

PROCEEDINGS
of the
INTERNATIONAL CONFERENCE
on
CHANGING CITIES III
Spatial, Design, Landscape & Socio-economic Dimensions

Under the aegis of

The Department of Planning and Regional Development, University of Thessaly
The Greek Ministry of Tourism

Editor:
Professor Aspa Gospodini
University of Thessaly

Syros-Delos-Mykonos Islands, Greece • June 26-30, 2017

Title: Proceedings of the International Conference on Changing Cities III:
Spatial, Design, Landscape & Socio-Economic dimensions

ISBN: 978-618-5271-12-1

Copyright 2017: Grafima Publications

GRAFIMA PUBLICATIONS

Str. Eksadaktylou 5, 546 35 Thessaloniki, Greece

Tel./Fax: +30,2310.248272 • e-mail: grafima@grafima.com.gr

www.grafima.com.gr

A. THE ORGANISING INSTITUTIONS

The conference is organised by the **Lab of Urban Morphology and Design**, Directed by Dr. Aspa Gospodini, Professor of Urban Planning & Design, Department of Planning & Regional Development, **University of Thessaly, Volos, Greece**.

In collaboration with:

- **The Department of Product & System Design Engineering**, University of the Aegean, Syros Island, Greece;
- **Syros Institute- Research Institute for sustainable development, cultures and traditions**, Syros Island, Greece;
- **The Association of Greek Planners (SEMPXPA)**;
- **The Association of Greek Planners (SEMPXPA) - Branch of Northern Greece**.

B. THE ORGANISING COMMITTEE

1. **Dr. Aspa Gospodini**, Professor of Urban Planning & Design, Director of the Lab of Urban Morphology & Design, Department of Planning & Regional Development, University of Thessaly, Greece, Chair of the Organising Committee and the Scientific Committee;
2. **Dr. Joseph Stefanou**, Honorary Professor of NTUA, President of Syros Institute- Research Institute for sustainable development, cultures and traditions, Greece, vice President of the Organising Committee and the Scientific Committee;
3. **Florence Ikonomidou**, Assistant Professor of Painting, Department of Product & System Design Engineering, University of the Aegean, Greece, member of the Organising Committee and the Scientific Committee;
4. **Emily Alexandropoulou**, Planning Engineer, President of the Association of Greek Planners (SEMPXPA), member of the Organising Committee and the Scientific Committee;
5. **Dr. Natasa Tasopoulou**, Planning Engineer, President of the Association of Greek Planners (SEMPXPA) - Branch of north Greece, member of the Organising Committee and the Scientific Committee.

C. THE CONFERENCE SECRETARIAT

6. **Maria Nikou**, Planner, MSc, Doctorate Student in Planning, Department of Planning & Regional Development, University of Thessaly, Chief of the conference secretariat;
7. **Stella Manika**, Planner, MSc, PhD Candidate in Urban Planning, Department of Planning & Regional Development, University of Thessaly, Officer of the conference secretariat.
8. **Dr. Maria Makropoulou**, Architect, Planner, Department of Planning & Regional Development, University of Thessaly, Officer of the conference secretariat.
9. **Marina Oikonomou**, Dipl. In Economics, MSc in Finance, University of Tilburg, The Netherlands, public relations officer;

D. THE CONFERENCE TECHNICAL SUPPORT

10. **Charalampos Alifieris**, ICT Technician, Department of Product and Systems Design Engineering, University of the Aegean, Officer of computer services in the conference venues;
11. **Dimitris Oikonomou**, assistant in computer services in the conference venues.

E. THE CONFERENCE FINANCIAL MANAGEMENT

12. **Nicos Economou**, Dipl. In Economics, MSc, University of Kent, UK, Financial Project Manager and Accounting Manager of the conference.

MEMBERS OF THE SCIENTIFIC COMMITTEE

Adamakis, K., University of Thessaly, Greece

Alexandropoulou, E., Planning Engineer, President of the Association of Greek Planners (SEMPXPA), Greece

Avgerinou-Kolonia S., National Technical University of Athens, Greece

Babalís D., Chair of INTEGRO UAD (International Group on Urban and Architecture Design), Università degli Studi di Firenze. Italy

Beriatos E., University of Thessaly, Greece

Bogiazides N., University of Thessaly, Greece

Carmona M., Bartlett School UCL, UK

Siddi, C., DICAAR – University of Cagliari, Italy

Chourmouziadou K., Aristotle University of Thessaloniki, Greece

Christodoulou C., Aristotle University of Thessaloniki, Greece

Christopoulou O., University of Thessaly, Greece

Cidre E., Bartlett School UCL, UK

Colonas, V., University of Thessaly, Greece

Cuthbert A., UNSW Asia Sydney Area, Australia

De Magalhaes C., Bartlett School UCL London, UK

Deffner A., University of Thessaly, Greece

Darzentas, J., Professor - Head of Department of Product & System Design Engineering, University of the Aegean, Greece

Dimelli D., Technical University of Crete, Greece

Dimitriou H., Bartlett School UCL, UK

Dimoudi A., Democritus University of Thrace, Greece

Economou D., University of Thessaly, Greece

Enlil Z., Yildiz Technical University Istanbul, Turkey

Fragopoulos Y., Aristotle University of Thessaloniki, Greece

Galani V., University of Thessaly, Greece

Gavra E., University of Macedonia, Greece

Geppert A., Université Paris Sorbonne, France

Giacumacatos A., Athens School of Fine Arts, Greece

Gospodini A., University of Thessaly, Greece
 Goussios D., University of Thessaly, Greece
 Grant Marcus, Editor in Chief of a new Routledge journal, "Cities & Health", Expert Advisor to the World Health Organization
 Haniotou E., National Technical University of Athens, Greece
 Haralambidou P., Bartlett School of Architecture & Planning London, UK
 Ilmonen M., Aalto University, Finland
 Ippolito A., Sapienza Università di Roma, Italy
 Kallioras, D., University of Thessaly, Greece
 Kalogirou N., Aristotle University of Thessaloniki, Greece
 Karadimitriou N., Bartlett School of Architecture & Planning London, UK
 Karydis D., National Technical University of Athens, Greece
 Kavaratzis M., University of Leicester, UK
 Klabatsea I., National Technical University of Athens, Greece
 Kotzamanis B., University of Thessaly, Greece
 Kousidonis C., University of Thessaly, Greece
 Kungolos A., University of Thessaly, Greece
 Kyrkilis, D., University of Macedonia, Greece
 La Greca P., Università di Catania, Italy
 Lalenis K., University of Thessaly, Greece
 Lazaridis P., Honorary Chair Former Rector University of Thessaly, Greece
 Leconte P., Foundation for the Urban Environment, Brussels, Brussels
 Lefantzis M., University of Thessaly, Greece
 Lo Piccolo F., University of Palermo, Italy
 Loukaitou-Sideris, A., Associate Dean of Luskin School of Public Affairs, UCLA, USA
 Makropoulou M., University of Thessaly, Greece
 Marda N., National Technical University of Athens, Greece
 Mironowicz I., Secretary General of AESOP Wrocław University of Technology, Poland
 Mitoula R., Harokopio University, Greece
 Moraitis K., National Technical University of Athens, Greece
 Mrdenovic T., University of Beograd, Serbia
 Nikolaou D., National Technical University of Athens, Greece
 Nilsson K., Luleå University of Technology, Sweden
 Oc T., Honorary Professor Bartlett School UCL - Editor of the Journal of Urban Design, UK
 Pagonis Th., National Technical University of Athens, Greece

Pallagst K., Kaiserslautern University of Technology, Germany
 Panetsos G., University of Patras, Greece
 Papageorgiou M., University of Thessaly, Greece
 Papagiannakis A., Aristotle University of Thessaloniki, Greece
 Patrikios G., Democritus University of Thrace, Greece
 Pendlebury J., Newcastle University, UK
 Pere Serra, Universitat Autònoma de Barcelona, Spain
 Petrakos G., Rector of University of Thessaly, Greece
 Petropoulou C., University of Aegean, Greece
 Pitsiava-Latinopoulou M., Aristotle University of Thessaloniki, Greece
 Polychronopoulos D., Dimokriton University of Thrace, Greece
 Polyzos G., National Technical University of Athens, Greece
 Ponzini D., Politecnico di Milano Milan, Italy
 Pozani D., Epoka University, Albania
 Pozoukidou G., Aristotle University of Thessaloniki, Greece
 Punter J., Cardiff School of Planning and Geography, UK
 Roberts M., University of Westminster London, UK
 Rodi, A., University of Patras, Greece
 Sakantamis K., Aristotle University of Thessaloniki, Greece
 Salet W., University of Amsterdam, Netherlands
 Salvati L., Third University of Rome, Italy
 Sapounakis A., University of Thessaly, Greece
 Sepe M., CNR-Università di Napoli Federico II, Italy
 Serra P. , Universitat Autònoma de Barcelona, Spain
 Serrao K., National Technical University of Athens, Greece
 Silva A. E., University of Cambridge, UK
 Skayannis P., University of Thessaly, Greece
 Stathakis D., University of Thessaly, Greece
 Stefanou, J., Honorary Professor of NTUA, President of Syros Institute of Syros Institute –
 Research Institute for sustainable development, cultures and traditions, Greece
 Stylidis I., University of Thessaly, Greece
 Sutcliffe B. E., Middle East Technical University, Turkey
 Tasopoulou, N., President of 7-the Association of Planners (SEMPXPA), Branch of north Greece
 Tellios A., University of Thessaloniki, Greece
 Theodora I., National Technical University of Athens

Terkenli T., University of Aegean, Greece
Thoidou E., Aristotle University of Thessaloniki, Greece
Townsend T., Head of School & Director University of Newcastle, UK
Triantafyllopoulos N., University of Thessaly, Greece
Trova V., University of Thessaly, Greece
Tsagkrasoulis A., University of Thessaly, Greece
Tselios V., University of Thessaly, Greece
Tsilimigkas G., University of Aegean, Greece
Veldpaus L., Newcastle University, UK
Velentzas, K. , University of Macedonia, Greece
Vlastos T., National Technical University of Athens, Greece
Vougias S., Aristotle University of Thessaloniki, Greece
Voutira E., University of Macedonia, Greece
Vyzoviti S., University of Thessaly, Greece
Zavraka D., Eastern Macedonia and Thrace Institute of Technology, Greece

FORWARD

The 1st international conference on 'Changing Cities', which was hosted on Skiathos island, 18-22 June 2013, had started as an idea in 2012. The initial concept was to organise an academic event creative, inspiring, stimulating, and above all, international. There had been a belief that such an academic event may contribute in revitalizing academia and promoting tourism in Greece - hit by the economic crisis of public debt in the Eurozone. Given that during the last years, both societies and cities in Greece have been dramatically changing, shrinking in economic, spatial and demographic terms, we have chosen Changing Cities as the main theme of this series of conferences. Our aspiration had been to provide an international forum for transaction of ideas on cities and bring together architects, urban designers, landscape designers, urban planners, urban geographers, urban economists, urban sociologists and demographers, to investigate new challenges. This goal became a reality since the 1st Changing Cities conference gained strong interest of academics and researchers from many countries and regions around the world; Greece and the Balkans, south Europe and Mediterranean countries, northwest Europe, Middle East and Asia, Far East, North America, Latin America and Africa. A total of about 460 abstracts and 320 papers had been submitted in the conference – most of them, about 60% from abroad.

The 2nd Changing Cities conference, Porto Heli, Peloponnese, Greece, 22-26 June 2015, was also fruitful academically since it attracted the attention of scholars, not only from Greece, the Balkans and Europe, but also from far-away countries like USA and Canada, Brazil, Chile, Colombia in Latin America, and China, Japan and Australia in the far-east. We received about 500 abstracts and more than 350 papers. Among the scholars participating, there were about 185 Greek academics and researchers. This indicated that despite shortage of research funds, salary cuts, and broken morale, university teachers and researchers in Greek state universities were trying hard to keep a high-level academic status. Besides, the number of contributions by scholars from abroad (63%) emphatically pointed the international character of the conference.

The results of the 3rd Changing Cities conference, Syros Island, Greece, 26-30 June 2017, points that the series of conferences on Changing Cities is getting established in the international academia as a significant bi-annual international forum. We have received 485 abstracts and 200 papers from many countries around the globe – honouring our efforts as Organising Committee. The contribution by Greek researchers and scholars is 27.42% while that of foreign academics reaches 72.58%; this indicates the international character of the conference. Regarding foreign academics, many of them are from neighbouring countries such as Italy (69), Turkey (37), Cyprus (11), and

Serbia (6); but also many are from distant countries such as Brazil (27), USA (16), UK (16), Poland (11), and Netherlands (10).

The strong interest for this conference by academic communities allows us to have thoughts about organising the 4th Changing Cities conferences in two years' time, spatially hosted in a different Greek sea resort – probably Santorini Island, or Crete.

I would like first to thank the Organising Committee, the keynote speakers, and the members of the international scientific board who supported enthusiastically the academic organization of this conference. I would especially like to thank those colleagues of the Scientific Committee who have also pre-organized special sessions in this conference. I would like to thank all the academic, political and scientific organisations which supported this conference in many different ways: University of Thessaly; The Municipal Authority of Syros Island; the Greek Ministry of Tourism; The Greek National Tourism Organisation (GNTO); Finally, I would like to thank the shipping companies 'Blue Star Ferries' and 'SuperFast Ferries' which sponsored sea travel to and from Syros Island.

Aspa Gospodini, PhD

*Professor of Urban Planning & Design,
University of Thessaly,
Department of Planning & Regional Development
Chair of the Organising Committee
& the International Scientific Board*

TABLE of CONTENTS

| | |
|----------------------------|-----|
| Organizing Committee | iii |
| Scientific Board | iv |
| Forward | ix |
| Table of Contents | xi |

KEYNOTE SPEECHES

- **Prof. Taner Oc**, Editor of Journal of Urban Design
Honorary Professor, The Bartlett School of Planning, UCL
Faculty of the Built Environment, London, UK
and **Elisabete Cidre**, UCL, Bartlett School of Planning
Heritage and Regeneration in Changing London..... 3

PRE-ORGANIZED SPECIAL SESSIONS

URBAN NATURES FOR CHANGING CITIES

organized by Prof. A. Ippolito, Università degli Studi di Roma "La Sapienza", Italy

- **Temporary public landscape. Potential and risks of the public spaces in the Italian provincial town**
M. Aprile..... 25
- **Fair natures in emerging minor urbanities. A green guide for seven categories**
R. Belibani, A. Capanna 34
- **Patterns of Participative Governance in Planning and Management of Urban Green Spaces. Initial Assessments through the European and Greek experience**
S. Chaldezou, Y. Theodora 45
- **Natural spaces river land in the urban context area**
D. Cialdea, N. Quercio..... 62
- **New performances in urban nature. Recovery examples for the city crossing green pathways**
D. Cialdea..... 79
- **Green infrastructures and biodiverse urban gardens for regenerating urban spaces**
M. Clemente, F. Bianconi, M. Filippucci, L. Salvati..... 94

Proceedings

of the International Conference on **Changing Cities III:**
Spatial, Design, Landscape & Socio-economic Dimensions
Syros, Delos, Mykonos Islands, Greece • June 26-30, 2017
ISBN: 978-618-5271-12-1

xi

| | |
|---|-----|
| • Urban natures for public spaces <i>M. Clemente</i> | 103 |
| • Urban natures as a new model of interaction between city and environment: a political and normative interpretation <i>D.S. Damiano</i> | 114 |
| • Models of knowledge and development of the urban vegetal architecture. Villa Celimontana in Rome <i>L. D. Carlo, M.F. Mancini, L. Paris, F. Pierdominici, W. Wahbeh</i> | 119 |
| • Urban natures for changing cities <i>A. M. Ippolito</i> | 131 |
| • Urban natures for urban resilience. Time-phases design for Changing Cities <i>M. Marino</i> | 145 |
| • Landscape by people: The landscape as glocalized resource <i>C. Stivali</i> | 156 |
| • Neither urban nor rural: landscape composition and land-use changes in the Mediterranean fringe <i>I. Tombolini, S. Pili, L. Salvati</i> | 164 |
| • Modern management of nature in the city <i>A. Veisz</i> | 172 |

PUBLIC SPACE AND SUSTAINABLE REGENERATION

Organized and chaired by Prof. M. Sepe, CNR-Università di Napoli Federico II, Italy

| | |
|--|-----|
| • Public space and sustainability: achieving livability through multimedia and urban design <i>M. Sepe</i> | 181 |
| • Issues on urban design of public space: social and spatial identifications in the case of 4 central squares in Athens <i>K. Advelidi, A. Vitopoulou, G. Gemenetzi, K. Gortsos, F. Vlastou, E. Massou</i> | 194 |
| • A critical overview on the outcomes of mending of the suburbs. Case studies and experiments G124. <i>R. Belibani, A. Capanna</i> | 208 |
| • DiverCity – intercultural perception for space <i>K. Lehmann</i> | 219 |
| • Incremental housing strategy. A possible approach for social and urban development <i>M. Plastina</i> | 230 |
| • A sequence of urban rooms. Public space as a regenerative structure <i>L. A. Pezzetti</i> | 236 |
| • Sustainable regeneration of academic public spaces. A choice of case studies <i>E. D. Rynska, U. Kozminska, A. Tofiluk, K. Zinowiec-Cieplik</i> | 249 |
| • Strategies for urban regeneration in Brazil <i>C. Sanna, R. Secchi, P. Pineschi, E. Paez, M. Colazza, M. S. Ristruccia</i> | 260 |

| | |
|---|-----|
| • Studies for a precise intervention – public spaces in a central area in Brasilia, Brazil <i>G. Tenorio, B. Kronenberger</i> | 268 |
| • Sport and leisure as elements for the regeneration of public spaces in the Catalan region <i>S. G. Troncone</i> | 278 |

WATERFRONTS FOR HUMAN FLOURISHING

*Organized and chaired by Prof. T. Townshend, Newcastle University UK
and Prof. D. Babalis, Università degli Studi di Firenze, Italy*

| | |
|--|-----|
| • Safeguarding old barracks and influencing positively nearby waterfront environment <i>D. Babalis</i> | 291 |
| • Re-designing urban waterfronts preserving heritage and improving urban environment. The case of Plomari <i>E. Maistrou, K. Moraitis, D. Anastasiadis, E. Ioannatou, A. Konidi, G. Koussoulos, V. Malkakis, A. Benetou, G. Nikas, X. Xanthopoulou</i> | 299 |
| • Waterfronts and Cultural Heritage. Questions and Challenges. The Case of Hydra <i>E. Maistrou</i> | 311 |
| • Urban landscape transformations through waterfronts' redesign. A new field to develop design tools and research approaches in architectural education <i>D. Polychronopoulos, M. Grigoriadou</i> | 321 |

SUSTAINABLE DEVELOPMENT, CULTURAL HERITAGE AND SPATIAL PLANNING IN SYROS, GREECE

Organized and chaired by Prof. J. Stephanou, Honorary professor of NTUA, President of Syros Institute, Prof. G. Pozoukidou and Dr. E. Linaki, Aristotle University of Thessaloniki, Greece

| | |
|--|-----|
| • Tangible and intangible cultural assets as means for sustainable urban planning and place making. The case of Ano Syros, Greece <i>G. Pozoukidou, E. Linaki</i> | 333 |
| • Cultural heritage management and development strategy: the case of Ermoupolis-Syros <i>Z. Paparsenou</i> | 345 |
| • Protection and heritage management of the historical centre of Thessaloniki, Greece: the designation of 199 buildings of the early 20th century <i>M. Selevista, M.M. Vyzantiadou</i> | 356 |

SOCIAL AND URBAN INFORMALITY: MIGRATION, MULTINATIONAL AND MULTICULTURAL SOCIETIES

*Organized and chaired by Prof. K. Moraitis and E. Konstantinidou,
National Technical University of Athens, Greece*

| | |
|--|-----|
| • Planning «Informality» <i>K. Moretti</i> | 373 |
| • Occupation of an Urban Territory - the Duality of Nature and the Human <i>A. Swiny, Y. Hadjichristou</i> | 380 |
| • Absurd: the significative role of informality <i>K.-O. Yenias</i> | 392 |
| • Institutionalized Informal Urbanism on the Fringes of Mount Parnitha <i>A. Zomas, M. Papavasileiou</i> | 399 |

CULTURAL HERITAGE AND CHALLENGES OF TOURISM

Organized and chaired by Prof. Z. Enlil, Yildiz Technical University, Turkey

| | |
|--|-----|
| • Discontent and resentment in tourist-historic sites: Re-thinking tourism via the perspectives and attitudes of local residents and local businesses <i>A. Altanlar, Z. Enlil, D. Kalkan Acikkapi</i> | 411 |
| • A new approach for sustainable tourism as a driver of conservation of the cultural heritage: Oleo tourism <i>K. Manisa, B. Yerliyurt</i> | 422 |
| • Space of craftsmen: A case study of tourism effects on Şişhane <i>O. H. Yeğenağa, Y.S. Özer</i> | 433 |

RESILIENT CITY – GOVERNANCE, NATURE, FORM, PEOPLE AND ECONOMY

Organized and chaired by Prof. T. Mrđenović, University of Beograd, Serbia

| | |
|---|-----|
| • Resilience and Sustainability: The Mutual Relations <i>T. Mrđenović</i> | 447 |
|---|-----|

NEW APPROACHES IN HISTORIC CENTERS PRESERVATION

Organized and chaired by Prof. D. Dimelli, Technical University of Crete, Greece

| | |
|---|-----|
| • Ancient city gates and modern checkpoints of Nicosia for the morphological theory of attractors <i>A. Camiz</i> | 455 |
| • Revitalizing the urban archaeological palimpsest - infilling the city fabric <i>K. Demiri</i> | 466 |
| • How would you design your home? A research in collective design <i>K. Varvatou, K. Sakantamis</i> | 476 |

URBAN PRESSURE IN COASTAL AND ISLAND AREAS: THE CHALLENGES IN IMPLEMENTATION OF MARITIME SPATIAL PLANNING IN GREECE

*Organized and chaired by Prof. S. Avgerinou-Kolonia,
National Technical University of Athens, Greece*

-
- **Coastal urbanization as a result of the absence
of an integrated maritime spatial planning approach**
S. Avgerinou-Kolonia, M. Rampavila..... 2135
 - **Current attitudes and lessons learnt in Maritime Spatial Planning:
a focus on governance issues in Europe**
S. Kyvelou-Chiotini..... 489
 - **Privatization of public land, spatial planning and *natural capital***
D. Litsardou, R. Klabatsea..... 501
 - **Urban pressure in coastal areas of Greece: the case of Corinthiakos Gulf**
M. Papageorgiou, O. Christopoulou, T. Kostopoulou..... 515
 - **Coastal space as a means for urban development.
The case of Faliron Bay in Athens**
E. Spanogianni, Y. Theodora..... 526

'SAILING CITIES': SEASCAPE IDENTITY AND AEGEAN TOURISTIC PORT'S NETWORK

Prof. K. Moraitis, A. Mentekidou, National Technical University of Athens, Greece

-
- **Establishment of networks between the islands of Northeastern Aegean Sea,
in order to promote their seascape identity**
A. D. Mentekidou..... 539
 - **Combined use of port facilities to host international sailing events
as well operate as terminals of high capacity amphibious aircraft**
S. Bouzeas, S. M. Gouloumis..... 549
 - **Santorini, down and across how access re-frames insular identity**
R. Lava..... 556
 - **Tourism and tragedy: the case of Lesbos**
T. S. Terkenli..... 560
 - **Nodes of a Networked Seascape**
A. Zomas, M. Papavasileiou..... 568

METHODOLOGICAL TOOLS OF ANALYSIS FOR CREATING STRATEGIES OF INTERNAL URBAN TECHNOLOGIES

*Organized and chaired by Prof. N. Marda & Prof. G. Parmenidis,
National Technical University of Athens, Greece*

-
- **Mapping connections in online learning communities:
architectural knowledge creation in the 'connectivist' paradigm**
O. Ioannou..... 579

| | |
|--|-----|
| • Crisis Control and Provisional Evacuation Management Scheme in Sana'a City <i>H. Nafa, M. Saeed</i> | 590 |
| • Sensing the urban landscape: The challenge of data visualization and multisensory mapping <i>T. Petras</i> | 599 |
| • Design by mapping the relational city <i>A. Stamatopoulou</i> | 606 |
| • Using Expanded Cinema design principles as an urban intervention tool <i>O. Venetsianou</i> | 618 |

BOTTOM UP PLANNING INITIATIVES IN THE URBAN SPACE. A VEHICLE FOR A FURTHER DEMOCRATIZATION OF THE URBAN PLANNING PROCEDURE?

Organized and chaired by Prof. K. Serrao, National Technical University of Athens, Greece

| | |
|---|-----|
| • Civil society and institutional practices towards democratization of urban planning: case studies on three German cities <i>K. Serrao, E. Asprogerakas, A. Chazapis, G. Gkoumopoulou, P. Voulelis</i> | 629 |
| • Athens revisited: Bottom up initiatives and organizational terms <i>N. Anastasopoulos</i> | 640 |
| • For a civic-familial Athens: Exploring the cultural background of participatory initiatives <i>M. Kiourti</i> | 649 |
| • A systematic correlation of public participation procedures with characteristics of areas addressed: The case of Athens metropolitan area <i>A. Vassi, K. Athanasopoulos, F. Vlastou</i> | 658 |

UNDER COLLECTIVE CONSTRUCTION

Organized and chaired by Prof. C. Siddi, University of Calgari, Italy

| | |
|--|-----|
| • “Under Collective Construction”. About the participatory and social potential in city-making <i>C. Siddi</i> | 673 |
| • Current trends and future prospect to develop a multi-scale landscape identity <i>S. Mocci</i> | 684 |
| • Creative spaces. The landscape design as an experimental laboratory <i>C. Sciarrone, M. Pasquali</i> | 694 |

INTEGRATED SUSTAINABLE ENERGY SPATIAL PLANNING

Organized and chaired by Dr. N. Koutsoumarkos, Hellenic Association of Urban and Regional Planners (SEMPXPA), Greece

- **A Co-planning Approach for Area-Based Holistic Energy Planning: The Experience of INTENSSS-PA project**
I. Giannouli, C. Zuidema, K. Salemik, K. Gugerell, S. Cantero-Celada, S. Blathra, C. Christidou, K. Leonhart-Petersen, A. M. Marinero-Peral, A. Tasopoulou, A. Papaioannou, N. Koutsoumarkos..... 699
- **Defining sustainability-aimed urban metabolism indicators**
Y. Song, A. Timmeren, A. Wandl..... 711

INTEGRATED URBAN INTERVENTIONS, RESILIENT CITIES AND METROPOLITAN AREAS: CHALLENGES AND POLICIES

Organized and chaired by Prof. E. Thoidou, Aristotle University of Thessaloniki, Greece

- **From factory to symbol of identity: the resilience process of disused economic sites**
J. Cenci..... 725
- **Changing approaches to urban intervention in Greece: The Integrated Territorial Investment (ITI) as a tool for sustainable urban development**
G. Katsavounidou..... 734
- **Designing buildings for increasing the urban resilience**
A. Krstic-Furundzic..... 740

ORIGIN OF METROPOLISES AND TRANSFORMATIONS OF ARCHITECTURE IN THE 21st CENTURY

Organized and chaired by Prof. A. Giacumacatos, Athens School of Fine Arts, Greece

- **The impact of capital flows on urban growth in transition periods: Athens urban transformation (1875-1909)**
A. Ntonou Efstratiadi, P. Dragonas..... 755
- **Induced stratification**
A. Castagnaro, F. Izzo..... 766

MAIN THEME SESSION

EUROPEAN CITIES AND MIGRATION: SPATIAL IMPACTS OF OUT-MIGRATION AND IMMIGRATION

- **Naples Historic Center Formation and Management: The Influence of Socio-Economic Mobility on the City Spatial Features and Urban Planning**
M. Al Gammal..... 773

| | |
|---|-----|
| • Morphogenesis and social structure in modern Mediterranean cities: the case of Athens <i>C. Bakalis, S. Chtouris</i> | 784 |
| • The historic abandoned settlement as a potential strategic resource for a sustainable reception of immigrants <i>C. C. Falasca, A. Gigante</i> | 794 |
| • Welcoming cities: new strategies for contemporary urban requalification in the migration era <i>F. Ficcadenti, R. Belibani</i> | 805 |
| • Spatial aspects of housing policy developed in the aftermath of the recent refugee crisis in Greece <i>G. Gemenetzi, M. Papageorgiou</i> | 813 |
| • Introvert Boundaries and Vulnerable Cities: the design of Public Space as an Opportunity for the Managing of Migratory Flows and the Affirmation of Multiculturalism <i>A. Gritti, G. Setti</i> | 825 |
| • Diffusion of suburbanisation. Theoretical approach <i>M. Mayer-Wydra</i> | 837 |
| • Housing emergency and minimum requirements for reception: contribution to the strategy of resilience <i>I. Montella, C. Tonelli</i> | 850 |
| • Impact of population dynamics on spatial development of Belgrade urban region <i>T. Nikolić, J. Petrić, T. Bajić</i> | 861 |
| • The Impact of Migrations on the Spatial Characteristics of the City of Gdańsk <i>L. Nyka, J. Szczepanski</i> | 872 |
| • A guideline for intercultural city <i>B. Petrella</i> | 882 |
| • Ancienne; fragile; transitoire. The Panier case study; Marseille <i>N. Suraci, G. La Delfa, A. Geuna</i> | 893 |
| • An examination a relationship between migration-place attachment in refugee camps in the context of the image of the city and its components <i>S. Tapki</i> | 901 |
| • Refugees; migration and inclusive communities through design: an ‘urban interior’ approach to resilient cities <i>C. Vains</i> | 912 |
| • An evaluation of social impacts of spatial and functional changes in a historical urban site: Kuzguncuk <i>N.Z. Gülersoy, S. Seçmen, G. Kuzey, O. Kargül</i> | 927 |
| • Unravelling the urban challenge of ethnic and cultural diversity <i>E. Zippelius</i> | 939 |

THEMATIC SESSIONS

URBAN DESIGN IN PLANNING

| | |
|---|------|
| • Menteşe In History: Four Different Period; Four Different Urban Texture <i>M. Aktaş, A. Sakarya</i> | 953 |
| • Urban transformations in a coastal city and movement of people in public open spaces <i>F. Antocheviz, C. Arsego, A.C. Braga, A.T. Reis, F. Zampieri</i> | 965 |
| • Assessment of social and spatial effects of urban design in Athens: insights for a methodological approach <i>K. Avdelidi, G. Gemenetzi, A. Vitopoulou, E. Massou, F. Vlastou, K. Gortsos</i> | 977 |
| • Urban densification and daylighting: Existing daylight levels in Swedish multi-family housing as a base for future daylight requirement <i>I. Bournas, M. Lundgren, M. Alenius, M.C. Dubois</i> | 987 |
| • Neighborhood: different perceptions of the meaning by natives and immigrants in Athens during economic crisis: Examining the case of Kypseli <i>M. Charalampidi, C. Desi-Louka, S. Yiannoudes</i> | 998 |
| • Transforming a small city through urban planning by integrating urban green spaces. Case Study: City of Nafpaktos <i>S. Ch. Fouseki, K. Sotiropoulou, V. Protopapa, D. Karvelas, E. Bakogiannis, I. Kyriazi</i> | 1008 |
| • Residential choices and preferences in Athens: Implications for city planning <i>G. Gemenetzi, V. Mourati, E. Zervas</i> | 1014 |
| • Environmental Interiorities: Design through real-time data collection and analysis <i>V. Geropanta, A. Karagianni, P. Parthenios</i> | 1024 |
| • Examining the Role of Architectural Technology in Future Cities <i>S. Habibi</i> | 1032 |
| • Supports; patterns and infrastructural processes in open-ended design <i>G. Kalnis</i> | 1042 |
| • Prison and city: Reintegration of the “Korydallos” prison in Athens, Greece <i>A. Kalymniou, K.A. Liapi, V. Petridou</i> | 1051 |
| • Connected yet private: the design of multi-household housing in Japan <i>J. McIntosh, Y. Kuboshima,</i> | 1060 |
| • An Analytical Culture-led Approach to the Urban Revitalization of Historical Center and Walled Cities <i>X. Lu, L. Pezzetti</i> | 1071 |
| • The Ghost Town of Famagusta, Cyprus <i>R. Makhoul Vassiliou</i> | 1083 |
| • Urban interfaces and aesthetic evaluations <i>A.T. Reis, A. F. Panzenhagen, V. L. Gerson, F. Bonoldi</i> | 1092 |

- **Evaluation of urban waterfronts as public spaces**
S. Seçmen, H. Türkoğlu 1103
- **Gentrification and urban design in the urban fabric of Rotterdam**
P. Stouten..... 1116
- **Towards a form for transgression: Civil disobedience in urban milieu**
A. Tsarouchi..... 1127

CITIES AND HEALTH

- **Ecology and Design in Developing Ecosystem Services in Urban Regeneration Processes**
M. L. Delendi..... 1139
- **Industrial city and health: first industrial cities in early 1819 to modern industrial cities**
S. Ch. Fouseki, D. Karvelas, E. Bakogiannis, I. Kyriazi 1147
- **The preliminary works of a study on the design of healing gardens for patients with mental disorders**
E. Kamperi, A. Paraskevopoulou, C. Papageorgiou, M. Papafotiou, N. Demirisi, M. Economou, C. Theleritis, M. Kitsonas 1157
- **Therapeutic landscape design for older persons health and well-being**
C. Kershaw, J. Cornwall, J. McIntosh, B. Marques 1163
- **Smart systems for rehabilitation and independence**
J. Lim, J. McIntosh, B. Marques, J. Cornwall, E. R. Rodriguez-Ramirez..... 1171
- **Primary school pupils' perceptions of a typical urban school ground**
A. Paraskevopoulou, M. Panou 1182

SUSTAINABLE URBAN LANNING AND DEVELOPMENT

- **Transformation of the city identity: Causes and Effects**
M. Aboutorabi, B. Zalloom..... 1191
- **GIS; VGI and open data during emergency: an experimental approach towards the resilient city**
L. Barbieri, D. De Ioris 1201
- **Physical landscape and social diversity: a study of Australian cities**
I. D. Bishop..... 1209
- **The strategic role of Universities for the sustainable regional and urban planning**
G. Calvano, G. Mangialardi, N. Martinelli, A. Tursi 1217
- **Waterfront Development Management in Greece? The Case of “Lipasmata” in Piraeus**
T. A. Daamen, T. Papadopoulos..... 1228
- **Well thought-out compactness at infra-local scale: determining the qualitative criteria linked to the limits of objective compactness when creating a predominantly residential block**
I. de Smet, D. Laplume 1242

| | |
|--|------|
| • Eco-cities: Strategies of Rebuilding Communities for Resilient and Sustainable development in Egypt with Particular Emphasis on Aswan <i>A. Elnokaly, A. Elseragy</i> | 1253 |
| • Urban Space Living in a changing city: sidewalks of Curitiba <i>H. M. Faria, c. de A. Lima</i> | 1264 |
| • The Vacant City: is there anything that we can do? The Land of València; a case study <i>G. i. Diaz, Fernando</i> | 1274 |
| • A novel local development model paradigm: The case of Ippokratios race <i>A. Goulas, M. Pappa, G. Theodosiou</i> | 1287 |
| • Climate governance in Cape Town and Oslo: Moving towards co-creational leadership? <i>T. Vedeld, H. Hofstad</i> | 1294 |
| • Configurational analysis of the city of Sines: contributions to the sustainability of urban planning <i>B. Lopes, R. Guerreiro</i> | 1315 |
| • Urban morphology of Western military architecture in the urban development of Vietnam: the case study of Hue City <i>V. N. Duc, A. Alici</i> | 1326 |
| • Sustainable landscape design; key ideas for effective implementation <i>A. Nikologianni, K. Moore, P. Larkham</i> | 1338 |
| • Urban network of 'green' and 'blue' corridors as a tool of metropolitan and environmental planning. Case study research: the northeastern part of Athens <i>E. Ntfa</i> | 1347 |
| • The renaissance of tramway as a challenge for Transit Oriented Development: A pilot project in the city of Thessaloniki <i>A. Papagiannakis, A. Yiannakou, D. Pateraki</i> | 1357 |
| • Assessing local stakeholders' perceptions of the urban waterfront through the use of Q methodology <i>T. Papatheochari, S. Niavis, H. Coccossis</i> | 1371 |
| • Visual impact: The case of wind turbines in Samos presentation of potential sites under specific context <i>F. Skalidi, D. Tsakou</i> | 1382 |
| • Assessing the effect of Resilient Green Infrastructure on land values at the neighborhood level in the city of Cali, Colombia <i>S. Grafakos, A. Tsatsou, L. D' Acci, N.E. Ramirez Aranda</i> | 1389 |
| • Evaluating the effect of cool materials on microclimatic parameters under different climatic conditions. Application in the city of Thessaloniki <i>S. Tsoka, E. Litserinou, K. Tsikaloudaki</i> | 1401 |
| • Evaluation of nuclear power plants in respect to sustainability: Mersin City example <i>S. Turgut, H. Berkmen</i> | 1412 |
| • The role of Carrying capacity as a Quantitative method for Urban Sustainable Development <i>P. Voulellis, K. Serraos</i> | 1420 |

- **Actor Analysis in Decision Making Process of Urban Renewal in China:
The Way to Achieve Sustainability**
T. Zhuang, Q. K. Qian, H. J. Visscher, M. G. Elsinga..... 1432

URBAN LANDSCAPES; LANDSCAPE PLANNING AND DESIGN

- **Types and representations of terrain vague in the cinematic city**
E. Asimakopoulou..... 1445
- **Increase security by recreating urban rivers in Tehran**
E. Bigdeli, O.R. Rahimi 1455
- **Intercultural narratives beyond borders**
L. Crespi, B. Di Prete, A. Rebaglio, R. Trocchianesi 1459
- **A map, thousand cities**
U. Domblás..... 1471
- **Comparative approach of Izmir and Thessaloniki's eco-landscape**
A. Chavrali, T. Sidiropoulou, C. Petropoulou..... 1481
- **Therapeutic Landscapes: the role of culture**
W. Hatton, B. Marques, J. McIntosh 1495
- **The “urban sprawl” effect on the out-of-town real estate market**
A. Kiakou..... 1504
- **Palmscaping. Tracing the multiple journey of the Palm tree
The case of Mesolonghi; Greece**
C. Makedonopoulou..... 1516
- **Recipro-city: synergistic processes from informal actions...**
A. Manca, C. Salaris..... 1528
- **Removing disability: the restorative powers of landscape design**
J. McIntosh, B. Marques, M. McKone 1540
- **Water-potential-mapping for urban flood/drought resilience:
A holistic approach to sustainable spatial planning and design by augmenting
use; reuse and storage capacity of storm water in South East Queensland**
K. Ozgun, A. Moulis, P. Leardini 1549
- **Landscape changes: Quantitative representation of structure and spatial
distribution of land uses in the Larger Urban Zones of Heraklion**
N. Rempis, G. Tsilimigkas 1562
- **The impact of the coastal development projects in the urban landscape
of Heraklion**
N. Rempis, G. Alexandrakis..... 1570
- **Athens - unauthorized: Unplanned but more planning than you would believe**
B. Röe 1581
- **Small city and a bridge. Landscape perspective**
A. Sas-Bojarska 1591

ARCHITECTURAL DESIGN AND NEW TECHNOLOGIES

- **Theoretical Outlines for a Complex Approach to Architecture**
F. Alves, V. Rato 1605
- **At school as in the city: spaces of imagination**
F. Bonfante 1615
- **What about commons in higher education?**
E. Frangedaki 1625
- **The innovative materials and technologies use as a means
of architectural expression in urban lighting**
E. Skafida..... 1633

URBAN CULTURES AND PUBLIC OPEN SPACES

- **Morphological analysis of squares in Europe's common cultural context**
I. Alistratovaite-Kurtinaitiene 1645
- **Ladies who do 'unboxing' of their groceries. From Internet anecdote
to contemporary material feminism applied to urban thinking**
A. Alonso Albarracin 1656
- **Human behavior and activity in public spaces**
The case of Monastiraki square in Athens
C. Charalampaki, M. Kourouvani, D. Nikolaou..... 1664
- **Autobiographical urbanities and design regression:**
Effrontery towards the urban; or the city as a game
A. Dimitrakopoulos..... 1675
- **Tactical Urbanism and the production of the common**
- an approach to emerging urban practices
A. Farias, A. Gonçalves..... 1685
- **Disputes for memory's place and artistic action against urban intervention:**
a Brazilian case
E. Marzulo, R. Capelato 1696
- **Narrating migration. Mnemonic traces connecting here and there
and feeling "at home" away from home**
S. Moulara 1704
- **Interconnected realities: Transforming public space through digital networks**
K. Ntampiza 1716
- **Resource characteristics of architecture in Open House initiatives**
Y. Okamura, T. Nohara, A. Tanaka..... 1723
- **Inclusive playground for Children with Disabilities**
B. Sah, S. Z. Sadri..... 1730
- **Palimpsest industry: industrial heritage and intangible cultural heritage
in the creative city. A comparative study of the Old Truman Brewery
in London and Technopolis in Athens**
S. Sarri..... 1741

- **The city as a model for spatial design: museums; the new town squares**
K. Tzortzi, D. Monioudi-Gavala 1754

HISTORICAL CENTERS AND BUILT HERITAGE MANAGEMENT

- **Comparative Remarks on Design Principles; Concepts and Terms used in Urban Conservation**
N. Apostolopoulou, A. Rodi 1765
- **The Recreation of an Urban Centre: The Case of the Abdullah Gul University Sümer Campus in Kayseri; Turkey**
N. Baturayoglu Yöney, B. Asiliskender* 1775
- **Reloading 21st century cities with cultural energy. The transformation of gas factories into cultural hotspots in Amsterdam and Athens**
T. Chatzi-Rodopoulou 1786
- **Place-identity and urban tourism: a galaxy of social representations of places in capital cities**
A. S. de Rosa, L. Dryjanska, E. Bocci 1797
- **Towards the preservation of visual identity of small historical towns**
D. Dijokiene, A. Vete 1808
- **Revitalizing Alexandria through its symbolic significance of heritage; urban form; and the distinctive spirit of place**
A. Elseragy, A. Elnokaly, M. Sabbagh 1819
- **Landscape Conservation Policy and Tourism Developments in the Traditional Settlement of Oia; Santorini Island; Greece**
T. Ishimoto, Y. Okamura, K. Eguchi 1835
- **The Aegean vernacular as vacant signifier: projections of meaning by modernist and post-modern architects**
N. Magouliotis 1847
- **Showcasing the heritage of historic towns as a vehicle for development planning. Case study: Langadia; Gortynia; Greece**
E. Maravelia, A. Koumpouli, M. Pateraki, V. Daskalakis, E. Kamontou, V. Katsimpoulas, I. Kavvada, M. Kilia, M. Kostagianni, I. Kourouni, D. Mpartzis, N. Papailiou, M. Vasila, E. Vasileiou, E. Maistrou, E. Konstantinidou 1858
- **Residents' perceptions about participation in cultural heritage displaying**
V. D. Spanos, O. Christopoulou 1869
- **When city branding meets ...geology**
V. D. Spanos 1879
- **Social and Spatial Changes In Urban Historic Neighbourhoods: Case of Cihangir District - Istanbul**
M. Ö. Kınacı, N. Z. Gülersoy 1885

ENVIRONMENTAL URBAN PLANNING

- **Waterscapes in transformation: insights on landscape accessibility challenged by new infrastructures for climate resilience: The case of the Flemish Coastal area: Uitkerkse Polders**
S. Pillen, K. Scheerlinck, E. Van Daele 1903
- **The proposed Park Road between Itatiaia main center and Penedo township: reflections upon the interests of the county administration and the communities involved**
I. Silveira, J. Rodrigues 1913
- **Climate Adaptation Strategies in Mediterranean Metropolises**
S. Tsoumalakos, O. Christopoulou 1923

GREEN ARCHITECTURE AND URBAN PLANNING

- **Deep renovation in changing cities: Densification and real-estate value for cost-effective energy targets in the ABRACADABRA strategy**
A. Ferrante, A. Fotopoulou, E. Cattani, G. Semprini 1935
- **The importance of green infrastructure planning in urban sustainability: Case study Ankara-Turkey**
N. Shakouri, M. Güneş 1947

TRANSPORTATION PLANNING AND POLICY IN CITIES

- **Niterói; RJ; Brazil; The Waterwais crisis and the “boalt revolt”**
M. Azevedo 1957
- **The notion of “sustainable intelligence” in a “smart” road network. The case of Tsimiski str; a most important commercial axis in the center of Thessaloniki**
S. Vougiar, K. Anastasiadou 1968

URBAN PLANNING LAWS; REAL ESTATE AND PROPERTY RIGHTS

- **Spatial planning system’s structure. Focus on urban development: Urban layout planning, plot arrangement – compensation acts, urban planning implementation acts**
T. Gkegkas, E. Stylianidis, P. Farmaki 1981

URBAN ECONOMIES AND SPATIAL IMPACTS

- **Spatial configuration of industrial development corridors: configurational impacts of the road expansion in urban industrial sites of Porto Alegre – Brazil**
D. Altafini, A. Braga, F. Zampieri 2001
- **Where do Greeks work during the economic crisis? A quantitative study of the spatial concentration of Greek employees**
E. Anastasiou, S. Manika 2012

| | |
|---|------|
| • Urban metabolism under pressure three major Greek cities transforming through 20th century <i>K. Christoforaki</i> | 2024 |
| • Changing local urban spaces: the case of housing projects <i>M. Corrêa; M. L. Silva</i> | 2036 |
| • Cyclades Archipelago: Regenerating productive landscapes <i>F. Pitoglou</i> | 2045 |
| • Expanding cities through summer residential suburban development <i>M. Stenou</i> | 2057 |

PLACE MARKETING AND CITY BRANDING

| | |
|---|------|
| • Space; identity and memory policies for the Jewish Community of Thessaloniki: a diachronic approach <i>I. Frangopoulos, G. Kazantzi, M. Evdou, N. Karanikolas</i> | 2067 |
| • Branding areas in transition: Balkan cities <i>E. G. Gavra, K. Gkioufi</i> | 2080 |

SHRINKING CITIES AND DIVIDED CITIES

| | |
|---|------|
| • The housing emergency in Palermo between rights and legality <i>F. Lo Piccolo, A. Giampino, V. Todaro</i> | 2089 |
| • Urban regeneration policies against spatial impacts of economic crisis <i>S. Manika, E. Anastasiou, K. Manika</i> | 2098 |

MIGRATION, MULTINATIONAL AND MULTICULTURAL SOCIETIES

| | |
|--|------|
| • The development of a landscape: a <i>Little India</i> in the Pontine Plain <i>S. Boca</i> | 2109 |
| • Sociospatial integration of Haitian immigrants in <i>Lajeado</i>; Brazil: a configurational study <i>F. Braun-Spinelli, A. Braga</i> | 2118 |
| • The effects of higher education students on the housing market from the Studentification Perspective <i>T. Tuncer</i> | 2128 |

| | |
|---------------------------|------|
| Author Index | 2149 |
|---------------------------|------|

| | |
|----------------------------|------|
| Subject Index | 2155 |
|----------------------------|------|

| | |
|-----------------------|------|
| Sponsors | 2165 |
|-----------------------|------|

THEMATIC SESSIONS



Urban Design in Planning



Assessment of social and spatial effects of urban design in Athens: insights for a methodological approach

K. Avdelidi^{1*}; G. Gemenetzi¹; A. Vitopoulou¹; E. Massou¹; F. Vlastou¹ and K. Gortsos¹

¹National Centre for Social Research; 105 52; Athens; Greece

*Corresponding author: E-mail: kavdelidi@ekke.gr; Tel +30 210 7491638; Fax: +30 2107489130

Abstract

This paper aims to briefly present and elaborate a methodological approach addressing the social impact of urban design and planning on the sustainable development of cities with emphasis to the city of Athens. This methodological approach was part of a research project - conducted by the National Centre for Social Research (EKKE)- attempting to assess the emergent social and spatial issues of urban design through the empirical study of selected urban interventions realized within Athens area during the last three decades.

Therefore; a set of interrelated tools was developed in order to formulate the basis of a methodological approach with reference to the evaluation of the impact of urban design on urban sustainability. These tools are: a) The socio-demographic identification of the surrounding areas of the urban interventions in order to assess their degree of integration in the local social tissue. b) The recording of land use changes before and after the urban interventions; that aims to show the effect of urban design on the functional and spatial organization of the study area. c) A detailed analysis of business activities and their modifications so that the adaptability of economic activities be within the context of the new urban interventions. d) The analysis of the political and scientific discourse through the recording of the views and considerations of planners; researchers and public agents about the necessity; the social acceptance and the perspectives of urban interventions. e) The analysis of qualitative findings of a questionnaire addressed to a target group of users regarding their opinions and experiences about the social activities taking place in selected redesigned public spaces in order to reveal social and spatial implications of urban design.

The paper briefly describes the above methodological tools and presents their main strengths and weaknesses. Given the lack of an established framework regarding the study of urban design social and spatial effects; the main finding of the paper is the proposal of an integrated methodological approach to monitor the impact of urban design on urban sustainability.

Keywords: urban design; social and spatial effects; urban design assessment tools; urban sustainability; Greater Athens

1. INTRODUCTION: BASIC CONSIDERATIONS OF URBAN DESIGN

For the most part, urban design deals with the design and structuring of public space, delimited by the scale and boundaries of the quarters and neighborhoods of a city or of a smaller settlement [1]. Indeed, in recent decades, the interest of urban designers has been highly orientated to urban public spaces (squares, streets, parks, leisure areas, and the like). Urban designers' interest for public open space can be seen as an attempt to better understanding aesthetics and their public [2]. As Appleyard states, with reference to urban

design, “it is important that all major and minor groups be *represented* at all stages of the planning and design process. All needs and values should be understood” [2, p.8]. The urban design is related to architecture and landscape architectural views of the city space, but remains distinct as a multifaceted concept -relating to a large theoretical discussion- that reflects modern urban space and contemporary urban society. However, the key feature that converge towards its clarification is related to its distinction from the architectural design concerned mainly with buildings design at the micro scale of the urban space and from urban planning concerned mainly with the spatial organization of resources, functions and land uses at city scale.

Below, basic dimensions of the operational framework of urban design are presented, which also highlight aspects of the current framework of urban design within the Greek context.

Firstly, the view of Washburn [3], according to whom there are three basic dimensions of urban design (the target, the tools or products and the conditions for success), reveals the operational context of urban design. As the ultimate goal of urban design is to improve urban life, it has to be simultaneously able to respond to current challenges, either they are common, such as budget cuts, or less frequent, such as extreme weather conditions. As well as urban design aims to change the “status quo”, to transform the city by doing it better than it was before, but without planning the entire city, but its parts, therefore three tools are in use: the rule, the plan and the pilot project. The tools are simultaneously the products of urban planning that guide urban change. The rule (often called code) is the simplest product. A typical example is the building regulations code and city plan, since setting the patterns of urban space and buildings may determine the nature and the quality of the public space between them. The plan is the most common product of urban design. It aims to translate the general (strategic) goals of city planning in two-dimensional or three-dimensional drawings that visualize the future urban change. Finally, the project in terms of ‘implemented plan’ is the rarest item of urban design. If an implemented project can transform a greater area surrounding the project site and serve a wider community, the involved stakeholders as well as urban representations of globalisation, is considered within the mainstream aspect as an urban design project. According to Washburn [3], the example of the Guggenheim Museum in Bilbao argues for these dimensions of urban design. The ways for the integration of emblematic and innovative architectural buildings, as having been framed in a number of last urban design projects in Athens, are both a challenge and a realm in the discussion on urban regeneration.

Secondly, concerning the Greek operational context of urban design, the rule of the planning legislation is of decisive importance. The objectives of urban design remain for many years ambiguous in the Greek planning system. For example, the relevant institutionalized reference in the planning legislation appears only the last years with the Law 4067/2012 regarding the New Building Code. An important point has to be considered: Within this Law (article 2, paragraph 9) urban design is identified with the product or result of the combination of the implementation of layout design and the adoption of volumetric and morphological rules that are regulated by the building code. Furthermore, since the built environment in Greek cities has been produced over the past six decades by the private initiative (mainly on the basis of the housing system known as “anti-parochi”) the improvement of public open space (squares, streets and underused spaces inside the city) has gradually identified with the main concern of small-scale urban design projects.

This context has been partly changed during the period of preparation of Athens Olympic Games, when the implementation of large-scale urban projects reached its peak, including

metropolitan transport infrastructure, 'flagship' projects [5], as the Olympic Stadium, large sports equipment, the Olympic Village, the program of the Unification of the Archaeological Sites of Athens and the redevelopment of a number of central squares. In parallel, after the institution of Law 2508/1997, urban design became identified with the urban consolidation tools, namely the 'urban renewal' institution. Finally, the shift of urban development management needs through the guiding framework of sustainability (or sustainable) led to the establishment of projects concerning integrated urban interventions (Law. 2742/99, No. 12), in other words urban projects that addressed also social, economic and environmental problems. However, in quantitative terms, the majority of integrated urban interventions projects were strongly orientated to physical design [6].

To sum up, since the 1990s, there are two main trends that frame the operational urban design consideration. Urban design is viewed as a tool that either may contribute to the increase of competitiveness between the cities via the creation of an attractive urban environment, either the sustainable development via green city planning [6]. The upgrading and the promotion of the city's image consist in new elements that define urban development, along with the emphasis given in issues of cultural infrastructure and urban design as mechanisms that promote the attractiveness of the city through the creation of business, tourism and leisure places [8] (see also [4]).

In particular, in the case of Athens, the upgrading of city's image was set off through projects such as the Unification of the Archaeological Sites, the construction of emblematic architectural buildings (such as the Concert Hall and the New Acropolis Museum), the promotion of mainly International Competitions of urban design, as well as the attraction of international cultural events accompanied by large scale urban design projects (e.g. Olympic Games) [6]. In parallel, integrated urban intervention programs (such as URBAN Community Initiative) that focused on the treatment of social and economic problems in the urban areas have been implemented. However, the majority of urban interventions were oriented to the physical design, whereas the urban intervention programs that have not focused on urban (physical) design have gradually weakened due to the lack of 'culture' regarding strategic urban development plans [6]. Just recently, the "promotion of integrated urban planning strategies in areas that have crucial and complex problems of under-development, social and economic cohesion, environmental degradation and quality of life" (FEK 1341/B/2012) was implemented by the approval of the Plan of Integrated Urban Intervention (SOAP) for the centre of Athens (Government Gazette 64 / B / 16.1.2015). It is not a spatial plan, but a multi-sectoral action development plan, a toolbox of good practices and policies that combine physical projects and activities related to social reform and economic regeneration [(see also [4]).

Taking into account the aforementioned considerations of urban design, it is deduced that in the Greek planning system there is a need of methodological and interdisciplinary inquiries concerning the enhancement of the role of the urban design. The process and projects of urban design are usually depleted within the physical nature of design and do not include the social consideration of urban design.

The current integrated methodological framework is part of the research project *Social impact of urban design for the sustainable development of cities* -that provides an attempt to assess the emergent social and spatial issues of urban design through the empirical study of selected urban design projects implemented within Athens area during the last three decades. This project was conducted by the National Centre for Social Research (EKKE) in the framework of the wider research program *Social impact and public policies in the fields of energy, industry, urban planning and design and internet infrastructure*. The proposed methodological framework is based on the development of a set of interrelated

methodological approaches and tools that may be used in order to evaluate the effects of urban design on urban sustainability. This set of approaches and tools includes the investigation of: the socio-demographic identification of the surrounding areas of urban interventions, the land uses changes before and after the urban interventions, the business adaptations in the redesigned open spaces, the necessity, social acceptance and perspectives of urban interventions through the discourse of planners, researchers and public agents, as well as the social, economic and spatial changes of redesigned public open spaces as they have been observed and experienced by the people working close to the spaces.

2. METHODOLOGICAL APPROACHES AND TOOLS CONCERNING THE ASSESSMENT OF URBAN DESIGN PROJECTS ON URBAN SUSTAINABILITY

The empirical study of the research project was based on five case studies in which urban design projects have been implemented. The selected case studies comprise various public open spaces and two new emblematic modern buildings in which cultural institutions are established. These case studies are located in central or peripheral places within the city area in diversified social and urban context. They result from different urban project types, such as projects concerning the upgrading of public open spaces or “flagship” projects, and have local, metropolitan, national or even international reach. The selected case studies are:

- A. The four squares complex in the central Athens: Omonoia-Kotzia-Varvakeios-Monastiraki.
- B. The New Acropolis Museum and the pedestrian street Dionysiou Areopagitou in the central Athens.
- C. The Stavros Niarchos Foundation Cultural Centre located in the waterfront area of Athens.
- D. The green space along the railway in Moschato.
- E. A set of open spaces dispersed in the district Agioi Elefterioi- Social housing Units.

The methodological approaches and tools concerning the assessment of urban design projects on urban sustainability are thoroughly described below:

(1) Socio-demographic identification of the surrounding areas of the urban projects [10]

This methodological approach aims to explore the social cohesion and consequently the content and the degree of social mix of the areas in which urban projects have been implemented, in order to assess the integration of urban projects in the local social tissue. Further elaboration of the methodological approach presented here, attempts to develop an application tool for the evaluation of the social impact of interventions of urban design with regard to the socio-demographic structuring of the surrounding areas in the case of a given set of interventions. Such a set could be defined on social and spatial criteria within the framework of public urban policy programs. As an insight of this methodological approach may be referred here that the K-means algorithm has been used, in parallel with descriptive statistics, for the clustering of different socio-demographic data. The socio-demographic similarities found, detail the set of the surrounding areas of urban projects under study (the five case studies in the project) and provide them, as a whole, with an actual socio-demographic structure rather than territorial one. Clustering or cluster analysis is the task of grouping a set of objects in such a way that objects in the same group (cluster) are the most similar to each other, and differ to those in other groups. Thirty eight spatial units with equal population size have been selected to comprise the surrounding areas of the above mentioned

case study sites (areas of urban design projects implementation). These spatial units with equal population size coincide with the Spatial Analysis Units defined by the application Mapping Panorama of Greek Census Data 1991-2011 developed by the National Centre for Social Research and Hellenic Statistical Authority (panorama.statistics.gr), according to which each unit corresponds to 1000 inhabitants. By the K-means clustering, a second-order of spatial units has been defined that group the first-order units (the spatial units of equal population size) in function of the maximum similarity of their socio-demographic characteristics basing on a broad set of categories (see Table 1).

Table 1. Socio-demographic characteristics of the second-order spatial units arisen from the application of K-mean clustering and grouping the (first-order) spatial units of equal population size. The percentages correspond to the centres of those groups (second-order spatial units). In bold, the highest and lowest percentages for all groups, and shading marks the deviations from the average value for each group per category [10].

| | GROUPS OF SOCIO-DEMOGRAPHIC CHARACTERISTICS | | | | | | | | | |
|-------------------------------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Men | 72.00 | 47.00 | 48.00 | 48.00 | 58.00 | 49.00 | 47.00 | 47.00 | 46.00 | 47.00 |
| 0-14 | 6.00 | 13.00 | 16.00 | 13.00 | 9.00 | 11.00 | 13.00 | 11.00 | 8.00 | 14.00 |
| 15-24 | 16.00 | 10.00 | 10.00 | 12.00 | 7.00 | 12.00 | 10.00 | 6.00 | 8.00 | 10.00 |
| 25-34 | 30.00 | 16.00 | 17.00 | 16.00 | 23.00 | 15.00 | 14.00 | 12.00 | 16.00 | 16.00 |
| 35-44 | 21.00 | 15.00 | 19.00 | 14.00 | 22.00 | 15.00 | 16.00 | 16.00 | 16.00 | 15.00 |
| 45-54 | 11.00 | 14.00 | 14.00 | 17.00 | 15.00 | 15.00 | 15.00 | 15.00 | 14.00 | 15.00 |
| 55-64 | 8.00 | 12.00 | 11.00 | 13.00 | 10.00 | 13.00 | 14.00 | 15.00 | 13.00 | 12.00 |
| 65-74 | 4.00 | 9.00 | 7.00 | 8.00 | 6.00 | 9.00 | 9.00 | 12.00 | 11.00 | 10.00 |
| 75+ | 4.00 | 11.00 | 6.00 | 10.00 | 7.00 | 10.00 | 9.00 | 13.00 | 13.00 | 10.00 |
| master | 1.00 | 2.00 | 3.00 | 1.00 | 6.00 | 1.00 | 3.00 | 16.00 | 8.00 | 2.00 |
| bachelor | 11.00 | 20.00 | 22.00 | 11.00 | 20.00 | 13.00 | 20.00 | 36.00 | 33.00 | 18.00 |
| degree of upper secondary education | 31.00 | 33.00 | 34.00 | 26.00 | 30.00 | 31.00 | 35.00 | 28.00 | 33.00 | 33.00 |
| Technical school | 4.00 | 6.00 | 7.00 | 9.00 | 4.00 | 6.00 | 6.00 | 1.00 | 2.00 | 5.00 |
| degree of Gymnasium | 15.00 | 11.00 | 10.00 | 12.00 | 14.00 | 13.00 | 12.00 | 5.00 | 8.00 | 12.00 |
| degree of elementary school | 23.00 | 19.00 | 13.00 | 30.00 | 15.00 | 25.00 | 17.00 | 9.00 | 10.00 | 21.00 |
| partial elementary education | 12.00 | 4.00 | 1.00 | 7.00 | 8.00 | 7.00 | 3.00 | 1.00 | 2.00 | 6.00 |
| preschool education | 2.00 | 5.00 | 7.00 | 5.00 | 3.00 | 5.00 | 6.00 | 4.00 | 3.00 | 6.00 |
| single | 48.00 | 40.00 | 41.00 | 41.00 | 47.00 | 40.00 | 40.00 | 44.00 | 46.00 | 40.00 |
| widow/ divorced | 9.67 | 12.86 | 8.33 | 13.00 | 12.00 | 12.00 | 52.20 | 18.00 | 18.00 | 51.50 |
| married | 42.00 | 47.00 | 51.00 | 47.00 | 41.00 | 48.00 | 47.00 | 39.00 | 36.00 | 47.00 |
| economically active | 48.67 | 40.14 | 47.67 | 35.50 | 48.00 | 37.60 | 41.20 | 50.00 | 45.33 | 38.00 |
| economically inactive | 51.67 | 59.29 | 53.67 | 64.00 | 53.00 | 62.10 | 59.60 | 51.00 | 56.00 | 62.00 |
| white collar | 47.33 | 71.43 | 74.67 | 60.50 | 64.00 | 61.60 | 75.00 | 86.00 | 82.67 | 67.50 |
| blue collar | 53.00 | 28.71 | 24.33 | 39.50 | 35.00 | 38.70 | 25.80 | 15.00 | 17.00 | 32.00 |
| other than Greek nationality | 77.00 | 9.00 | 5.00 | 9.00 | 47.00 | 9.00 | 8.00 | 14.00 | 14.00 | 12.00 |
| 1 member | 10.00 | 12.00 | 10.00 | 11.00 | 24.00 | 10.00 | 12.00 | 24.00 | 26.00 | 13.00 |
| 2 members | 17.00 | 26.00 | 22.00 | 25.00 | 23.00 | 23.00 | 23.00 | 29.00 | 31.00 | 25.00 |
| 3-4 members | 32.00 | 54.71 | 59.33 | 52.50 | 44.00 | 55.90 | 54.80 | 39.00 | 35.00 | 49.50 |
| 5+ members | 41.00 | 7.86 | 9.00 | 11.50 | 10.00 | 9.90 | 11.40 | 14.00 | 12.00 | 15.00 |
| detached or semi detached house | 2.67 | 24.57 | 14.00 | 15.50 | 9.00 | 47.70 | 18.80 | 39.00 | 12.33 | 30.50 |
| block | 97.00 | 75.00 | 86.00 | 84.00 | 89.00 | 52.00 | 81.00 | 60.00 | 85.00 | 69.00 |
| before1946 | 4.00 | 3.00 | 1.00 | 0.00 | 8.00 | 4.00 | 1.00 | 35.00 | 14.00 | 18.00 |
| 1961-1980 | 75.00 | 50.00 | 20.00 | 82.00 | 71.00 | 52.00 | 35.00 | 20.00 | 52.00 | 19.00 |
| after1991 | 0.33 | 24.00 | 62.67 | 8.50 | 7.00 | 13.60 | 33.60 | 18.00 | 3.33 | 31.00 |

(2) Land uses changes before and after the implementation of urban design projects [4]

The recording of land use change in the adjacent area of the urban design project before and after its implementation is a fundamental tool for the assessment of the impact of urban design project on urban development. Specifically, this tool investigates the spatial and functional organization of land uses concerning the urban project's adjacent area and its transformation after the urban project implementation. It may give indications about the mix

of land uses, the economic and social regeneration of the study area, and in general, the urban sustainability of the area.

The methodology of land use analysis is based on two axes: (1) the mapping of existing land uses and (2) the comparison of land uses over time. A basic methodological option is the distinction of land uses in two levels of the city's space: a) the level of the ground floor of the buildings and b) the level of the set of the rest floors of buildings. At least, two time data series are needed for the investigation of the land uses changes. Therefore, the data are based on a) an on-site research and b) data extracted by the on-site research made by Attiko Metro S.A. in Athens on 1995. Land uses have been classified on the basis of FEK 142/28.6.2014 (N. 4269/2014 - Chapter B'). Apart from the classification that uses the legislation, a new category named "empty/without use" has been added since the last years empty spaces in buildings or even entirely abandoned buildings have been increased as a result of the recession. In short, land uses (existing in urban areas) are classified in two categories: general land uses and specific land uses (Table 2). They are statistically edited and the results are presented in maps. The statistical editing gives information about the prevalence and the shrinkage trends of certain land uses. This, in combination with the spatial pattern of land uses, indicates the formulation of the new identity of the study area.

Table 2. Specific and General categories of land uses [4]

| Specific categories of land uses | General categories of land uses |
|--|--|
| Plain Residence | Residence |
| General Residence | |
| Retail, Services (local level) | Local Services |
| Medical care, welfare, culture (local level) | |
| Primary education | |
| Secondary education | |
| Green spaces, open spaces, sports, leisure, religious services (local level) | |
| Retail (hyper-local level) | Central (city level) Services |
| Offices | |
| Administration | |
| Mixed land uses | |
| Tertiary Education | Institutions-Social Infrastructure |
| Medical care | |
| Welfare | |
| Sports (hyper-local level) | Cultural Services |
| Green/ open spaces (hyper-local level) | |
| Religious services (hyper-local level) | |
| Leisure services (hyper-local level) | |
| Warehouses outside statutory industrial areas | Freight services |
| Wholesale | |
| Small Industry | Small Industry |
| Parking - car services | Transport |
| Mass urban transport facilities | |
| Long-distance mass transport facilities | |
| Void buildings/spaces | Special land uses |
| Under construction buildings/spaces | |
| Vacant plots | |

(3) Adaptability of business activities in regenerated open spaces [11]

The analysis of current business activities in selected open public spaces aims to examine the trade character of regenerated open spaces as well as its modifications. The study based on a detailed field recording of the existing business activities in the regenerated four central squares of Athens (Omonoia-Kotzia-Varvaki-Monastiraki). The recording refers to all activities that are located on the ground floor of buildings bordering the open space of the examined square, including also light or ephemeral constructions and facilities (such as light kiosks, booths etc.) inside the open space. The entries on an Excel Worksheet of the collected data are categorized according to the land use definitions of the urban planning legislation and the results are presented in graphs. Besides, these results are combined with the findings of the questionnaire described in the methodological approach (5) in order to estimate the degree of business adaptability in the squares after their urban regeneration

(4) Political and scientific discourse analysis [12]

The qualitative method of political and scientific discourse analysis is used to estimate the necessity, social acceptance, possibilities and perspectives of urban design projects implementation, giving emphasis to the social dimensions of urban design. From the set of various groups of actors who are usually involved in the process of urban projects design and implementation, the discourse analysis focused on the views and perceptions of two groups of actors: a) public agents participating in the decision-making process as well as in the design and implementation of urban projects and b) specialists: creators (such as architects, urban planners etc.) and/or researchers.

The discourse analysis is based on two complementary investigations. The first investigation refers to the analysis of secondary sources concerning articles and published interviews of the creators (architects, urban planners), researchers and authorized actors of the design and implementation of urban projects. It also includes the analysis of primary sources that is material originated from the administrative archives of the relevant urban design and implementation authorities, such as tender notices for architectural competitions issues, jury reviews, contracts, other documents, etc. The second one focuses on semi-structured interviews addressed to people that have a responsible position in the relevant public agents of urban projects design and implementation. Therefore, an Interview Guide has been formulated with four thematic axes. These four axes focus on the investigation of: (a) The conditions that indicate the necessity and objectives of the urban project, its character and the problems that intends to solve, its integration in broader urban sustainability strategies and the degree that international experience influences urban design. (b) The pros and cons of cooperation between different agents involved in the urban planning process including the research institutions. (c) The potential assessment of social, environmental and economic effects of urban design as well as the degree that social dimension is incorporated into urban design. Besides, it explores the social acceptance of the citizens and the ways that it is expressed. (d) The perception of public agents concerning the possibilities for urban projects implementation, the basic priorities of urban design and the funding tools that could contribute to its implementation in the era of crisis.

(5) Studying the relationship of a target group of users of public open spaces with their regeneration A questionnaire -having the form of face to face interview- is used for the investigation of the social, economic and spatial effects of urban design projects. This questionnaire is designed to be addressed to the target group of people working in businesses situated in the study area, so that have an everyday experience with the regenerated open

Table 3. General and specific thematic issues for compiling findings arisen from the two complementary investigations on the published discourse and the semi-guided interviews. The systematic analysis of the findings argues for the interpretative dimension in their description and comment [12].

| General thematic axes of analysis | Specific thematic axes of analysis |
|---|---|
| 1. Necessity and objectives of urban design projects (axis A of the Interview Guide) | (a) Character, key objectives and expected results (b) Incorporation of the social dimension of the necessity of urban projects in the public agents' texts (c) Integration into wider urban strategies (d) Urban "models" and/or examples of best practices promoted/implemented by both public agents and creators |
| 2. Results and social acceptance of urban projects (axis C of the Interview Guide) | (a) Study of the urban projects impact (social, economic, environmental) using quantitative and/or qualitative methods (b) Social impact of the urban projects and benefiting population groups (c) Acceptance of urban projects as expressed by the attitude of the local community and the users in general (d) Issues of use and maintenance |
| 3. Possibilities and perspectives of urban projects (axes B+D of the Interview Guide) | (a) Collaboration with other public agents and stakeholders, consultation processes and possibilities to co-produce urban intervention programs (b) Possibilities for urban projects implementation (c) Key priorities of the public agents and proposals for strengthening the social consideration of urban projects (d) Available funding tools, particularly in the current context of the economic crisis |

spaces. It aims to extract information with reference to the knowledge, perceptions and experiences of respondents about the public open spaces and their empirical assessment of social, economic and spatial effects of urban projects. Apart from the section that refers to the socio-demographic profile of the respondent (gender, age, educational level, professional status, nationality), the questionnaire is divided in five sections concerning: (a) Description of the basic characteristics of the businesses in which respondents are employed (type of business, location, main activity, number of employees, rent or owned space, first year of business establishment etc.) and development of businesses in relation to the previous urban projects implementation as well as the economic and refugee crisis in order to weigh up the different effects and their causes. (b) Respondents' perception about the integration of the square's surrounding area in the local social tissue. (c) Evaluation of the today use of the square area based on the empirical observation of the everyday activities that take place, their frequency and the type of users and visitors (nationality, gender, age etc.) as well as their mutation over time. (d) Assessment of quality of the open space and its evolution highlighting the advantages and drawbacks of open space that have been provoked by the implementation of various urban design projects. (e) Respondents' opinion about their participation in urban design processes concerning open public spaces [13].

3. EVALUATION AND DISCUSSION

The above presented interdisciplinary methodological approaches and tools may provide an integrated methodological framework for evaluating the impact of urban design on urban sustainability, giving emphasis to its social dimension. The innovation of the proposed integrated methodological framework arises from the compiled quantitative and qualitative findings of the complementary investigations. These may shed light on social, economic and spatial effects of urban design, in particular highlighting aspects of social cohesion and social mix, economic restructuring, every day activities in open public spaces, social acceptance, necessity and possibilities of urban design projects.

However, not all of the proposed approaches and tools have the same feasibility. In fact, the socio-demographic identification is the most accessible tool, since it is based on the use of statistical data. The other approaches and tools are based on information collected through field surveys (concerning semi-structured interviews, questionnaires land uses and activities recording). However, field surveys may be time-consuming and costly, since there is the need of experts who will be able to collect the necessary information. Another important difference among the suggested approaches and tools is that some of them are based on quantitative measurements or data and other on qualitative data. This is of high importance as the quantitative and qualitative findings have a complementary role and, therefore, may contribute to a better interpretation and a more integrated assessment of the social impact of urban design. In particular, in the long-term, quantitative data may comprise a useful database for the monitoring of urban design over time. In addition, this database makes feasible the application of meta-analysis method that can conclude in a more objective way on issues related to the social effects of urban design.

The bottom line is that the suggested integrated methodological framework may compare the actual results of the projects against the expected results. Therefore, it may establish the role of urban design project-taking into account its type, its location and its objectives- in the urban sustainability of the city through the evaluation of its social impact. In short, the institutionalization of a framework evaluating the social impact of urban design is necessary in order to maximise its social benefits. Its implementation should be done from high-qualified staff in the public agents (municipal or metropolitan authorities) that are responsible for the design and implementation of urban projects.

References

1. Moughtin C. 1999. *Urban Design: Street and Square*. Architectural Press, Oxford..
2. Appleyard R. (1991). Foreword. In A.V. Moudon (ed.). *Public Streets for Public Use*. Columbia University Press, New York.
3. Washburn, A. 2013. *The Nature of Urban Design. A New York Perspective on Resilience*. Island Press, Washington, Covelo, London.
4. Gemenetzi, G. 2017. Considering land uses as a tool for the investigation of urban design projects in urban development. *Working Paper*. National Centre for Social Research, Athens (in Greek).
5. Hall, T.1999. *Urban Geography*. Kritiki, Athens (in Greek).
6. Economou, D., Petrakos, G. 1999. Urban development and organization policies in Greece. *The Development of Greek Cities* (D. Economou and G. Petrakos, eds.). Gutenberg, University Press of Thessaly, Athens, Volos, 413-446.

7. Komninos, N. 1986. *Theory of Urbanism - (iii) urban design and city construction*. Sychrona Themata, Thessaloniki (in Greek).
8. Newman, P., Thornley, A. 2005. *Planning World Cities: Globalization and Urban Politics*. Palgrave-Macmillan, London.
9. Kafkalas, G., Vitopoulou, A., Gemenetzi, G., Yiannakou, A., Tasopoulou, A. 2015. *Sustainable Cities: Adaptation and Resilience in the Era of Crisis*.
10. Avdelidi, K., Massou E. 2017. Socio-demographic identification of the surrounding areas of urban projects. *Working Paper*. National Centre for Social Research, Athens (in Greek).
11. Gortsos, K. 2017. The commercial character of four central squares in Athens after the urban renewal projects. *Working Paper*. National Centre for Social Research, Athens (in Greek).
12. Vitopoulou, A, Vlastou, F., 2017. Necessity, acceptance and possibilities of urban design projects: Views and perceptions of public agents and creators. *Working Paper*. National Centre for Social Research, Athens (in Greek).
13. Avdelidi, K. (ed). 2017 (under publication). *Empirical Investigation for the Social Consideration of Urban Design Interventions*. National Centre for Social Research, Athens (in Greek).