Chapter 73

Accessibility Improvement Interventions at Byzantine Monuments:

Use of Technology for Facilitating Accessibility of Visitors With Sensory Disabilities

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ABSTRACT

The accessibility of monuments and archaeological sites by disabled persons and persons with restricted mobility in general, constitutes a social, financial and political demand. The project "PROSPELASIS" attempted to counter this problem by focusing on creating a methodology for facing monuments' accessibility and perceptibility problems for people with disabilities and testing its application at Byzantine monuments of Thessaloniki. In six major monuments included in UNESCO's World Heritage List, significant accessibility improvements were realized. A Wi-Fi information system was installed in all of them via which an audio and visual information system was created with audio information in three languages, description of visual information, text information, information in Greek and International Sign Language. Additionally, in Rotunda and Heptapyrgion monuments three dimensional models were developed. The successful validation of the proposed methodology constitute the results of this project not only pertinent to Thessaloniki or Greece, but worthy of a wider application.

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INTRODUCTION

A visit to an archaeological site or monument is a unique experience that also constitutes a main tourist attraction. A visit to a monument allows the composition of all stimuli into a unique experience, consisting of the following:

- Visual Stimuli: Shapes, colours, textures, images, sense of the real scale of the site.
- **Tactile Stimuli:** The floor's texture and the way in which it is perceived (e.g. gravel or stone) or the texture of the seats (e.g. wood, marble, metal).
- Auditory Stimuli: The soundscape of the surrounding area, either natural or artificial, the sound
 of interaction between man and the environment, walking, the swish of plants when walking
 through them.
- Olfactory Stimuli: Natural scents (depending on the season, time, weather) and artificial scents (e.g. scents of diverse materials or deliberately diffused scents and incenses).
- **Gustatory Stimuli:** Tastes referring to the site and underlining its uniqueness, such as fruits from the trees of a garden, the water of a fountain, the treat in a monastery.

In Thessaloniki, a city with rich heritage, monuments constitute isolated "islets", with the modern cityscape "drowning" them, allowing no visual connection between them, making their identification, their understanding, and physical access to them difficult for visitors in general and persons with restricted mobility in particular. This problem is exacerbated by the fact that the current city's ground level is often four to five meters above the level, where the entrance to the monuments is. Thus, any attempt to "socialize" the cultural heritage of the city has to pursue the following two objectives: a) to provide easy access to monuments for all visitors, including persons with disability and restricted mobility, and b) to help visitors through the provision of adequate information and the indication of ways of moving from one monument to another, connecting the" pieces of the puzzle" (Naniopoulos et al., 2011b.).

The present chapter describes the process of improvement of accessibility in selected Byzantine monuments of Thessaloniki using a methodology created in the frame of the "PROSPELASIS" project, financed by a grant from Iceland, Liechtenstein and Norway through the EEA Financial Mechanism 2004 – 2009 (50%) and from the public investments programme of the Hellenic Republic (50%). The project was realized by the cooperation of the Aristotle University of Thessaloniki (project leader) and the 9th Ephorate of Byzantine Antiquities. The chapter describes the background and the needs that lead to the development of the methodology, the methodology itself, its implementation and the accessibility improvement interventions carried out at selected Byzantine monuments of Thessaloniki. The authors aspire that the adoption of the proposed methodology can lead to further actions that will improve monuments' and archaeological sites' accessibility at national and international level.

BACKGROUND

Addressing, at an international level, the problems of protection, conservation, restoration and management of historical centres, archaeological sites, architectural aggregations, monuments and works of art, has been a major issue. Nowadays, we are not only interested in the monuments' past; we are also interested in their preservation, restoration and role in direct relation to their present and future environ-

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