ABSTRACT
The paper describes an ongoing doctoral research that aims at understanding how mobile technology and locative media can modify the relation between visitors and cultural heritage, fostering new models of interaction. The issue is dealt from a design perspective and the major aim is the development of a framework and a process to exploit locative mobile technology in cultural heritage field, defining design mechanics to facilitate social engagement and learning. The definition of the design mechanics to connect people at different levels of social engagement is the crucial point of the process, in which aesthetics plays an important task. Design assumes a leading role in devising and applying new models of interactions that could affect the way people relate to each other and with objects while visiting museums and cities.

Categories and Subject Descriptors
J.5: ART AND HUMANITIES
K.3.1: Collaborative learning

General Terms
Performance, Design.

Keywords
Mobile Technology, Locative Media, Cultural Heritage, Learning, Social engagement.

1. RESEARCH QUESTIONS AND FIRST RESULTS
The paper describes an ongoing doctoral research that aims at understanding how mobile technology and locative media can impact on the relation between people and cultural heritage, fostering new models of interaction.

The research aims at answering four main questions: how mobile technology and locative media can affect museum and cultural heritage visit? What kind of relations these technologies allow and what are the benefits in terms of learning and social engagement? What are the design mechanics that promote sociality and how they can be applied in different contexts? What could be the framework and the process to take advantage of these technologies in cultural heritage field?

Mobile technologies and locative media add new items to curators’ and designers’ toolkit, introducing new ways to interact with cultural heritage that affect mainly the quality of the relation between visitors and objects/places and among visitors themselves.

Looking at these changes from a learning perspective the research has identified three main models of relation: personalization, immersion and collaboration. While the first two have been widely dealt, the collaborative model still offers great space to innovation in the next future, taking advantage of the broad diffusion of mobile devices.

Smart-phones are today widely widespread worldwide with a medium penetration of 30% in USA and Europe in the third quarter of 2010 [9] allowing access to the web from everywhere and real-time location to a large part of population.

Ubiquitous access to internet together with location awareness are often exploited to customize learning experiences during museum and urban visits - situated and mobile learning - [2, 7, 4, 10] providing contextual information and potentially endless insights to visitors.

Other researchers are focusing on the role of locative media in fostering a different approach to learning: exploiting mobile gaming as a means to engage young people in immersive cultural learning activities [5, 1].

Social engagement is instead the aim of other mobile applications which exploit location awareness and connectivity to create links among people: mobile social networking systems [6], such as the earlier Dodgeball [3] now Foursquare, facilitate social connection and coordination among friends. Although these experiences are not directly related to museum visit, they highlight new models of interaction among people that can be easily translated into cultural heritage field.
The need of social engagement, aroused by social networks and web 2.0, is increasingly affecting museums and cultural institutions that are today facing with new requirements asked by visitors that desire to “create, share and connect with each other around contents” [8].

In this direction moves the research that has led to the outlining of a framework and a process to take advantage of mobile technology in cultural heritage field and that is now entering the testing phase.

A mobile application, “Looking for Castiglioni”, has been designed by the author together with Studio Museo Achille Castiglioni to test the first results of the research. LfAC is a mobile location-based tour, which drives visitors to discover Castiglioni’s projects hidden in the downtown of Milan, delivering contextual information - audio and video - in the right mobile location-based tour, which drives visitors to discover Castiglioni to test the first results of the research. LfAC is a mobile application, “Looking for Castiglioni”, has been designed by the author together with Studio Museo Achille Castiglioni to test the first results of the research. LfAC is a mobile location-based tour, which drives visitors to discover Castiglioni’s projects hidden in the downtown of Milan, delivering contextual information - audio and video - in the right location. The aim of this first pilot project is to test the public’s response to a mobile application and to evaluate the effectiveness of a situated learning approach: next pilot projects will analyze the response to a mobile application and to evaluate the effectiveness of a situated learning approach: next pilot projects will analyze the efficacy of mobile technology as catalyst of sociality.

Moreover aesthetic defines the tasks/actions visitors are asked to accomplish, like shooting a photo to the best view of a building, stimulating users’ critical reflection on architecture, art and beauty.

Future project could also ask visitors for gesture-based interaction (e.g. Nintendo Wii, Microsoft Kinect) pushing the role of aesthetics in the domain of gestures, transforming ipso facto the users into performers.

The research is not yet completed: the process and the design mechanics as well need to be tested in order to understand if they really facilitate social engagement and what are the induced behaviors and the benefits in terms of learning. The testing phase is also intended as starting point for following adjustments of the process and of design mechanics.

2. REFERENCES


