INDEX

CITIES AND TERRITORIES TO LIVE
ELISA PALAZZO, BRUNO PELUCCA

URBAN REGENERATION FEASIBILITY USING AHP TECHNIQUE,
CASE STUDY OF RECREATING THE LANDS AROUND THE TOMB OF HAFEZ IN SHIRAZ
Hassanali Laghai, Faranak Jamshidi

WATER AND EARTH. THE BASIN SAHRIJ LABGAR IN MARRAKECH
Federica Visconti, Renato Capozzi

THE ARCHITECTURE OF REASON: TRADITION, HISTORY AND CITY
FEDERICA VISCONTI, RENATO CAPOZZI

ARCHITECTURE AND CITY. A BUILDING BY FERDINANDO CHIAROMONTE IN NAPLES:
A REFLECTION ON ITS STRUCTURE OF THE URBAN AND ARCHITECTURAL COMPOSITION
Guido Corsaro

TOWARD A SEISMIC ARCHITECTURE
ALBERTO PARDUCCI

ASSESSMENT AND SEISMIC IMPROVEMENT WITH TRADITIONAL AND INNOVATIVE
TECHNOLOGIES IN THE REUSE DESIGN OF SAN BENEDETTO NOVELLO IN PERUGIA
Fabrizio Comodini, Marco Mezzi, Olimpia Niglio

CRITICAL FUNDAMENTALS OF ARCHITECTURAL RESTORATION
OLIMPIA NIGLIO

THE OIL INDUSTRIAL HERITAGE IN VENEZUELA. A HERITAGE IN ACTIVITY
Lucía Sánchez Figueroa

PISTA BETWEEN RECONSTRUCTION, PRESERVATION AND TRANSFORMATION
Fabiana Susini

MATERIALS, TECHNOLOGY, INNOVATION AND ENVIRONMENT
GIUSEPPE DI GIOVANNI

INNOVATION PROCESSES IN BUILDING RETROFITTING
Sergio Russo Ermolli

URBAN REGENERATION IN SAN FRANCISCO (CA, USA).
ENVIRONMENTAL DESIGN FOR PUBLIC REALM
Renata Valente

ESEMPI DI ARCHITETTURA, 2014, VOL. 1, N. 1
URBAN REGENERATION FEASIBILITY USING AHP TECHNIQUE. CASE STUDY OF RECREATING THE LANDS AROUND THE TOMB OF HAFEZ IN SHIRAZ

HASSANALI LAGHAI 1
FARANAK JAMSHIDI 2

1 Faculty of Urban Planning, College of Fine Arts, University of Tehran, Tehran, Iran
2 Department of Urban Planning and Design, Kish International Campus, University of Tehran, Iran

Accepted April 22th, 2014

ABSTRACT
The aim of urban regeneration is to revitalize the city in all aspects, so urban regeneration includes social, economic and ecological aspects in municipal, regional and national scales. Given the importance of urban regeneration, the purpose of this study is to explore the variables and the main factors affecting urban regeneration. In this paper, the concept of urban regeneration and its main factors were analyzed using descriptive - analytic study based on the library data. The concept of AHP technique was also presented and its application in urban issues was introduced. According to the case study these factors were analyzed and weighted using AHP technique. Finally this technique was proposed as a way to recreate the urban sites due to the fact that we are facing different criteria in the decision-making process and AHP technique is a decision-making model according to the multitude of criteria.

Keywords: AHP, Hafeziyeh, Shiraz City, Urban Regeneration

INTRODUCTION
Urban regeneration has appeared in the literature of urban planning as a new phenomenon, but its different forms have been taken into consideration in different parts of the world. Most cities are familiar with the contemporary designs and there has been no predetermined scenarios based on the idea of "recreating the city" in many of these measures. Urban regeneration explores the function and interactions of many resources and stimuli to cause changes in the city and is an answer to the opportunities and challenges that degenerate into a place at a specified time. In fact, urban spaces are complex and dynamic systems. Physical, social and economic developments are changes that are entered on the system. No city is safe against the external forces that dictate change upon it and domestic pressures which accelerate the rate of growth or decline in the city. Therefore urban regeneration is applied as a response to these changes (Roberts and Sykes, 1999).

Regeneration comes through the improvement of environmental, social and economic life and describes the range of activities that will give new life to worn areas. And thus it leads to the resurgence of buildings, infrastructures, urban utilities and built environment and also leads to the redevelopment of structures that is their end of useful life (Galdini, 2005). Therefore, in regeneration we are faced with a variety of different standards and achieving an integrated decision needs to evaluate all these measures. In the evaluation of every subject we need a measure index, selecting an appropriate indicator allows us to make an appropriate comparison between alternatives. But when a few or several indicators are considered for evaluation, assessment will be complex and it will become more complex when there are multiple criteria are together in space. A powerful tool for functional analysis will be required. One of the powerful tools for such situations is (AHP) (Yu and Kwon, 2011). This method is used for the classification and grading and may also be used occasionally for social and economic analyses. In this way, the data of every place must be standardized. AHP model begins by identifying elements and decision-making process and prioritizing them, these elements include various ways of doing things and prioritizing measures or features. In this context, the present paper with the analytical – descriptive method based on library data provides some criteria for urban regeneration. And then using the AHP technique, based on questionnaires that were collected from the experts these criteria in the case study were tested (lands around the tomb of Hafez in Shiraz) and weighting of these criteria was presented. The conclusion mentioned that using AHP technique can be a good way for urban regeneration.
The project for the Sahrij Labgar basin in Marrakech is a continuation of the studies carried out during the ArcheoURB international research programme. The programme was financed by FAS funds allocated by the Italian Ministry of Economic Development to the Ministry of Foreign Affairs and used by the latter to stimulate co-operation between the Italian regions, as well as those of the Mediterranean area, increasing and improving regional skills in order to be prepared to face the challenges of the European programmes. In this framework, the International Foundation for Advanced Studies in Architecture - the project’s scientific coordinator for the Campania Region - the University Cadi Ayyad of Marrakech and the University of Cairo, worked together in order to propose pilot-projects: among these the Sahrij Labgar basin area in Marrakech. The Sahrij Labgar basin was formerly part of the wider water system supply of Marrakech. The aim of the project is the recovery of the basin’s original function and the creation of a garden connected to the already existing gardens in order to slow down the rapid urbanization of recent years. A new building is also included in the garden system: a museum of “water resource”. This building experiments with the idea of using either the stereotaxic and the tectonic construction not as alternative systems of architectural expressiveness.

Keywords: Morocco, Marrakech, Sahrij Labgar, tâbiya, tawwâb.

The Sahrij Labgar Basin. Preliminary Surveys and Project Hypothesis

Marrakech is part of an arid climate area of Morocco, characterized by irregular rainfall, very high daily temperatures and dry air causing a rapid evaporation. In this harsh climate scenario, the inhabitants of Marrakech were able to adapt efficiently to their natural environment. The construction of the city and the creation of an urban life style were made possible thanks to the use of different techniques which guaranteed the water supply. The water supply issue has influenced the entire history of the city, being a constant and strategic concern which each dynasty has had to deal with over the centuries.

The history of the development of the urban water management system in Marrakech started with city’s founders. Before their arrival, this land was simply a deserted marshy plain, with scarce vegetation. In the 11th century, the Almoravids - a Berber dynasty from the Sahara - chose this “no-man’s land” to found a new city. They reigned from 1071 to 1147 drawing the main outlines of the urban fabric of Marrakech. Ali ibn Yusuf, from 1106 until his death in 1143, was an enlightened king and a master builder. He clearly understood that the main problem to be solved was the water supply to the villages thus, through an ingenious process, there began the search for water that “hides itself” in the inhospitable subsoil of this land. To achieve this goal, he involved Obeyd Allah ibn Younus “Al-Muhandis” - known as “the engineer” - who succeeded in finding enough water resources for the city. A 12th century document, written by the geographer Al-Idrisi offers us a description of the new technique used in Marrakech: «The water that inhabitants need in order to irrigate their gardens is supplied through a brilliant invention by Obeyd Allah Ibn Younus. When he came to Morocco (at the time of the city’s foundation), there was only one garden belonging to Abû Al-Fadî […] Obeyd Allah directed his research towards the upper part of the land near the garden, dug a large square well, from which he dug a tunnel directing it straight along the ground surface. He then continued his excavation down the slope so that once it arrived at the garden, the water poured onto a flat surface, thus spreading over the ground. This paragraph is about surveys and preliminary studies on the Sahrij Labgar basin and is a reworking of a chapter in Capozzi R., Picone A., Visconti F. (edited by) 2011, ArcheoURB. Archeologia e città, Naples: CLEAN.
ARCHITECTURE AND CITY
A BUILDING BY FERDINANDO CHIAROMONTE IN NAPLES:
A REFLECTION ON ITS STRUCTURE OF THE URBAN AND
ARCHITECTURAL COMPOSITION

GUIDO CORSARO
Scuola Superiore Europea di Architettura Urbana
Fondazione Internazionale per gli Studi Superiori di Architettura, Napoli, Italia
Accepted April 29th, 2014

ABSTRACT
The essay is about a building in Naples by Ferdinando Chiaromonte ‘narrated’ through the project and construction events but also, and above all, the analytical drawings aimed to underline and show the structure of the building composition in plan and elevation and in relationship with the urban context. The study of this building was an occasion to re-discover the figure of Ferdinando Chiaromonte, engineer and architect that, working in Naples for fifty years, contributed to the urban and architectural development of the city and also of the local faculty of architecture.

Through research in the archives of the Municipality of Naples, it was possible to find the original drawings of the building permit and its variants and, in this way, to re-construct the history of the building. Moreover the residential and office building in via Cesare Battisti was completely re-drawn (plans, facades, sections, details and analytic drawings) and this was used for the knowledge of its urban and architectural structure.

What is the lesson of this building? First of all, the building establishes a significant relationship with the urban context, dealing with the theme of the urban corner but also of the connection with an important building such as the seventeenth-century cloister of ‘Olivetani’. On an architectural scale, the building is a block-type and in this way the architect can realize the maximum exploitation of the soil. Despite this, the building plan shows its richness with an articulation in elementary parts that, clearly distinguishable, relate and contrast each other without a loss of general uniformity.

In the end, the architectural character the architect uses for this building is an application of rules and compared itself with the more famous and near Post Office building by Vaccaro and Franzi talking the same language of rational and intelligible architecture.

Keywords: Ferdinando Chiaromonte, rational architecture, building composition analysis

L’OPERA DI FERDINANDO CHIAROMONTE
Guidata da un’appassionata attività didattica e da una intensa attività professionale, la produzione di Ferdinando Chiaromonte, Napoli 1902-1985, si è concretizzata nella pubblicazione di due importanti manuali sulle tecniche e i materiali da costruzione, di riferimento per l’intera Scuola Napoletana, e nella costruzione di oltre cento opere tra Napoli, Roma, Milano e Taranto.

Ingegnere (1925), architetto (1926) e professore universitario presso la Reale Scuola di Architettura di Napoli, Chiaromonte, grazie ai suoi studi e ai tanti interessi in ambiti disciplinari eterogenei, incarna la “figura tecnica” per eccellenza che utilizzando il Progetto come elemento di confronto tra due “mondi divergenti” - quello dell’ingegneria e dell’architettura - riesce con la Costruzione a risanare quella frattura che agli inizi del XX secolo, attraverso il Manifesto dell’Architettura Futurista, vedeva Arte e Tecnica contendersi il primato di autorità nella realizzazione di un organismo edilizio e che ebbe come diretta conseguenza la formazione di due antitetiche figure professionali: quella dell’ingegnere e quella dell’architetto. Allo stesso tempo il nostro si pone come “interlocutore” a tutti quei problemi che investono il vivere comune e i rapporti tra l’uomo, il costruito e l’ambiente. La passione e la cura con cui segue l’iter progettuale e quello realizzativo, confermano la inimitabile capacità tecnica di Chiaromonte nella definizione e nell’esecuzione del dettaglio dal punto di vista costruttivo.

1 Elementi di costruzione edilizia, Politecnica S. A., Napoli, 1942, e I materiali nella costruzione edilizia, s. e. dattil., Napoli, 1947.
TOWARD SEISMIC ARCHITECTURE

ASSESSMENT AND SEISMIC IMPROVEMENT WITH TRADITIONAL AND INNOVATIVE TECHNOLOGIES IN THE REUSE DESIGN OF SAN BENEDETTO NOVELLO IN PERUGIA

FABRIZIO COMODINI 1
MARCO MEZZI 2
OLIMPIA NIGLIO 3

1 University eCampus, Faculty of Engineering, Novedrate, Como, Italy
2 University of Perugia, Dept. of Civil and Environmental Engineering, Perugia, Italy
3 Graduate School of Human and Environmental Studies, Kyoto University, Japan

Accepted May 30th, 2014

ABSTRACT
The paper deals with the design procedures for the refurbishment, seismic improvement and reuse of a class of historical buildings defined ordinary since they have an intermediate relevance within the cultural heritage of a country. The procedures include the basic knowledge, the assessment methods, the design works aimed at defining appropriate cost-effective technologies and methods for the structural and seismic retrofitting. The research is carried out with reference to an emblematic study-case concerning the reuse of the complex of San Benedetto Novello in Perugia as a center for artistic and cultural activities. The complex includes architectural elements attributed to Gaelazzo Alessi and is nowadays partially occupied by offices. The study provides for the evaluation of the structure safety considering both the global and local level with reference to the performance levels expected at the different limit states. The works for seismic improvement have been designed respecting the peculiarities of the ecclesiastical complex and allowing the performances required by the new functions. Special focus is given to the use of innovative restoring and strengthening technologies allowing for works characterized by cost effectiveness and contained invasiveness.

Keywords: Seismic assessment, Seismic improvement, Seismic vulnerability, Conservation, Monumentality.

INTRODUCTION
The definition of historical construction refers a large amount of constructions even characterized by very different features. It includes constructions many centuries old and constructions having only few decades of life, constructions built with very different materials, archaeological constructions in ruined state and still operating buildings, constructions having a high architectural or artistic worth and other ones more simple. Many other subjects introducing an element of differentiation within the historical constructions can be found. It is evident that we can refer to historical constructions only in a general way, but if we have to examine special problems we have to focus our attention to a single class of these constructions, or even to a more restrict field. Countries like Italy own a large number of historical construction having a small or intermediate architectural and artistic value generally due to alterations and contaminations operated in their history and frequently in the most recent years or to the decay related to the neglect. Often these constructions risk to be left to their destiny if a motivation for their reuse and a cost effective solution for their safeguard are not found. Opportunities for an appropriate equilibrium among the cost, the effectiveness, the reduced invasiveness of the works allowing for a reuse of the retrofitted construction can be found in the application of the new restoring and strengthening techniques based on the use of innovative technologies. The study of the use of new techniques is particularly interesting for the mechanical performances of the retrofitted structures resulting in composite structural system made of old and new elements.

The present research deals with the design procedures for the refurbishment, seismic improvement and reuse of an historical building having a quite noble origin but a quite ordinary status at present. The procedures include the basic knowledge, the assessment methods, the works design aimed at defining practical and appropriate
THE OIL INDUSTRIAL HERITAGE IN VENEZUELA
A HERITAGE IN ACTIVITY

LUCIA SANCHEZ FIGUEROA
Université Paris 1 Panthéon Sorbonne / PDVSA

ABSTRACT
The First and Second World War propelled oil to the rank of an essential component of industrial and transportation of the twentieth century, after the Second World War this panorama was irreversibly. The degree of relationship is so great between the oil and the model of global economic output that without the first the second would decline. The use of the petroleum as the main energy from the 20th century, has established the conditions of life different from those who existed long before the age of the petroleum. After 120 years of petroleum exploitation in Venezuela, nowadays the country with the biggest oil reserves, our approach to this enormous wealth rests primarily on the economic viewpoint. The reflection that is presented below is part of bigger research about the history of technology and Venezuelan oil industrial heritage. It has been realized as the final project of the master TPTI (Techniques, Patrimoine, Territoires de l’ industrie) which is directed by the University of Paris 1 Pantheon-Sorbonne in conjunction with the University of Evora and the University of Padua. Assuming that the study of a developing story is always complex, we have established an analysis on the evolution of the oil industry in Venezuela and the potential of Venezuelan oil industrial heritage: the multinational companies in Venezuela, the settlement and development of company towns, the State enterprise, etc., ending with a consideration of the Venezuelan industrial heritage and its future.

Keywords: Oil industrial heritage, Venezuela, Oil, Industrial landscape.

INTRODUCCIÓN
La Primera y la Segunda Guerra Mundial proclamaron al petróleo como la componente esencial de la industria y el transporte del siglo XX. “El esfuerzo en el desarrollo científico-tecnológico para la exploración y cuantificación de las reservas de petróleo pero, sobre todo, para su extracción, transporte y procesamiento, procesos estos, de base fundamentalmente técnica, fueron claves para el control estratégico ejercido política y militarmente por Estados Unidos y Gran Bretaña”1.

En el caso de los países latinoamericanos con reservas significativas, entre ellos México y Venezuela, la irrupción del petróleo en la primera mitad del siglo XX, tendrá consecuencias evidentes, tanto en los procesos sociales (economía, política, cultura e ideología) como en la organización territorial de los espacios productivos y en la urbanización.

Desde el nacimiento de la República hasta finales del siglo XIX, el café representó para Venezuela el principal producto de exportación; durante dicho periodo la economía venezolana estaba sujeta a los cambios que experimentaba el precio de dicho rubro en los mercados internacionales, hasta 1914, un mes después de haberse iniciado la primera Guerra Mundial, cuando la Caribbean Petroleum Company (Shell) inició la explotación intensiva del petróleo. A partir de ese momento, Venezuela se convirtió en el foco de las inversiones internacionales tanto por sus considerables reservas de crudo como por la instrumentación de la llamada “política petrolera más liberal de toda América latina”2.

ABSTRACT
The urban structure of the city of Pisa at the beginning of the twentieth century suffered a lot of developments determined by two master plans of nineteenth century, the Plan of “beautification and enhancement” of Silvio dell’Hoste in 1852 and the Plan of Vincenzo Micheli in 1871. In 1929 was launched a competition for architects and engineers for the new Master Plan of Pisa and Marina di Pisa: the jury was composed by Gustavo Giovannoni, Corrado Ricci, Ghino Venturi, Pietro and Francesco Cuppello Bernieri. The presence of Giovannoni at the head of the Commission was a guarantee for a plan that didn’t propose the demolition of the historic tissue, but only urban “thinnings”. The Master Plan of 1929 for Pisa planned several operations in the urban and extra-urban territory, paying particular attention to the identity preservation of the places. The events that followed the approval of the plan changed many of the points dictated by Gustavo Giovannoni, disregarling also the programming indicated by the designers winners of the competition for the Plan.

The World War II, that affected the whole of Italy, directly struck at the heart of some of the most significant places of the city. The situation emerged in Pisa after the bombing of the 31 August 1943 required a master plan entrusted to the engineers Luigi Pera, Ugo Ciangherotti and Giulio Fascetti and to the architect Renzo Bellucci. The guidelines for the reconstruction of the Arno River and the historic quartiers of the city were based on compliance with the existing urban tissue, in close collaboration with the Superintendent of Monuments, Piero Sanpaolesi: he worked in the urgency for the reconstruction, the recognition and preservation of historic buildings of the city. Despite the efforts of Sanpaolesi, reconstruction and new constructions built in historic area, didn’t have relation with the existing, either in terms of architectural style or of the materials used.

Keywords: Reconstruction, Preservation, Transformation.

PISA NELL’OTTOCENTO
L’Ottocento ha rappresentato per Pisa, come per molte altre città italiane, l’epoca del passaggio dalla città aristocratica, che aveva caratterizzato i tre secoli di governo granducale, alla città borghese, promossa e sostenuta dal nuovo Stato unitario. Con l’avanzare del secolo, si iniziò a ripensare la struttura urbana della città e dei suoi confini e a riprogettarne l’assetto e l’articolazione interna, con tentativi non sempre felici di razionalizzare gli spazi. Ciò comportò la demolizione di molti edifici, con l’obiettivo primario di realizzare una maglia viaria ampiamente razionale, pensata in un’ottica di sviluppo delle comunicazioni e incoraggiata anche dal nuovo impulso alla crescita della città dato dall’arrivo della ferrovia.

La struttura urbana della città di Pisa agli inizi del XX secolo risentì molto degli sviluppi determinati dai due maggiori piani di intervento del secolo precedente, il Piano di abbellimento e di accrescimento di Silvio dell’Hoste del 1852 e il Piano Regolatore di Vincenzo Micheli del 1871. Il piano era fortemente incentrato sulla realizzazione di precisi assi stradali a collegamento delle principali aree monumentali. Il rinnovamento suggerito da Dell’Hoste risentiva notevolmente della politica urbanistica europea e in particolare dei programmi haussmanniani francesi mentre sembrava tralasciare i dettami della “nuova”
ABSTRACT
The text highlights the initiatives carried out by the city of San Francisco, to promote outdoor public urban spaces. Objectives, strategies and operating participatory methodologies are illustrated. The following programs are presented: “The Open Space Framework” for the realization of the “High Performing Open Spaces” network, the ROSE (Recreation and Open Space Element) which describes the urban policies for the requalification of open spaces, “The Better Streets Plan” that indicates the criteria used for the implementation of appropriate elements in the urban landscape, the “Green connections” Program for implementation of the ecological connections and “Pavement to Parks” which is a project conceived to help people reconfigure allotments of urban public spaces as places where one can relax and enjoy, achieved with low cost improvements, fast to realize and implement. Besides describing environmental, technological and processes aspects and the concept of parklets is illustrated. This has been proposed in the last project, emulated in many cities throughout the world with satisfying results that activated relations within the neighborhood, reconsidered the potential of urban streets, encourage walking and non-motorized transportation and support business activities. In light of the most updated international scientific literature, the text analyzes the Design Toolkits highlighting common aspects and specific characteristics. The possible technical alternative solutions are examined with requisites of the project, constructive technology and indications on the materials to be used. Finally, the Mint Plaza study case was presented describing the strategies of the local administration for storm water management. This is an example of intervention of urban requalification using private funds on public soil. Here special devices were adopted in order to delay, clean and maintain on the site the outflow from weather events. Highlighted in the conclusions are the need to create guidelines for the requalification of public outdoor spaces depending on the degree of persistence of the interventions, relating duration, strategy and technology, researching innovative and appropriate devices for reinventing the sites.

Keywords: Urban open spaces, Parklets, Better streets, Storm water management

INTRODUZIONE
In linea con gli orientamenti delle città più vivibili, la necessità di riqualificare gli spazi urbani aperti e di svago è sottolineata nei documenti dell’amministrazione di San Francisco elencando motivi di sostenibilità, giustizia ambientale, salute fisica e mentale, beneficio economico. Gli spazi liberi che non abbiano funzione di attrezzature urbane sono definiti “aree aperte non programmate né strutturate” ed è soprattutto su queste che si concentra il vasto programma urbano intitolato “The Open Space Framework”. Tra i principali obiettivi vi è la realizzazione di una rete di “High Performing Open Spaces” che offrono opportunità sociali e di ricreazione alternative e sicure che rispondono alle esigenze del quartiere. Attraverso la multifunzionalità, l’incentivazione di stili di vita sani ed attivi, un uso innovativo dello spazio aperto e l’integrità ecologica dell’habitat naturale si è attuata una efficace azione da parte dell’Amministrazione comunale con adeguate partnership pubblico/privato. Tali caratteristiche possono essere opportunamente confrontate con quelle già indicate per gli “spazi ad intensità prestazionale”1, ovvero integrazione di funzioni, trasformabilità, autonomia energetica, performatività, confermando il