MODERNISATION AND GLOBALIZATION

Challenges and Opportunities in Architecture, Urbanism, Cultural Heritage

ABSTRACT PROCEEDINGS BOOK
IFAU 2019 – 3rd International Forum on Architecture and Urbanism aims to bring together leading academic scientists, researchers, and research scholars to exchange and share their experiences and research results about all aspects of Architecture, Urbanism, Cultural Heritage within Modernization and Globalization trends of XXI century.

The third edition is expanding the horizon by introducing a series of overlapping visions spanning the recently institutionalized Adriatic – Ionian Euroregion, now extended to the Balkan and South-East European region. The Forum will concentrate on Architecture, Urbanism, Cultural Heritage located in contexts and territories that reveal their tendencies to Modernization and Globalization.

Themes of the Research Abstracts

- Global / local modernizations
- XXth Century modernism and the question of cultural heritage
- Phenomena of re-generation, revitalization, recycle, reuse
- Modernization / globalization of urban planning / design and landscapes
- Modern housing
- Modern designing and daily life / universal design
- Utilization of future technologies
- Sustainability on the era of modernization / globalization
3rd International Forum for Architecture and Urbanism

Modernisation and Globalization
Challenges and Opportunities in Architecture, Urbanism, Cultural Heritage

INTERNATIONAL FORUM

ABSTRACT PROCEEDINGS
BOOK

21-23 November 2019
Tirana, Albania

ISBN: 978-9928-131-89-8

This forum is organized
Faculty of Architecture and Urbanism, Polytechnic University of Tirana
DIGITAL REVOLUTION, ARCHITECTURE, URBAN (RE)GENERATION, A CRITICAL OVERVIEW ON THE SOFTWARE FOR THE “DIGITAL LAYER”
Andrea Pasquali, Kristiana Kumi, Megi Ballanca

THERMAL VISIONS
Fabrizio Chella, Erica Scalzone

ZEB PROTOTYPE CONTROLLED BY A MACHINE LEARNING SYSTEM
Federico Cinquepalmi, Sofia Agostinelli, Fabrizio Cumo

DIGITAL REVOLUTION, ARCHITECTURE, URBAN (RE)GENERATION, A CRITICAL OVERVIEW ON THE HARDWARE FOR THE “DIGITAL LAYER”
Giorgio Verdiani, Elisa Miho, Julia Demirahi

CONCEZIONE DELLA FORMA ARCHITETTONICA E TECNOLOGIA DI STAMPA 3D A GRANDE SCALA. VERSO UN’ARCHITETTURA ‘HIDDEN-TECH’?
Giulio Paparella, Maura Percoco

IL CICLO INFINITO DELL’ALLUMINIO: RICERCA E PROGETTO PER L’ECONOMIA CIRCOLARE
Michele Di Sivo, Daniela Ladiana, Lediana Rrjolli

MODERNIZATION OF BUILT ENVIRONMENT BY THE INTEGRATION OF PV TECHNOLOGY - THE CASE OF STREETLIGHT SYSTEMS
Mirjana Devetaković, Florian Neporavishta, Goran Radović, Milan Radojević

BUILDING WITH ADAPTIVE SHELLS AND SMART MATERIALS: THE STUDY AND APPLICATION OF AN INTELLIGENT FACADE IN THE FACULTY OF ARCHITECTURE AND URBANISM, TIRANA
Jani Toci, Sonila Oka

TECNOLOGIE DEL FUTURO PER VIVERE LA CITTÀ
Igor Todisco, Valeria Marzocchella

WITHIN THE ABSENT PUBLIC SQUARES OF KORÇA: A VIRTUAL RECONSTRUCTION OF THE UN-BUILT URBAN SPACE OF ITALIAN RATIONALISM
Andrea Maliqari, Andronira Burda, Denada Veizaj, Ejonë Veliu
ARCHITETTURA/LINGUAGGIO/STAMPA 3D ................................................................. 260
Maria Argenti, Giulio Paparella, Maura Percoco

THE HISTORY OF STRUCTURAL FIGURATION IN ARCHITECTURE ................................................................. 261
Annarita Zarrillo

INNOVATIVE SURVEY METHODS FOR DIGITAL DOCUMENTATION OF “ONUFRI” MUSEUM IN BERAT CITY ................................................................. 262
Etleva Bushati, Sokol Allaraj, Luigi Corniello
The contemporary town is a mix of transformations, intentions, opportunities and difficult challenges. In recent years a digital layer is overlapping the various levels of the urbanscape. It exists “virtually” but with a more and more strong consistency in all the realities of the town. When William Gibson wrote “virtual space is where we are when at the telephone with someone else” he was maybe barely imaging how much the Information Technology was going to transform the perception of the “real” world. In this context, the architect, the urbanist, the designer is called to operate, not as simple users, but as promoters, members of the teams that should exploit the possibility offered by different tools, both on the front of gathering data, analysing them, using to propose new solutions which hopefully will be tuned with the new reality. In the paper proposed here, it will be presented a critical analysis of the SOFTWARE tools that offer new possibilities of investigation and intervention in the middle of the digital revolution. In facts, this set of tools are more and more accepted in the process of the architectural/urban definition, with a gradual reduction of the operators considering the operations of digital modelling and data treatment as something “external”, almost a disturbing accessory, in front of the pure architecture process. Reflecting on the new level of skills required for appropriate operations on buildings and new urban/regeneration assets, a specific taxonomy will be defined for the digital tools aimed to analyse and design the sites and the projects. With specific attention to their influence in the final results (CAD and BIM environments, data analysis, generative modelling, imaging software, crew sourcing solutions, APP for personal devices for operators/users, etc...) as well as their state of implementation in the general architectural workflows.
The contemporary town is a mix of transformations, intentions, need of knowledge, opportunities and difficult challenges. Even if global/general planning should be the main reference for organic development, interventions based on isolated intentions, occasional researches, specific investigations may bring positive and interesting contributions to the general debate and the occasions of knowledge. In recent years, with ongoing growth, a digital layer is overlapping the various levels of the urbenscape. It exists “virtually” but with a more and more strong consistency in all the realities of the town. When William Gibson wrote “virtual space is where we are when we are at the telephone with someone else” he was maybe barely imaging how much the mobile communications and the Information Technology was going to transform the perception of the “real” world. In this context, the architect, the urbanist, the designer are called to operate, not as simple users, in which case they are at risk of losing a precious opportunity, but as promoters, members of the teams that should exploit the possibility offered by different tools, both on the front of gathering data, analysing them, using to propose new solutions which hopefully will be tuned with the new reality. In the paper proposed here, critical analysis about the Hardware tools that offer new possibility of knowledge and functioning in the middle of the digital revolution will be presented, reflecting on the new level of skills required for appropriate intervention on buildings and new urban assets. A specific taxonomy will be defined for the digital survey tools and the product they allow to generate (3d laser scanner, photogrammetry, Drone/UAV, diagnostic tools, sensors, personal devices for operators/users, etc...) as well as their state of implementation in the general architectural workflows.

Giorgio Verdiani
Dipartimento di Architettura, Università degli Studi di Firenze, Italy
giorgio.verdiani@unifi.it

Elisa Miho
Catholic University “Our Lady of Good Counsel”, Tirana, Albania
elisa.miho@gmail.com

Julia Demirahi
Catholic University “Our Lady of Good Counsel”, Tirana, Albania
juliademiraj14@gmail.com

Keywords:
digital tools, digital survey, digital layer, digital solutions, hardware
Nepravishta, Florian
IFAU19 – 3rd International Forum for Architecture and Urbanism
Modernization and Globalization
Abstract Proceedings Book
Challenges and Opportunities in Architecture, Urbanism, Cultural Heritage
/ Florian Nepravishta, Andrea Maliqari, Ledita Mezini

Tiranë: Flesh, 2019
234 f. : me foto ; 21.5 x 21.5 cm Bibliogr.
ISBN: 978-9928-131-89-8
Maliqari, Andrea; Mezini, Ledita


721 (439.5 : 496.5) “1916/1935”
624.21(439.5 : 496.5) “1916/1935”