ENGLISH ABSTRACTS

MAIA PARK STATION AND URBAN INSERTION

João Alvaro Rocha

The Maia Park station provides a certain urbanity to the chaotic surroundings where it is placed and connects it to the rural environment. The result is, essentially, a structural bridge-station, where all its building elements are clearly expressed, providing a greater significance as infrastructure than as a building.

INTERVENTIONS IN THE URBAN SPACE

José Gigante

The Metro Channel, set along the old train tracks, has two very different trace layouts at the Vila do Conde and Póvoa de Varzim councils. To the south of the Ave River it crosses a distinct rural landscape, with scarce stations unrelated to each other, commanding to propose projects within an essentially local framework. Towards the north of the river and up until the current Póvoa de Varzim station, the trace develops within an urban context, along almost 5 kilometers. Thus opening a new cityscape that does not exclude the creation of a global project comprehending the whole extension of the Channel, and all the articulations and extensions inherent to the emerging new urban tissue.

108 DWELLINGS AT ARDOI

Alfonso Alzugaray, Jesús Ramírez, Carlos Urzainqui

The architects propose blocks with a very flexible housing scheme with a high concern for low energy consumption. The stretched aluminum trays, whether as facade cladding or as solar protection shutters provide an abstract appearance to an initially extremely defined urban planning scheme.

PEDESTRIAN FOOTBRIDGE AND URBANISATION OF THE SURROUNDINGS OF THE BALUARTE DE LABRIT, PAMPLONA

Óscar Pérez Silanes, Carlos Peredalglesias, Ignacio Olite Lumbreras

The construction of the pedestrian footbridge between the Baluarte de Labrit and the Fuerte de San Bartolomé satisfies the traditional aspiration of Pamplona's urban planners of creating a continuity to the ring boulevard traversing the walled enclosure beyond the limits of the old Burgos. The project locates itself in the limit between Pamplona's historic city, a space with a strong topography, the limit between the city walls, distinguished by the formal prevalence of the different elements conforming its history.

DECREASING THE CLOGGING PROBABILITY DUE TO OBSTACLES AT THE EXIT

Celia Lozano, Álvaro Janda, Diego Maza, Ángel Garcimartín, Iker Zuriguel

The granular media –inert matter composed of divided solids– can clog when pushed through an opening slightly bigger than the size of the particles. How to diminish this probability by placing an obstacle before the opening has been studied. The results obtained demonstrate how the probability of clogging diminishes depending on where the obstacle is placed, being the optimum position where the distance between the obstacle and the exit is similar to the size of the opening. This results might be interesting for the optimal design of an emergency exit.

ACTIVITY BASED & BEHAVIOURAL OCCUPANCY MODELLING FOR EE BUILDING DESIGN

Christos Malavazos, Dimitrios Tzovaras, Dimosthenis Ioannidis

Analysis of building energy efficiency at the early stages of the design process has been viewed in the past few years with increasing interest by key stakeholders such as architects, designers and mechanical engineers as well as by the research community. Early design products comprise features that determine to a large extend energy performance and thus can provide critical evidence to simulation and analysis tools for thorough evaluation of design alternatives. Capitalizing on the actual effect of building occupancy (human presence and movement) in the overall energy consumption during the early design phases of a building, this paper addresses the need for a common set of reference models definition for correlating the two disjoint worlds in the building domain, the building information models and the business processes models of an organization that will be housed in the building. The paper introduces a set of domain semantically enriched models that can express occupancy using spatio-temporal information and incorporate space utilization definitions taking into account

enterprise-related information at various levels. To cope with interoperability with existing simulation tools, a provisional extension to the green building schema (gbXML) is examined towards incorporating the necessary information needed for realistic and accurate evaluation and optimization of alternative energy efficient building designs.

¿WHAT ARE TECHNICAL REGULATIONS WORTH FOR? (THE ROLE OF BUILDING TECHNICAL REGULATIONS)

Domingo Pellicer Daviña

Something is not totally right in a society that requires too many laws for its functioning, specially if they are heavily coercive. ¿Is it perhaps a society that mistrusts its members?

EUROPEAN REFURBISHING PANORAMA.
REGULATIONS AND INCENTIVES IN 4 COUNTRIES OF THE UE: ENGLAND, GERMANY, FRANCE AND SPAIN

Jon Terés Zubiaga, Lorea Arrien Elgezabal, José Mª Sala Lizarraga

Energetic rehabilitation has become in the last years a priority strategy for the reduction of the energy consumption for great amount of the countries in the European Union. The approval of the EPBD directive in 2002 was a key factor in the strategy that would transpose the different national regulations on the following years. However, its implementation and the parallel strategies developed to encourage rehabilitation have been very different in every country. In the following paper we examine and compare the situation of rehabilitation in France, Germany, United Kingdom, and Spain.

DOCUMENTARY ARCHIVE OF PRESERVATION WORKS AND PROJECTS (DOCURECOPARESPA)

Rosa Bustamante, María Soledad Camino, Juan Monjo, César Díaz, Virtudes Azorín

The documents of preservation works and projects is currently disperse, which makes hard to know what interventions have been made on personal or real estate property, as well as the results of the different techniques that have been used along recent years. Regarding this matter, the Spanish association of historical heritage restoration companies (ARESPA) have created an extensive documentation archive. The research project DocuReCoPaRESPA lies in the inventory and analysis of two statistic samplings of these documents, encompassing 1513 files, between 1984 and 2012. This information will be available in the near future at the web site specifically developed for this matter: http://docurecoparespa.aq.upm.es/

In order to achieve this goal the information first has been catalogued regarding the property type: personal or real estate; the sort of intervention: restoration, rehabilitation, repair or consolidation; the construction systems affected by the intervention: foundations, structures, roof, facades, or finishing; the employed intervention techniques and their cost, as well as the information regarding the developers. The archive is composed of written documents as well as project memoirs, archeological reports, technical prescriptions, budgets and material quantities, plans, and photographs portraying the goods before, during, and after the process.