

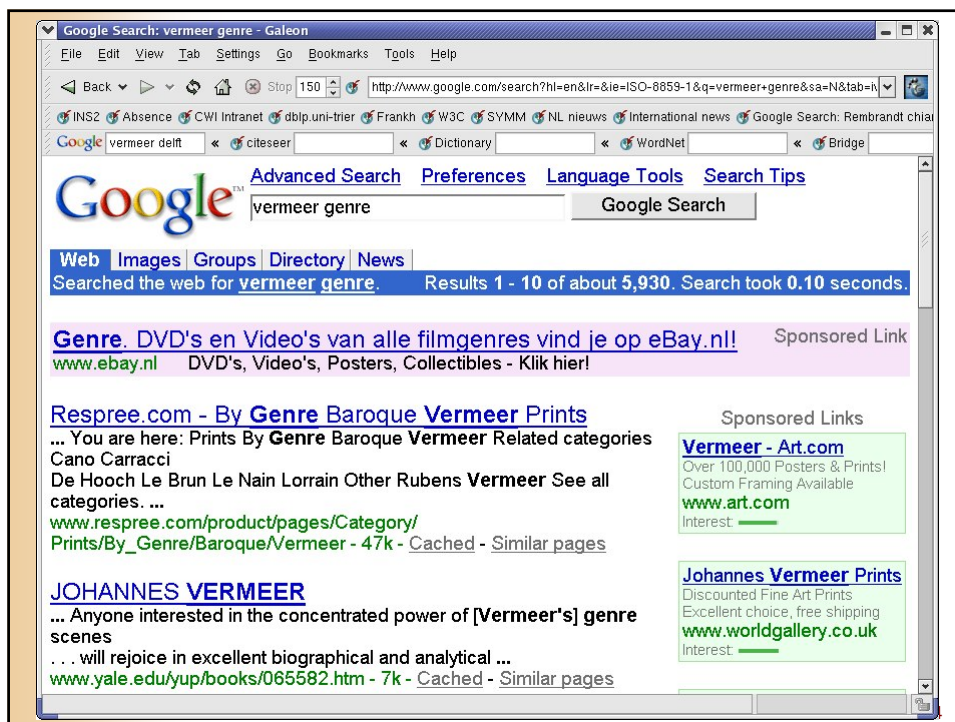
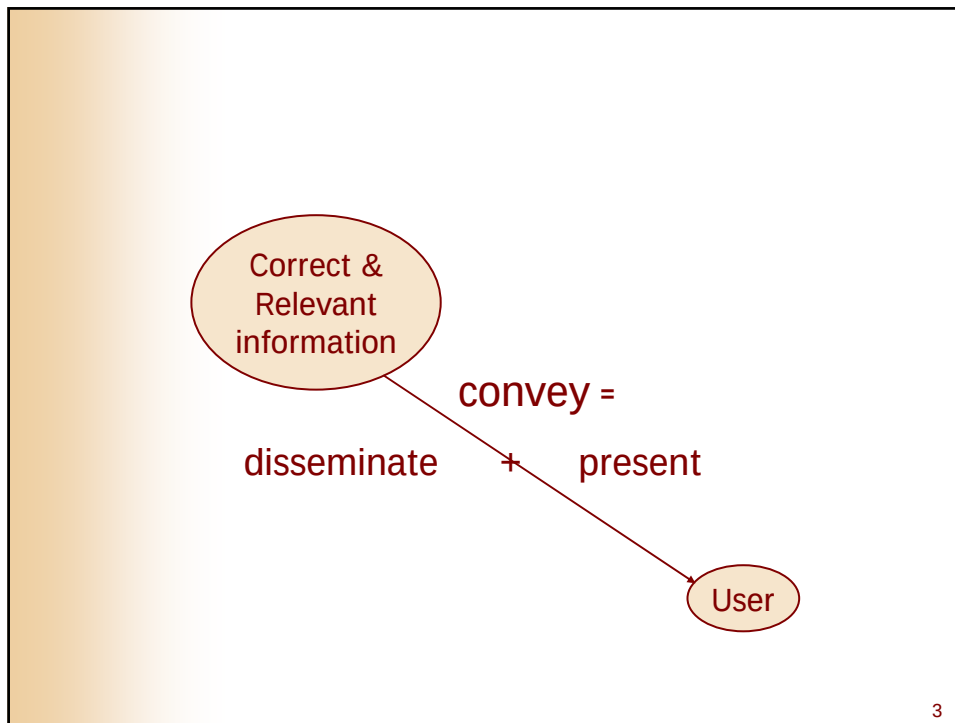
smart style

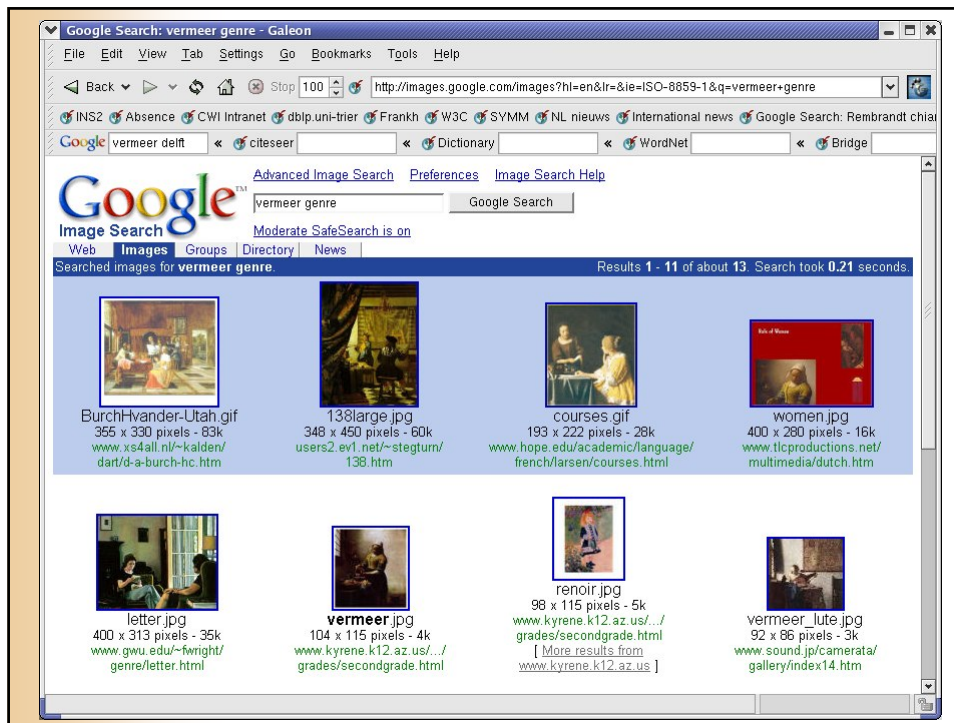
for conveying information

prof. dr. Lynda Hardman



conveying information





Tailored presentation

RealOne Player

media.cwi.nl/cocoon/cuyper/aria/selectform-process 1328kbps 0:00 / 0:50

Genre painting and Johannes Vermeer



Genre

Genre paintings, drawings or prints depict people in their everyday surroundings: at home, in a café or at work. They appear to be painted from life, but in reality were usually thought up in the artist's studio. Sometimes (but not always!) they contain a moral lesson. In some works the message is clear, in other cases the viewer has to make an effort to interpret the picture. Often, however, these household scenes are simply decorative paintings designed to entertain and amuse.

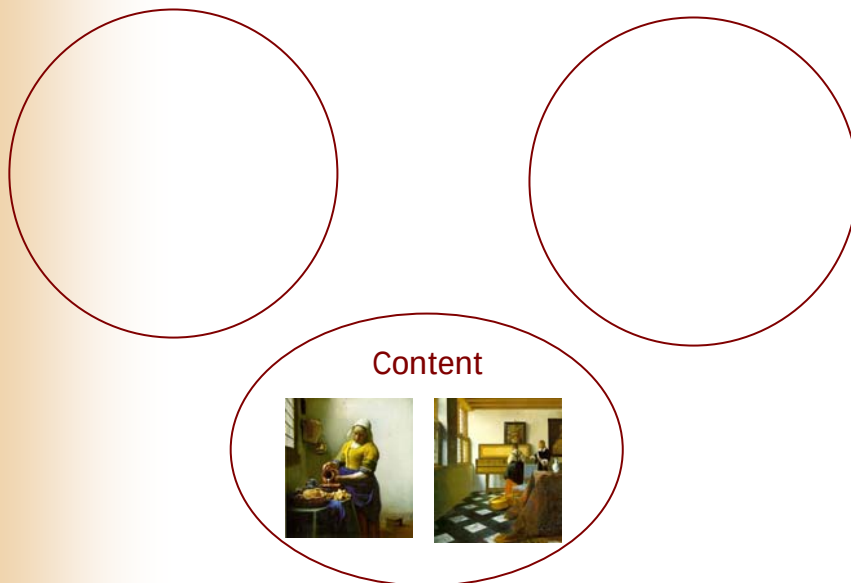
The Kitchen Maid (c. 1658)

The problem

- Too many users need their own information
 - for their level of expertise
 - using appropriate media
 - in an appropriate style
 - displayed on their own device
- Designers need as much help as they can get!

7

Three ingredients



8

Content of example



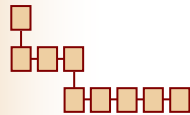
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9

Three ingredients

Presentation
structure

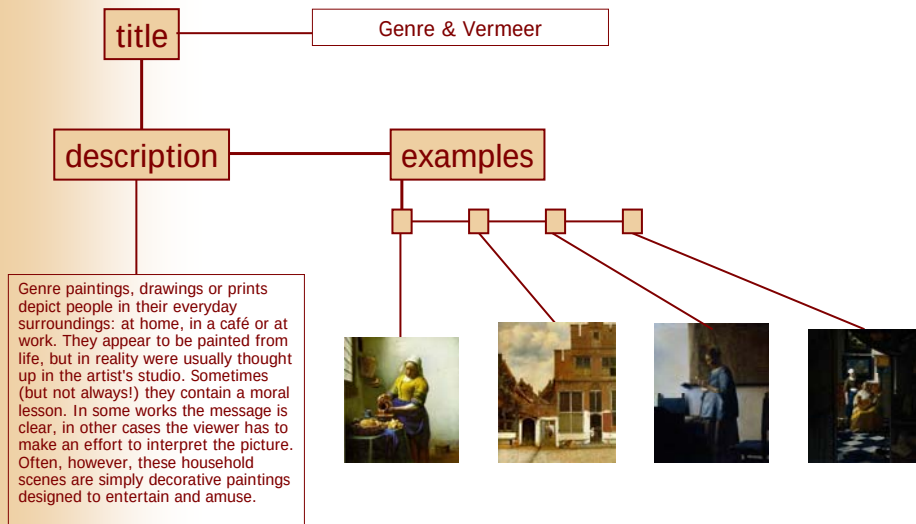


Content



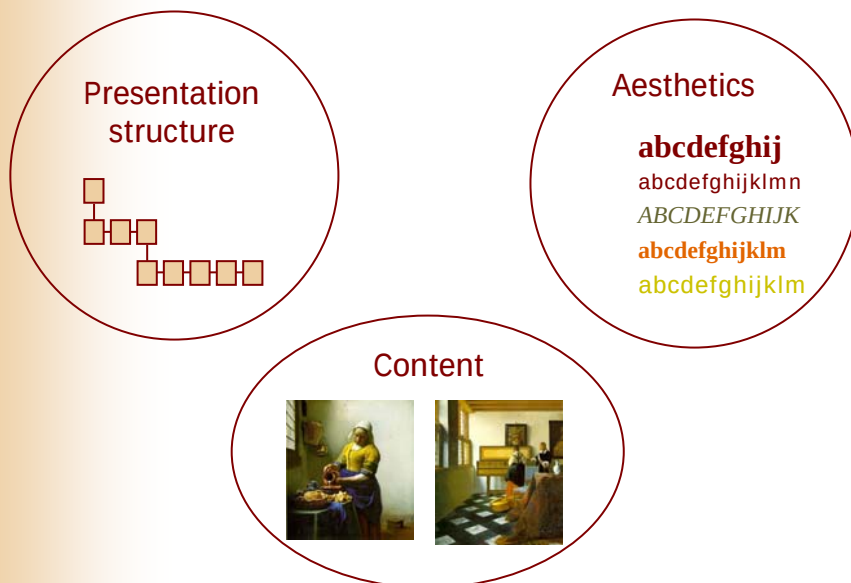
10

Presentation structure of example



11

Three ingredients



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Aesthetics of example

RealOne Player

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Genre painting and Johannes Vermeer

Genre

Genre paintings, drawings or prints depict people in their everyday surroundings: at home, in a café or at work. They appear to be painted from life, but in reality were usually thought up in the artist's studio. Sometimes (but not always!) they contain a moral lesson. In some works the message is clear, in other cases the viewer has to make an effort to interpret the picture. Often, however, these household scenes are simply decorative paintings designed to entertain and amuse.



The Kitchen Maid (c. 1658)

Fonts

Layout

Colours

13

Tailored presentation

RealOne Player

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Genre painting and Johannes Vermeer



The Kitchen Maid (c. 1658)

Genre

Genre paintings, drawings or prints depict people in their everyday surroundings: at home, in a café or at work. They appear to be painted from life, but in reality were usually thought up in the artist's studio. Sometimes (but not always!) they contain a moral lesson. In some works the message is clear, in other cases the viewer has to make an effort to interpret the picture. Often, however, these household scenes are simply decorative paintings designed to entertain and amuse.

14

One size *doesn't* fit all



15

What we need is...

Correct and relevant information presented to the user

- conveying underlying relations in the subject matter
- at a suitable level of detail
- in the time available to the user
- using appropriate media
- in an appropriate style
- making optimal use of the delivery context

Where did it all begin?

16

Aural tradition: Storytelling

- First means of passing information from generation to generation
- Form optimised for remembering large numbers of, otherwise unrelated, facts
- Very old, but still a valid and extremely powerful way of communicating information

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Rhythm and rhyme

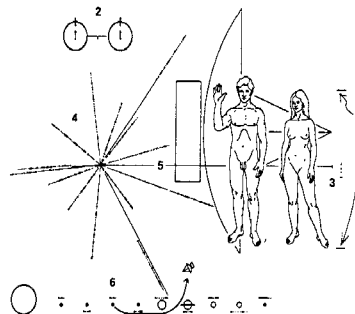


18

Visual (still images)



Cave Chauvet-Pont-D'Arc
© Jean Clottes



Plaque on
Pioneer 10 spacecraft

19



20

Written



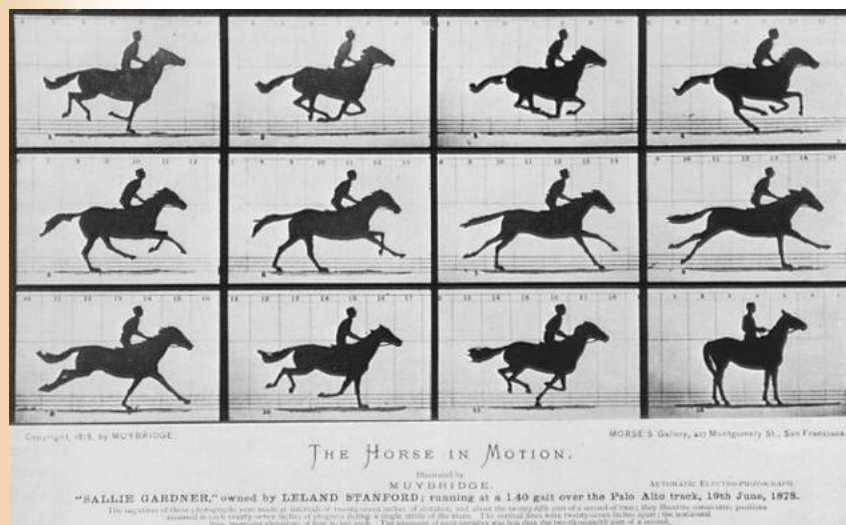
Dead Sea scrolls



Newspapers

21

Visual (moving images)



22

Visual (moving images)



23

Hypertext

Via het gootje vestigt Vermeer onze aandacht op de vrouw in het gangetje. Dat de kunstenaar het doorkijken belangrijk vond, blijkt uit een **overschildering**. Eerst zat er nóg een vrouw in het poortje, maar omdat zij het zicht in het gangetje blokkeerde, schilderde Vermeer haar weer weg. Doorkijkjes als deze heeft Vermeer kunnen afkijken van zijn collega en stadsgenoot **Pieter de Hooch**.

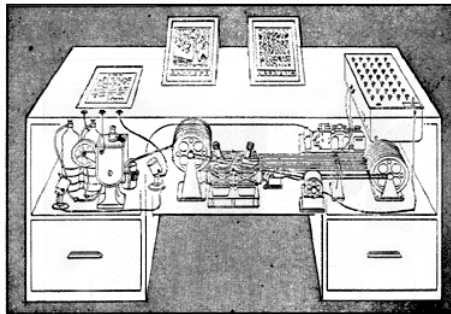
Een overschildering is een gedeelte van een schilderij dat de schilder zelf, of een andere schilder of restaurator, heeft overschilderd. Kleine veranderingen door de schilder zelf worden ook wel **pentimenti** genoemd. Overschilderingen die niet door de schilder zelf zijn aangebracht, hebben meestal te maken met een veranderde smaak of met strengere fatsoensnormen. Bij 'Het toilet' van **Jan Steen** bijvoorbeeld was de **po veranderd in een vaas en**

Jan Havicksz. Steen werd in 1626 in Leiden geboren, als zoon van een bierbrouwer. Na de **Latijnse School** schreef hij zich in 1646 in aan de Leidse universiteit, waar hij echter nooit een graad heeft behaald. Over Steens opleiding tot schilder is weinig met zekerheid bekend.

"Latijnse school" was de benaming voor scholen die in de vroege Middeleeuwen waren gesticht door kloosters of bisschoppen (en later ook door gemeentebesturen). Op deze scholen werd les gegeven in de "artes liberales", de vrije kunsten: de grammatica, welsprekenheid, redeneerkunst, rekenkunde, meetkunde, sterrenkunde en muziek. In de 19de eeuw maakte de Latijnse school steeds vaker plaats voor het Gymnasium. Daar werd ook les gegeven in het Grieks, de moderne talen en de natuurwetenschappen; vakken die op de Latijnse school nauwelijks aan bod kwamen.

24

Vannevar Bush's Memex, 1945



Memex in the form of a desk would instantly bring files and material on any subject to the operator's fingertips. Slanting translucent viewing screens magnify supermicrofilm filed by code numbers. At left is a mechanism which automatically photographs longhand notes, pictures and letters, then files them in the desk for future reference (*LIFE* 19(11), p. 123).

25

"The Web"

Hyper-images



27

Multimedia

- Synthesizes existing media
- Need to choose the most appropriate medium
- or combination of media



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Presentation Technologies

- Aural
 - wax cylinders, vinyl disks, magnetic tape, CD's, **computer**
- Visual
 - cave walls, stone, papyrus, canvas, paper, **computer**
- Written
 - Stone, papyrus, paper, **computer**
- Moving images
 - Celluloid, magnetic tape, **computer**
- Hypermedia
 - **computer**

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Multimedia on the Web

- Anyone
 - Professional publishers, amateurs
 - Different users, accessibility
- Anywhere
 - Places, devices (delivery context)
- Anytime
 - Not the 9 o'clock news
- Anyhow
 - Any medium or combination of media



"On the Internet, nobody knows you're a dog."

How do we realise this?

30

Create models...

Need

Knowledge of...

Convey underlying relations	Domain
Suitable level of detail	Discourse
Time available to user	User task
Appropriate media	Media characteristics
Appropriate style	Graphic design
Device characteristics	Device capabilities

...to drive the creation of presentations

31

Encyclopaedia

Artists: Johannes Vermeer, Pieter de Hooch

Step 1: choose artist | Step 2: choose artefact | Step 3: choose genre | FINISHED

Please choose the artist(s) you want information about:

A B C D E F G **H** I J K L M N O P Q R S T U V W X Y Z

Haag, Tethart Philipp Christian
 Haarlem, Cornelis Cornelisz. van
 Haaxman, Pieter Alardus
 Hack, Marinus Johannes
 Hainhofer, Philipp
 Hals, Dirck
 Hals, Frans
 Hanneman, Adriaen
 Hannké
 Hansen, Carel Lodewijk
 Hausdorff
 Heda, Willem Claesz.
 Heem, Jan Davidsz. de
 Heemskerck, Maarten van
 Heemskerck, Willem Jacobsz. van
 Helst, Bartholomeus van der
 Herselle, Josse van
 Heyden, Jan van der
 Hilligaert, Pauwels van
 Hiller, Joachim
 Hiroshige, Utagawa
 Hisgen & Co., O.
 Hobbema, Meindert
 Hodges, Charles Howard
 Hogenberg, Frans
 Hogers, Jacob
 Hokusai, Katsushika
 Hondecoeter, Melchior d'
 Hondius I, Hendrick
 Honthorst, Gerard van
 Hooch, Pieter de
 Hoogstraten, Samuel van
 Horrix, Gebr.
 Horrix, Matthijs
 Houckgeest, Gerrit
 Houdon, Jean-Antoine
 Hove, Bartholomeus J.W.M. van
 Huysum, Jan van

32

Presentation Player
RIJKS MUSEUM
 amsterdam

Artists: Johannes Vermeer, Pieter de Hooch Artefact: The Kitchen Maid Genre: Genre piece

■ Artist ● Artefact ◆ Style ▲ Genre ▼ Technique

33

Presentation Player
RIJKS MUSEUM
 amsterdam

Artists: Johannes Vermeer, Pieter de Hooch Artefact: The Kitchen Maid Genre: Genre piece

■ Artist ● Artefact ◆ Style ▲ Genre ▼ Technique

The Kitchen Maid

ca. 1658, Johannes Vermeer
 Oil on canvas, 45,5 x 41 cm

With quiet concentration a woman pours milk into a bowl. With her left hand she supports the can she is pouring from. Around her are various objects: a loaf of bread, a stoneware jug, a basket and a brass bucket. The woman is standing near the window so she can see what she is doing. The light falls on her hands; her silhouette is dark against the white wall. There is a fascinating play of light and shadow in this painting.

▲ Genre
 This is one of Johannes Vermeer's genre pieces in which he establishes an intensely intimate atmosphere. Although the artist observes his model from nearby, she continues with her work, totally unperturbed.

▼ Technique
 Vermeer made use of light and perspective to create the intimate atmosphere. All lines of perspective lead to the right hand of the girl, which subtly accentuates the task of pouring milk in which she is completely engrossed. The horizon lies beneath her head, so that the viewer seems to look up

34

Presentation Player
RIJKS MUSEUM
 a m s t e r d a m

Artists: Johannes Vermeer, Pieter de Hooch Artefact: The Kitchen Maid Genre: Genre piece

■ Artist ■ Artefact ◆ Style ▲ Genre ▼ Technique

The Kitchen Maid

ca. 1658, Johannes Vermeer
 Oil on canvas, 45,5 x 41 cm

▲ Genre
 E Ex J All

▼ Technique
 E Ex J All

◆ Style
 E Ex J All

■ Johannes Vermeer
 E Ex J All

■ The Sleeping Girl
 E J All

Text: Audio: [Icons]

Diagram: A network diagram on the left shows 'Johannes Vermeer' connected to 'The Kitchen Maid' and 'The Sleeping Girl'. 'The Kitchen Maid' is connected to 'The Sleeping Girl'. 'The Sleeping Girl' is connected to 'Genre piece'. 'Genre piece' is connected to 'Style', 'Technique', and 'Artefact'. 'Style' is connected to 'Classicism', 'Light and perspective', and 'Street'. 'Technique' is connected to 'Light and perspective'. 'Artefact' is connected to 'Street'.

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Presentation Player
RIJKS MUSEUM
 a m s t e r d a m

Artists: Johannes Vermeer, Pieter de Hooch Artefact: The Kitchen Maid Genre: Genre piece

■ Artist ■ Artefact ◆ Style ▲ Genre ▼ Technique

The Kitchen Maid ▲ Genre: Genre piece ● Justification

ca. 1658, Johannes Vermeer
 Oil on canvas, 45,5 x 41 cm

Artemisia, ca. 1645, follower of
 Domenico Fiasella, Canvas

Diagram: A network diagram on the left shows 'Johannes Vermeer' connected to 'The Kitchen Maid' and 'The Sleeping Girl'. 'The Kitchen Maid' is connected to 'The Sleeping Girl'. 'The Sleeping Girl' is connected to 'Genre piece'. 'Genre piece' is connected to 'Style', 'Technique', and 'Artefact'. 'Style' is connected to 'Classicism', 'Light and perspective', and 'Street'. 'Technique' is connected to 'Light and perspective'. 'Artefact' is connected to 'Street'.

36

Storyteller

Presentation Player
RIJKS MUSEUM
amsterdam

Duration: 3 minutes Character: Prosaic

Step 1: choose duration Step 2: choose character Step 3: choose artefact FINISHED

Step 1: How long do you want your story to be? minutes.

Step 2: What is the preferred character of your story?



Prosaic

37

Presentation Player
RIJKS MUSEUM
amsterdam

Duration: 3 minutes Character: Prosaic Artefact: The Kitchen Maid

Step 1: choose duration Step 2: choose character Step 3: choose artefact FINISHED

2. Search by name of artist:

A B C D E F G H I
J K L M N O P Q R
S T U **V** W X Y Z

Vermeer, Johannes

Artefacts in Rijksmuseum:



"Little Street", ca 1658 The Kitchen Maid, ca 1660 Woman reading a Letter, 1662/1663 The Love Letter, 1669/1670

All other Artefacts in chronological order:



Soldier and a laughing Girl, ca 1658 View of Delft, 1660/1661 The Music Lesson, 1662-1664 Woman holding a Balance, 1669/1670 Young Woman with a Water Pitcher, 1664/1665

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Presentation Player

RIJKS MUSEUM
amsterdam

Duration: 3 minutes Character: Prosaic Artefact: *The Kitchen Maid*

Text: Audio: Speed:



The Kitchen Maid
by Johannes Vermeer
ca 1660
Oil on canvas
45.5 x 41 cm

39

Presentation Player

RIJKS MUSEUM
amsterdam

Duration: 3 minutes Character: Prosaic Artefact: *The Kitchen Maid*

Text: Audio: Speed:







Tiny points of light

Nail with shadow

Cracked Windowpane

Brass bucket

40

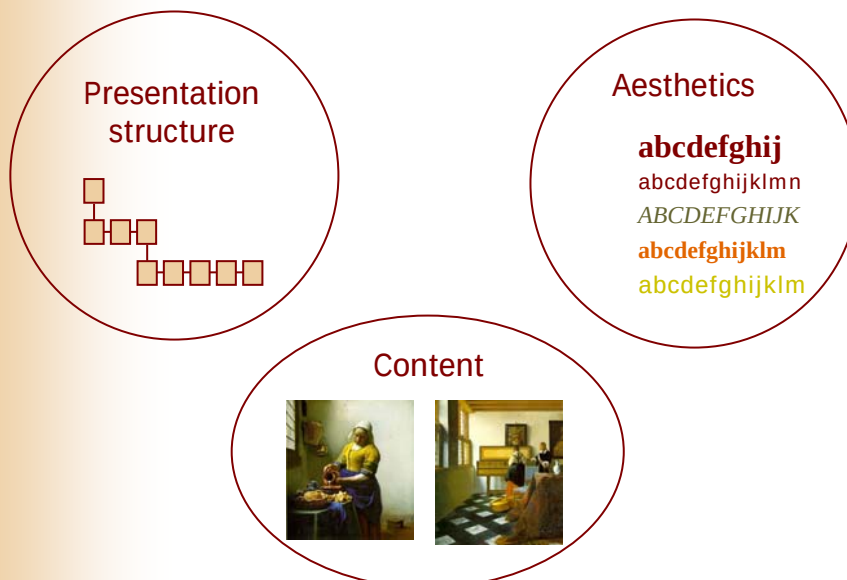
Create models...

Need	Knowledge of...
Convey underlying relations	Domain
Suitable level of detail	Discourse
Time available to user	User task
Appropriate media	Media characteristics
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...to drive the creation of presentations

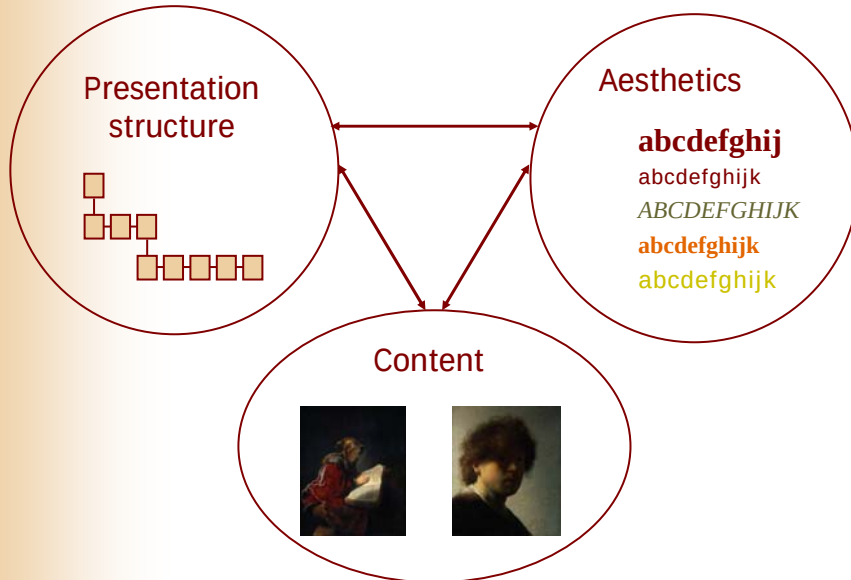
41

Three ingredients



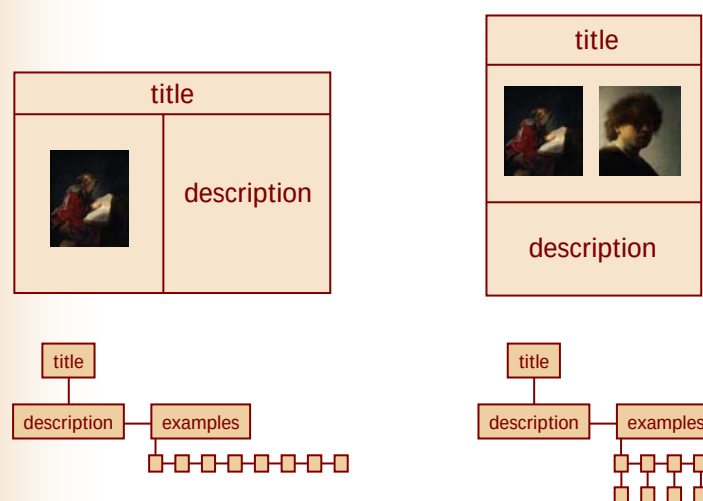
42

Design dependencies



43

Presentation Structure depends on Layout



44

Style Depends on Content

Chiaroscuro & Rembrandt



The Stone Bridge (1638)

Chiaroscuro & Rembrandt



The Stone Bridge (1638)

45

Presentation structure depends on content

chiaroscuro



1631



1628



1638

Rembrandt

Caravaggists



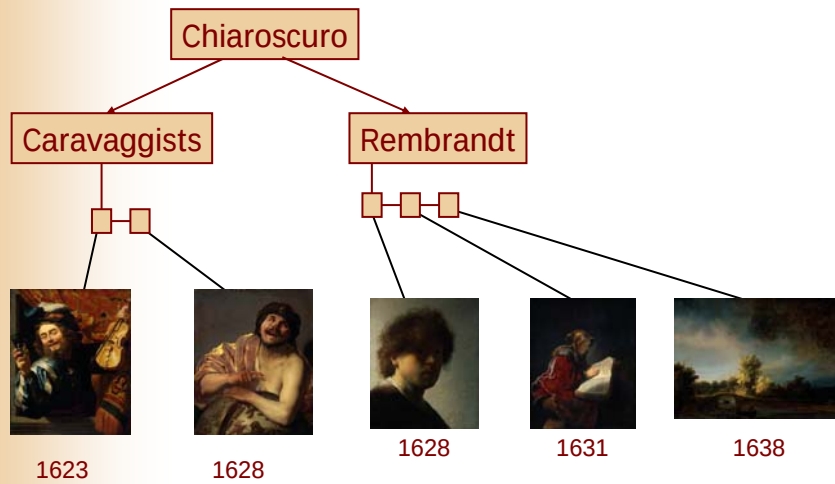
1623



1628

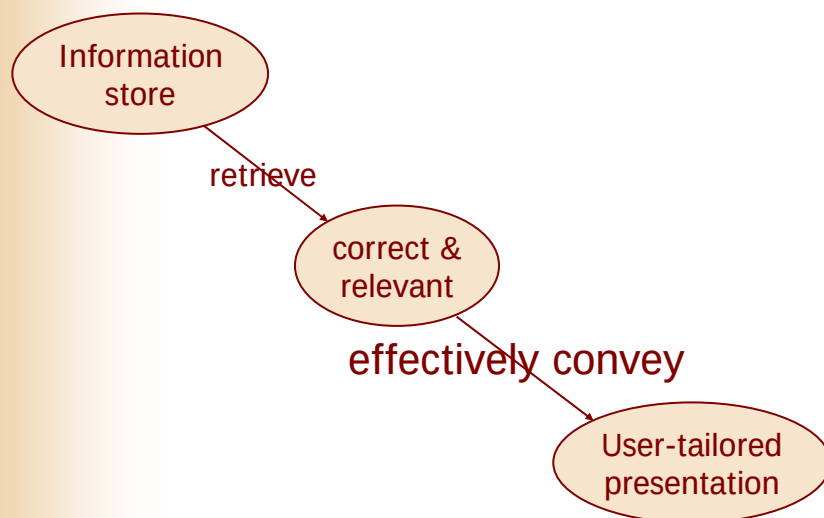
46

Example Presentation Structure



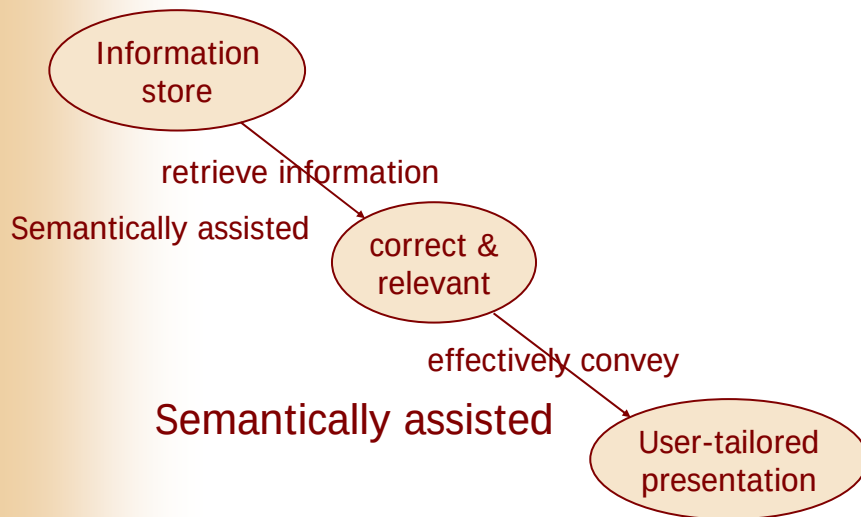
47

Web



48

Semantic Web



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Conclusions

- Creating 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

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This research is supported by

- NWO **I²RP** ToKeN2000
Intelligent Information Retrieval and Presentation
- NWO **CHIME** ToKeN2000
Cultural Heritage in an Interactive Multimedia Environment
- NWO **NASH**
Networked Adaptive Structured Hypermedia
- Telematica Instituut **Topia**
- Images courtesy of **Rijksmuseum**, Amsterdam

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