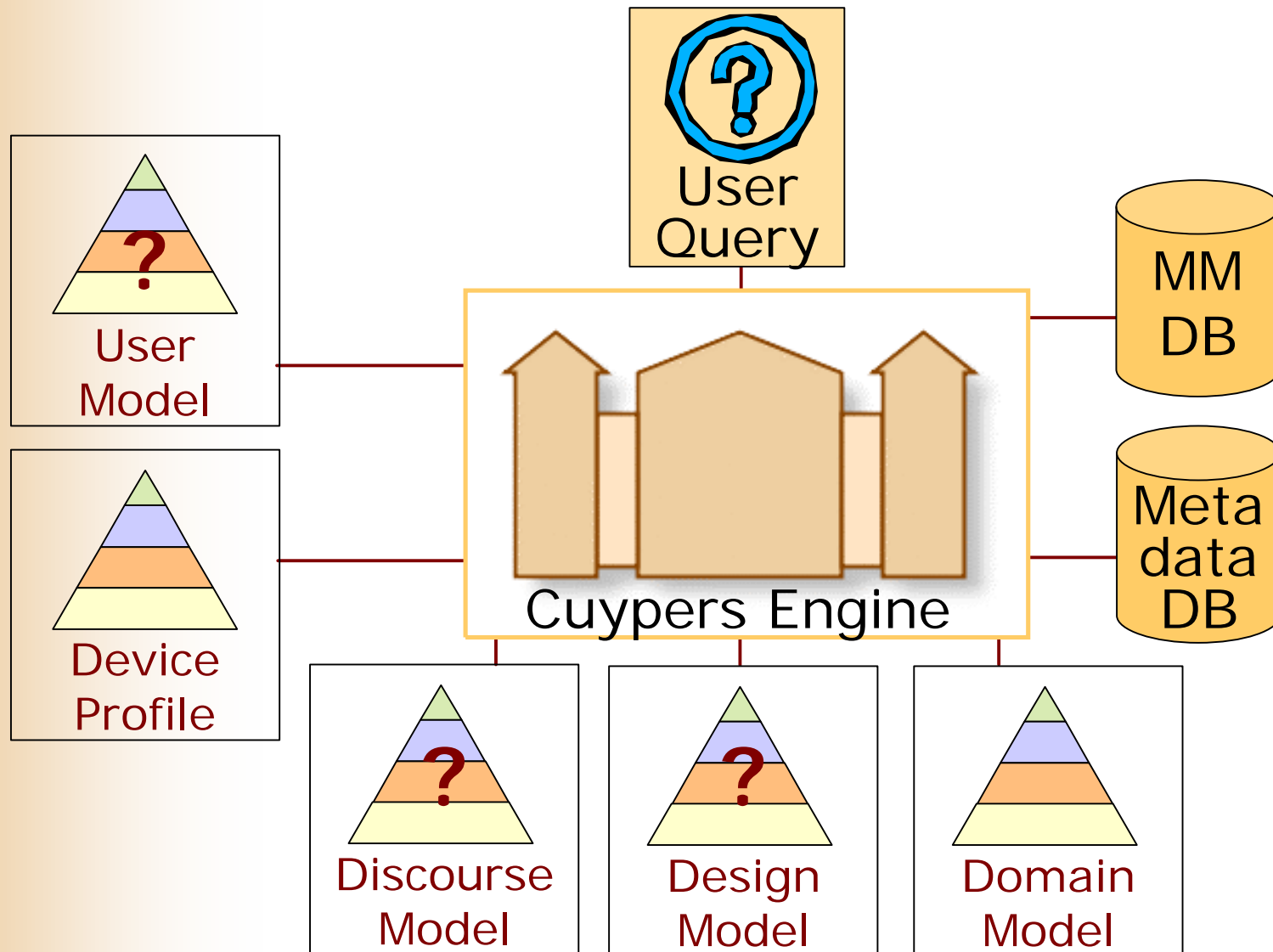
abcdefghijkl

abcdefghijkl

Content



Cuypers Knowledge Sources



Conclusions

- Generating multimedia presentations requires
 - making design dependencies explicit
 - taking these dependencies into account
- Semantic Web has the potential to
 - encode knowledge we use
 - reuse knowledge already available
- Cuypers system provides an experimentation platform

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Intelligent Information Retrieval and Presentation

- NWO **CHIME** ToKeN2000
Cultural Heritage in an Interactive Multimedia Environment
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- NWO **NASH**
Networked Adaptive Structured Hypermedia

- Images courtesy of

