

Ancient Presence, Modern Projection: Torcello - Venice, Italy¹

2014 VENICE BIENNALE – EXHIBITIONS STATEMENT

by **Deborah A Garwood**

Milestone Architecture's exhibition for the 2014 Venice Architecture Biennale, "*Ancient Presence, Modern Projection: Torcello - Venice, Italy*" immerses the visitor in a contemporary experience of Venetian–Byzantine structures located on the island of Torcello. Conceived as a participatory exhibition, live feeds connect Torcello with installations in New York and Venice. The ancient structures' fundamental relationship to architecture is interpreted through the installations, where physical objects, light projections, and interactive software engage the viewer. Creative deployment of digital media – as a transparent construction material and live–streaming medium – invokes themes of modernist architecture while facilitating a contemporary experience of Torcello, across time and space. Notably, the exhibition and its website adapt cutting–edge techniques of Human–Centered Design to the project. Tools of visual, haptic and aural presentation permit points of entry for persons with differing abilities, so that any

visitor may gain access to the Basilica and partake in its spirit through a prism of modalities.

Torcello's antiquity is a complex phenomenon in the present day. *"Ancient Presence: Modern Projection"* interprets the Byzantine-era origins of Torcello's structures as ideological forms that have transmuted into its existing architectural forms. The Basilica of Santa Maria Assunta was first constructed from Roman bricks in 639 CE. In the Middle Ages, a monumental renovation during the 12th and 13th centuries manifested as elaborate interior mosaics with many-layered meanings, prompted by evolving spiritual beliefs. Subsequent changes to Torcello's architectural legacy occurred throughout the 19th century. Their documentation accounts for exterior and interior alterations, including the removal of sacred imagery and physical repairs of varying magnitudes. In a 20th-century restoration that took place during the 1930s, the Italian engineer and architect Ferdinando Forlati introduced new materials such as cement and reinforcement bars into supporting exterior columns. Far from erasing the basilica's architectural integrity, Forlati's modernist intervention was absorbed into its palimpsest.

Important source material for the exhibition's development was based on the data set from Milestone's laser scanning survey of Torcello's religious structures and surrounding landscape, in 2013, including digital photographs taken at the same time. Thanks to this cutting-edge technology, the team has used point-cloud data to produce extremely accurate and visually arresting virtual

images for exhibition installations that dematerialize and reconstruct this place of contemplation.

The Biennale's theme in 2014 emphasizes fundamental architectural elements as a creative resource that underlies modernist developments. In keeping with this theme, key motifs in Milestone's exhibition design focus on the door, the wall, the floor, and the surrounding environment as starting points. The iconostasis – a sacred, colonnaded partition within the Basilica – draws on the door and wall motifs. In its native context, the iconostasis serves as a permeable boundary between the universe and humanity, a liminal space traversed by spiritual means. Within the installation, the image of the iconostasis is projected onto a transparent wall that casts its shadow on the floor. The colonnade's arched openings house projected live–feeds from Torcello itself, like door motifs that present virtual portals to visitors in Venice, Torcello, and New York.

Visitors also encounter the wall motif via a live feed projection from within the basilica, that presents a series of renowned mosaics based on the spiritual theme, "The Last Judgment." The mosaics' theological intent was to mediate consciousness and the spiritual realm – a meditative act that metaphorically dematerializes the wall. Live–feed projection echoes this dematerialization, and transports its potential effect to viewer–participants of the installation. These "Last Judgment" mosaics are also accessible within the gallery interactively. Like

a technological illuminated manuscript, the screen device itself (or downloads to mobile devices) facilitates greater intimacy with the wall's mosaic imagery, allowing people to view pages and zoom in on high-resolution details, or zoom out for a comprehensive view.

The floor motif in the exhibition also appears as a projection of a floor mosaic found on the approach to the Basilica's altar, where colorful stone mosaics, imported from India, were arranged in a sunburst pattern derived from ancient cosmology. The beauty of this floor mosaic lies as much in its color and pattern as in contemplation of artisanal skill underlying its execution in Byzantine times. The mining and selection of these stones from their source, followed by transport to their destination – a Basilica on the island of Torcello – suggests an act of spiritual connection of one place on Earth to another. The installations' projection of this floor mosaic echoes a sense of the transporting intention underlying this ground-plane motif from ancient times.

Environment, as another essential component of architecture, correlates in the exhibition to projections of landscape imagery. Derived from photographs and videos of Milestone's survey data, this imagery flanks the iconostasis to evoke an atmospheric representation of the island's abandoned agricultural fields as they exist at present. The inclusion of landscape imagery in the exhibition alludes to complexities of the island's long-term social expansions and contractions, the better to help envision

new possibilities for sustainable economic and environmental initiatives in the 21st century.

The collective spirit of preservation that pervades Torcello's legacy now stretches into the 21st century: Milestone is engaged in an international restoration initiative at Torcello.

Priorities reflect broad trends in the field of architectural restoration, such as balancing function and aesthetics while applying scientific innovation and new material technologies toward low-impact, minimal interventions at world legacy sites such as Torcello. Milestone's initiative strives for a holistic perspective on the island's present realities, drawing attention to the special marine environment of the Venetian lagoon, which has played a critical role in phases of island population and depopulation while also impacting its sacred structures. This pastoral island, once densely populated, is now a UNESCO site, home to only a small population of native Torcellani; yet each year it hosts thousands of tourists drawn to its precious architectural legacy. "Ancient Presence, Modern Projection: Torcello – Venice, Italy" envisions 21st-century technology as a global bridge to the Torcello site. Significantly, the methods chosen provide access to Torcello without taxing the integrity of its physical structures.

In order to make this exhibit accessible to the widest range of visitors possible, we have had to consider the kind of information that may be necessary for visitors before, during, and after their physical visits. To this end, we have created

VRML (Virtual Reality Modeling Language) models that may be accessed online, through the exhibition's website, in order to be viewed by those who can't physically visit the galleries or the site of Torcello. These models will also be useful as preemptive information regarding potential architectural barriers for those who would like to prepare for their visit, or as an educational tool for teachers or tour guides. In addition, these models may be downloaded in the format necessary for 3D printing, so that anybody with access to rapid prototyping facilities can use them as an educational tool before, during, or after the visit. The exhibit will feature 3D physical models of the religious structures of Torcello; fixed tactile maps of the Site of Torcello; visual-tactile portable maps of the galleries, of the buildings and of the island itself; and textural reproductions of the key mosaics from Santa Maria Assunta, which are normally not accessible by touch. The exhibition website and catalog are designed to be easily legible, and to provide multiple formats of information addressing a wide range of physical and cognitive abilities, which will be accessible at any time, from any place.

As a UNESCO World Heritage Site, it is necessary for Torcello to be accessible to everybody. The 3D models, 2.5D models, photographs, videos, and any accompanying information (including audio files and accessible files of written texts) will all be available to be seen or downloaded from the website, giving everyone the ability to visit the Isle of Torcello, physically or virtually.

Visitors to the installations in Venice and New York can be virtual tourists, breathing in the spirit of the place without risking damage to its body. Inspired by innovative, interdisciplinary tendencies of 21st century architecture – inclusive of technologically informed preservation efforts and archeological studies – the exhibition ultimately advocates an integration of these fields, and their impact on the fruitful continuation of Earth itself.

1 The project has been taken as one of the case studies in the experimentation of the development of the international and multidisciplinary research of **Paola Barcarolo**, XXVIII° cycle of Doctorate of Research in Civil and Environmental Engineering, Architecture, University of Udine, Italy, entitled: "***DfA Communications for the Strategic and Sustainable Enrichment of Cultural and Natural Heritage: Definition and Validation of Perceptual - Synaesthetic and Emotive Operational Principles for the Usage of Touristic UNESCO Sites.***"