

Hypermedia paradigm and Museum's didactics:
a challenge for the future. Studies on Palazzo
Pianetti's Application

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Research proposal

What can UX Design offer to Museum's didactics?

The State of the Art

Cultural Heritage Communication

- growing importance of hypermediatexts
in Cultural Heritage Communication;

- this media are not only related to acoustic
paradigm but involving visual and interactive
fields (Pascucci 2009):

“hypermediatext”

- change in knowledge, way to transmit
informations, emphasize new cultural models
and human values;

The State of the Art

Cultural Heritage Communication

hypermedia focus:

- enable people to “visit” collections virtually;
- collections become virtual;
- subject rather than the collection itself.

The State of the Art

Cultural Heritage Communication

the visitor

who is no longer requested to observe the contents of exhibitions *in loco*, can now experience the exhibition even *outside* the museum.

“act, choose, react”

according to hypermedia exhibition contents.

UX DESIGN

The State of the Art

UX Design

- new field of HCI Design;
- solution designed for a single profile of visitor;
- intuitive and unintuitive graphic user interfaces (GUIs).

open questions:

- protocol for different kind of visitors;
- general line guide of intuitive graphic user interfaces (GUIs);
- how to exploit museum's collection contents at best through hypermedia text is concerned;
- improve museum's education and didactics.

Research

When UX is well designed, interactive design can match the goal with the different types of visitors, the traditional meaning of “public use of history” and didactics proposal.

Analysis of successful case studies showing that hypermedia texts can improve users' experience in accessing museum's collections in term of visiting and learning.

Research

Case Studies. Palazzo Pianetti

Palazzo Pianetti

Palazzo Pianetti is a museum of fine arts located in Jesi. It is a Rococo palace built in 1730. Its architecture hinders the building of an entry for individuals with disabilities;

The focus of the museum is *only* on the second floor, with Lorenzo Lotto's exhibition. Frescoes on Aeneid by Placido Lazzarini represent a part of the didactic but related communication is design only through photocopies.

Research

Case Studies. Palazzo Pianetti

Phase 1. Focus on didactics

BRIEF:

*Design a third generation-audioguide
to improve learning process related to Aeneid Fres-
coes*

- The myth is generally introduced at school before the tour of Palazzo Pianetti Museum;
- Frescoes are painted on the roof. The App is able to show details and narration engaging students;
- if it is possible, App could be presented also to visitors.

Research

Case Studies. Palazzo Pianetti

Phase 2. Tour

- visiting the museum in guided tour with student;
- observation of generally reaction;
- observation in proxemic reaction;
- observation of engagement between explanations (including the use of material) and tour.

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Phase 3. Analysis of didactics material

- processing didactic material;
- focus on the details to point out;
- focus on the visitors engagement;

Research

Case Studies. Palazzo Pianetti

Phase 4. Design the Application
(Project)

- Analysis of case studies;
- Studies on cognitive psychology (affordances) and Interactive Design;
- Storyboard of the Application;
- Design of the Application in terms of narration and graphics;
- Graphic should be coherent with content, App navigation and the (Brand) identity of the Museum;
- Focus on education always at first place.

Research

Case Studies. Palazzo Pianetti

Phase 5. Design the Application
(Graphic)

- Storyboard of the Application;
- Design of the Application in terms of narration and graphic;
- Graphic must be coherent with content, App navigation and the (Brand) identity of the Museum;
- Focus on education always at first place.

Research

Case Studies. Palazzo Pianetti

Phase 6. Design the Application

- Students are visitors. Like other people that visit the museum, they can represent different types of users and their specific needs, like older people or users with visual impairments;

- Design and Graphic should think about content accessibility.

Research

Case Studies. Palazzo Pianetti

Phase 7. Inside the Application

LE STANZE DI ENEA

Icons



Description

iPhone
e iPod Touch (pixel)

iPad
(pixel)

App Icon

57x57
144x144 (retina)

72x72
144x144 (retina)

App Store
Icon

512x512
1024x1024

512x512
1024x1024

Research

Case Studies. Palazzo Pianetti

Phase 7. Inside the Application

“Canto le armi e l'uomo che per primo
dalle terre di Troia raggiunse esule l'Italia
per volere del fato”

Two level of voices: one for general narration and
the other for Frescoes details



Research

Case Studies. Palazzo Pianetti

Phase 7. Inside the Application

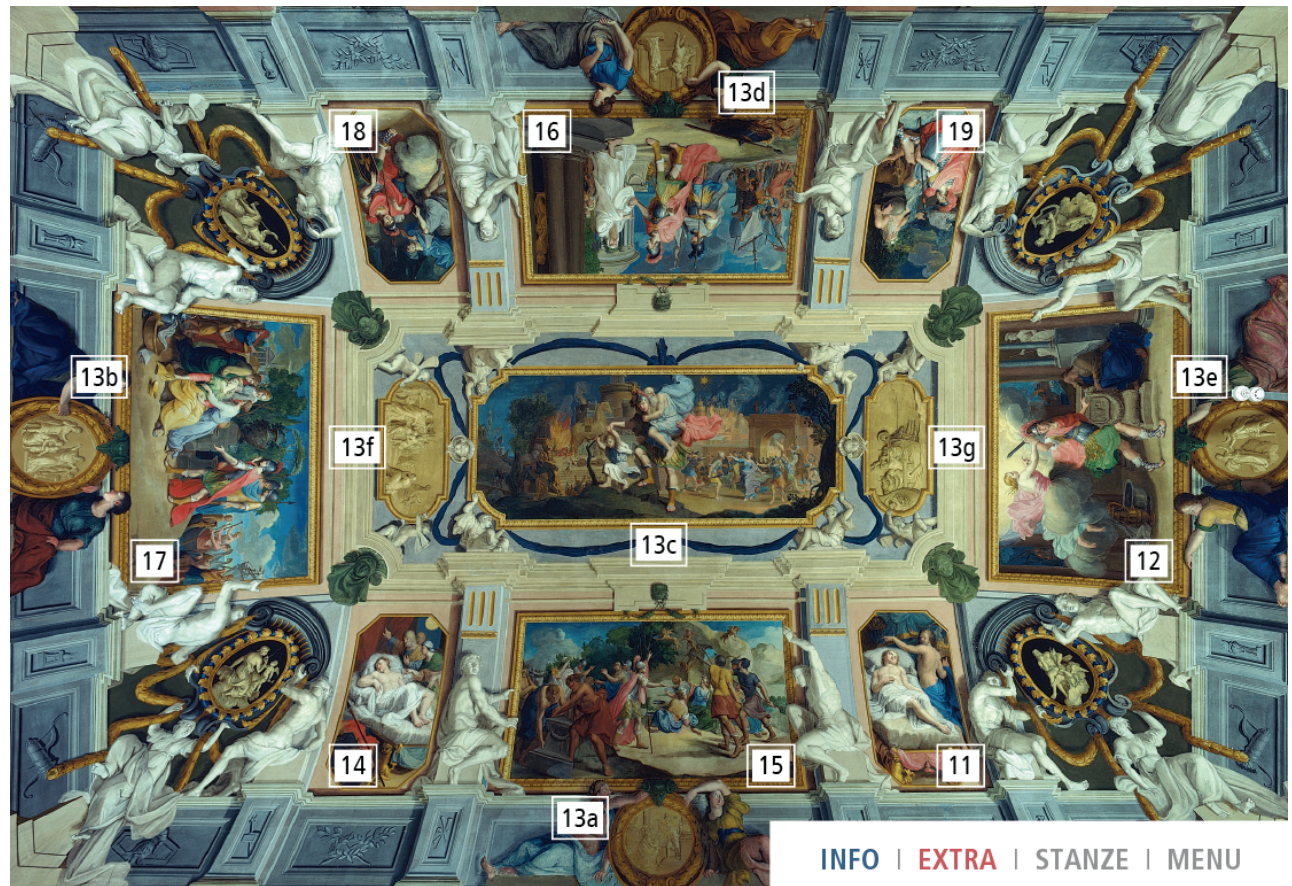


Sample of screenshot

Research

Case Studies. Palazzo Pianetti

Phase 7. Inside the Application



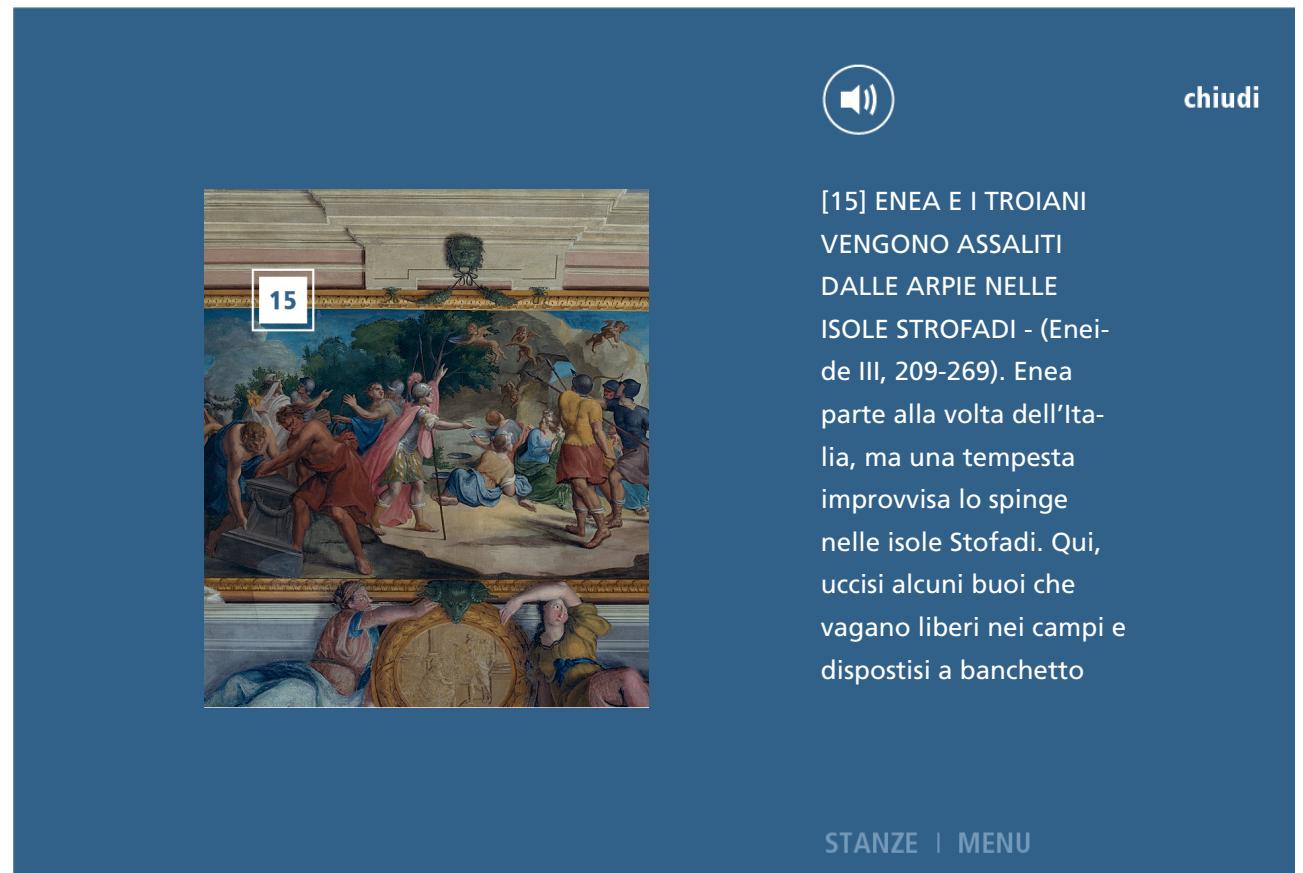
Main Menu - down right

Extra - Possibility to enjoy narration of the
myth related to the room (Voice 1)

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Phase 7. Inside the Application



[15] ENEA E I TROIANI
VENGONO ASSALITI
DALLE ARPIE NELLE
ISOLE STROFADI - (Enei-
de III, 209-269). Enea
parte alla volta dell'Ita-
lia, ma una tempesta
improvvisa lo spinge
nelle isole Stofadi. Qui,
uccisi alcuni buoi che
vagano liberi nei campi e
disposti a banchetto

STANZE | MENU

Scroll of the text

Zoom and pinch of the picture

Possibility to enjoy narration of the myth
related to the detail (Voice 2)

Research

Case Studies. Palazzo Pianetti

Phase 8. App's Test

APP "LE STANZE DI ENEA" / Questionario di valutazione dell'applicazione

1

1. Navigazione

- > Intuitiva Poco Molto
- 0 1 2 3 4 5 6 7 8 9 10
- > Menù principale Poco comprensibile Molto comprensibile
- 0 1 2 3 4 5 6 7 8 9 10
- > Navigazione tra le varie sezioni Poco comprensibile Molto comprensibile
- 0 1 2 3 4 5 6 7 8 9 10
- > Visita le stanze: lo scroll orizzontale è funzionale? Poco Molto
- 0 1 2 3 4 5 6 7 8 9 10
- > Nella stanza, i bottoni della navigazione di approfondimento dei particolari sono adatti? Poco Molto
- 0 1 2 3 4 5 6 7 8 9 10
- > La veste grafica ti sembra adeguata? Poco Molto
- 0 1 2 3 4 5 6 7 8 9 10
- > In linea generale, come ti sembra la qualità della navigazione? Pessima Ottima
- 0 1 2 3 4 5 6 7 8 9 10

2. Contenuti

- > I bottoni sono facilmente riconoscibili? Poco Molto
- 0 1 2 3 4 5 6 7 8 9 10
- > I contenuti audio sono funzionali? Poco Molto
- 0 1 2 3 4 5 6 7 8 9 10
- > Hai usufruito dell'audio? SI NO NON SEMPRE
- > Il carattere del testo è leggibile? Poco Molto
- 0 1 2 3 4 5 6 7 8 9 10
- > Lo scroll verticale del testo per la lettura è adatto alle tue esigenze? Poco Molto
- 0 1 2 3 4 5 6 7 8 9 10
- > Come valuti la voce femminile? Poco gradevole Molto gradevole
- 0 1 2 3 4 5 6 7 8 9 10
- > Come valuti la voce maschile? Poco gradevole Molto gradevole
- 0 1 2 3 4 5 6 7 8 9 10
- > Trovi utile la lettura audio delle didascalie? Poco Molto
- 0 1 2 3 4 5 6 7 8 9 10
- > Avresti preferito un testo "fisso" non dinamico? SI NO NON SAPREI
- > Come valuti il sottofondo musicale? Poco gradevole Molto gradevole
- 0 1 2 3 4 5 6 7 8 9 10

dedicated questionnaire based on
differential semantic

Research

Case Studies. Palazzo Pianetti

Phase 9. Data Collections
(here focus on UX)

visiting experience 100%

navigation system 82%

quality of narration 100%

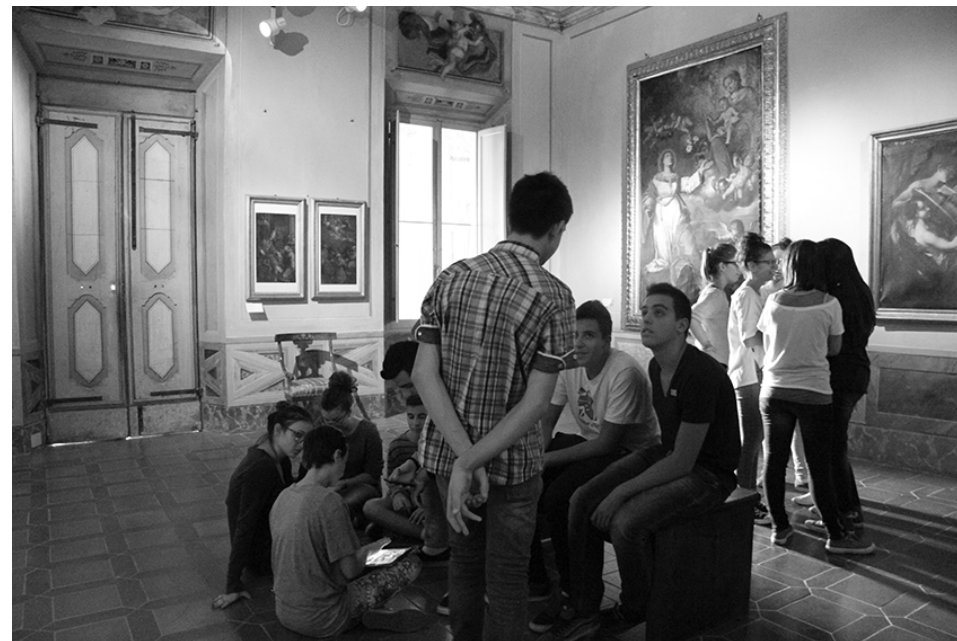
engagement 96%

quality of contents 98%

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Phase 7. Further Observations



Research

Case Studies. Palazzo Pianetti

Conclusions

- Cultural Communication experience based on well UX Design can offer something new;
- UX Design can improve museum's education;
- UX Design intercepts people's need;
- Technology and UX Design enable people with disabilities to have experience of the museum (even by distance);
- Dialogue with urban space in terms of "open space", "identity", "citizenship" and belonging to the city and its community;
- the use of this kind of hypermedia texts seems to encourage not only the interaction among peers but also between students and professors during the visit;
- Technology and UX Design improve notion of "democratic culture".

Biobibliography

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