Digital Visualization Workshop 2013 – The Ghetto of Venice

Overview:
Digital Visualization Workshop 2013: The Ghetto of Venice
Venice International University - June 4-14, 2013
Faculty: Donatella Calabi, Università Iuav di Venezia, Mark Olson and Victoria Szabo, Duke University

The aim of the workshop, jointly promoted by Duke University, Iuav University of Venice and Venice International University is to provide a thorough introduction to a series of digital tools for the analysis, interpretation and visualization of data related to the shaping of man-made space.

Using Venice as a "laboratory", D modeling, visualization, and mapping technologies will enable the students to engage with questions of change over time and dynamic process in urban and rural environments, showing how man-made spaces respond to social and economic process and transformation.

The theme of this year's workshop is **The Venetian Ghetto: Change Over Time in the Life of the City**. Students will learn historical visualization and representation techniques through collaborative authorship of final multimedia projects completed over the course of the 10-day workshop session. These will be undertaken in close consultation with subject-area experts, and will include:

- Description of the institution of the Ghetto of Venice and densification in theXVI century.
- Description of the process of the physical and functional transformation of the Urban space.
- Description of the Urban relationships between the Ghetto and the rest of the city.
- Description of the 'opening' of the gates: the transformation within the Ghetto; transformations outsider the Ghetto.

The workshop is addressed to Master's- or Ph.D- level students in Interpretive Humanities (including Cultural Patrimony, History of Art, Architecture and Urbanism, History, Geography, Architecture, Archaeology, and other relevant disciplines).

Visualization Techniques:
3D Modeling
PhotogrammetryyMapping
Interactive Video
Data Visualization
Web Presentation Strategies
Immersive Virtual Worlds

Software Tools:
Trimble Sketchup
Adobe Photoshop

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1Autodesk 23- Catch
Meshlab
Google Earth
QqIS
PopcornMaker
OpenSim
iMovie

DRAFT COURSE OUTLINE:

First week - everyone works on these models for the collective (Saturday on-site data collection)
Second week - project teams develop in-depth materials on their subjects

Week 1:

MONDAY - arrivals on your own

TUESDAY - Workshop Begins
AM:
Overview and Welcome
   ● Introductions and demonstration of last year's final projects
   ● Agar Brugiavini, *Short presentation of the workshop within the VIU activities*;
   ● Riccardo Calimani, *Greetings by the President of the Jewish Community*;
   ● Donatella Calabi, *Main questions about the Urban history of the Ghetto of Venice.*

PM:
   ● Isabella Di Lenardo, *guided visit of the Ghetto*.

WEDNESDAY: Introduction to 3D Modeling for Representing the Urban Fabric
AM:
Build Landscape Neighborhood Transformations:
   ● regional transformation in 3D - G
   ● schematic modeling from shapes
   ● Software Used: Google Sketchup

PM:
   ● Continued modeling from shapes
   ● Canal: excavation of the Canale degli Ebrei (to Lido)

THURSDAY:
AM:
Mapping and Annotating the Location of the Ghetto over Time (1516-1740):

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- a series of geolocated maps showing transformations of the boundaries of the Ghetto itself
- Georectification and overlay of old maps
- diffusion of services (shops, charity initiatives, synagogues) - points changing over time
- annotate maps for online sharing
- Software Used: Google Earth, QGIS, Excel; iMovie; Web dev tools

PM:
Focusing in on the Cemetery:
- Gelocation of specific points geolocating tombstones
- Preparing the database of cemetery information for map-based annotation

THURSDAY:
AM:
Cemetery continued:
- On-site visit to the Cemetery for photography and GPS confirmations

PM:
- Photogrammetry for modeling shapes using 123-D Catch
- Mapping the Tombstones
- Software Used: Google Earth and QGIS

FRIDAY:
AM:
Densification of Interior Spaces:
- increasing of the buildings in terms of number of floor and of density of the population; interior fragmentation of the flats -
- shows change over time in a movie, ex. Ludovica's Zanipolo movie
- Software used: Sketchup/AutoCAD; iMovie and PopCorn Maker

PM:
Interior Space Model:
- Interior space imagery superimposed on a detailed model w/ textures etc.- need example building (synagogue? palace?) to focus on here
- Software used: Sketchup, Photoshop, OpenSim

SATURDAY:
- on-site capture of textures, images for photogrammetry on your own....

MONDAY:
AM:
Abstract Mapping and Visualization of Change Over Time:
- polygon tracing of GIS maps generated in built-landscape transformations

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- pull sq meter data from maps to show changing footprint of the Ghetto Spaces and their occupants
- Acquisition of palaces, investments, decoration, collections; industries in the Giudecca island
- Software Used; QGIS, Excel, Visualization javascript libraries, Web development tools

PM:
- Review and Project topic overviews

TUESDAY - THURSDAY: Project Work
Final Projects Topics:

1) the growing of the jewish residential district on itself between 1516 and 1740 (increasing of the buildings in terms of number of floor and of density of the population; interior fragmentation of the flats);

2) diffusion of services (shops, charity initiatives, synagogues);

3) location of the cemetery: funeral rites, excavation of the Canale degli Ebrei;

4) the end of the enclosure: inside the Ghetto: the "assimilation" of the district to the other venetian boundaries (conservation, new bridges, wells, measures taken to consolidate, foundations);

5) the end of the enclosure: outside the Ghetto: the acquiring by some jewish families of great palaces, investments, decoration, collections; industries in the Giudecca island.

- Software Used: Database-driven Exhibits: Omeka and Neatline; Video Narratives and Annotation (Popcorn.js); Web and mobile delivery mechanisms

FRIDAY:
AM:
- Online Exhibit techniques

PM:
- Presentations

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