



THE ATHENS INSTITUTE FOR EDUCATION AND RESEARCH

# Abstract Book

**14<sup>th</sup> Annual International Conference on  
Urban Studies & Planning  
3-6 June 2024, Athens, Greece**

**Edited by  
Giulia Pellegrini & Olga Gkounta**

2024



Abstracts  
14<sup>th</sup> Annual International  
Conference on Urban Studies &  
Planning  
3-6 June 2024, Athens, Greece

Edited by  
Giulia Pellegri & Olga Gkounta

First published in Athens, Greece by the Athens Institute for Education and  
Research.

ISBN: 978-960-598-619-3

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9 Chalkokondili Street

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## Preface

This book includes the abstracts of all the papers presented at the 14<sup>th</sup> Annual International Conference on Urban Studies & Planning (3-6 June 2024), organized by the Athens Institute for Education and Research (ATINER).

A full conference program can be found before the relevant abstracts. In accordance with ATINER’s Publication Policy, the papers presented during this conference will be considered for inclusion in one of ATINER’s many publications only after a blind peer review process.

The purpose of this abstract book is to provide members of ATINER and other academics around the world with a resource through which they can discover colleagues and additional research relevant to their own work. This purpose is in congruence with the overall mission of the association. ATINER was established in 1995 as an independent academic organization with the mission to become a forum where academics and researchers from all over the world can meet to exchange ideas on their research and consider the future developments of their fields of study.

To facilitate the communication, a new references section includes all the abstract books published as part of this conference (Table 1). I invite the readers to access these abstract books –these are available for free– and compare how the themes of the conference have evolved over the years. According to ATINER’s mission, the presenters in these conferences are coming from many different countries, presenting various topics.

**Table 1.** *Publication of Books of Abstracts of Proceedings, 2011-2024*

Year	Papers	Countries	References
2024	33	15	Pellegri and Gkounta (2024)
2023	47	19	<a href="#">Patricios and Gkounta (2023)</a>
2022	42	20	<a href="#">Patricios and Gkounta (2022)</a>
2021	26	13	<a href="#">Papanikos (2021)</a>
2020	24	16	<a href="#">Papanikos (2020)</a>
2019	33	19	<a href="#">Papanikos (2019)</a>
2018	39	19	<a href="#">Papanikos (2018)</a>
2017	44	15	<a href="#">Papanikos (2017)</a>
2016	40	24	<a href="#">Papanikos (2016)</a>
2015	24	17	<a href="#">Papanikos (2015)</a>
2014	35	23	<a href="#">Papanikos (2014)</a>
2013	28	18	<a href="#">Papanikos (2013)</a>
2012	20	10	<a href="#">Papanikos (2012)</a>
2011	34	12	<a href="#">Papanikos (2011)</a>

It is our hope that through ATINER's conferences and publications, Athens will become a place where academics and researchers from all over the world can regularly meet to discuss the developments of their disciplines and present their work. Since 1995, ATINER has organized more than 400 international conferences and has published over 200 books. Academically, the institute is organized into 6 divisions and 37 units. Each unit organizes at least one annual conference and undertakes various small and large research projects.

For each of these events, the involvement of multiple parties is crucial. I would like to thank all the participants, the members of the organizing and academic committees, and most importantly the administration staff of ATINER for putting this conference and its subsequent publications together.

**Gregory T. Papanikos**  
**President**

## **Editors' Note**

These abstracts provide a vital means to the dissemination of scholarly inquiry in the field of Urban Studies & Planning. The breadth and depth of research approaches and topics represented in this book underscores the diversity of the conference.

ATINER's mission is to bring together academics from all corners of the world in order to engage with each other, brainstorm, exchange ideas, be inspired by one another, and once they are back in their institutions and countries to implement what they have acquired. The 14th Annual International Conference on Urban Studies & Planning accomplished this goal by bringing together academics and scholars from 15 different countries (Australia, Bosnia and Herzegovina, Canada, China, France, India, Italy, Philippines, Poland, Spain, Taiwan, Türkiye, UAE, UK, USA), which brought in the conference the perspectives of many different country approaches and realities in the field.

Publishing this book can help that spirit of engaged scholarship continue into the future. With our joint efforts, the next editions of this conference will be even better. We hope that this abstract book as a whole will be both of interest and of value to the reading audience.

**Giulia Pellegrini & Olga Gkounta**  
**Editors**

## **14<sup>th</sup> Annual International Conference on Urban Studies & Planning, 3-6 June 2024, Athens, Greece**

### **Organizing & Scientific Committee**

All ATINER's conferences are organized by the Academic Council. This conference has been organized with the assistance of the following academic members of ATINER, who contributed by reviewing the submitted abstracts and papers.

1. Gregory T. Papanikos, President, ATINER & Honorary Professor, University of Stirling, U.K.
2. Nicholas N. Patricios, Vice President of Strategic Planning & Analysis, ATINER, Dean Emeritus & Professor, School of Architecture, University of Miami, USA.
3. Clara Germana Gonçalves, Head, Architecture & Design Unit, ATINER & Researcher, CITAD (Centro de Investigação em Território, Arquitectura e Design), Lusíada University and Invited Assistant Professor, Lisbon School of Architecture, University of Lisbon, Portugal.
4. Jesus J. Lara, Head, Urban & Regional Planning Unit, ATINER & Professor, The Ohio State University, USA.
5. Giulia Pellegrini, Head, Environment & Landscape Unit, ATINER and Vice Dean & Associate Professor, Architecture-Polytechnic School, University of Genoa, Italy.
6. Virginia Sisiopiku, Head, Transportation Engineering Unit, ATINER, & Professor, The University of Alabama at Birmingham, USA.

## FINAL CONFERENCE PROGRAM

14<sup>th</sup> Annual International Conference on Urban Studies & Planning, 3-6  
June 2024, Athens, Greece

### PROGRAM

Monday 3 June 2024

08.30-09.15

Registration

09:15-09:45

Opening and Welcoming Remarks:

- o **Gregory T. Papanikos**, President, ATINER.

09:45-11:30 Session 1

**Moderator: Giulia Pellegrini**, Head, Environment & Landscape Unit, Athens Institute and Vice Dean & Associate Professor, Architecture-Polytechnic School, University of Genoa, Italy.

1. **Gregorio Froio**, Professor, Università della Calabria, Italy.  
*Title: Archaeology and Modern Architecture. A Comparative Reading.*
2. **Michela Scaglione**, Research Fellow, University of Genoa, Italy.  
*Title: Nudging and the Architecture of Choices: The Tools of Behavioral Economics for a More Sustainable City.*
3. **Martina Tazzara**, PhD Student, University of Milan/University of Turin, Italy.  
*Title: Public Transport Implementation: A Policy-Making Process for or against Poverty? Between Germany and Italy: A Comparative Study.*

11:30-13:00 Session 2

**Moderator: Michail Fragkias**, Professor, Boise State University, USA.

1. **Robert Hammarberg**, Faculty Associate & Assistant Director, Public Health Practice and Engagement, The University of Texas Health Science Center at Houston (UTHealth Houston), USA.  
*Title: Urban Odyssey: Navigating Multidimensional Strain, Innovative Mitigation, and Public Health Resilience in Rapidly Growing 'Hot Cities'.*
2. **Duo Chai**, Associate Professor, Central University of Finance and Economics, China.  
*Title: How Does the Promotion Competitive Pressure among Chinese Cities' Officials Affect the Revenue and Expenditure Patterns of State-owned Land Sales: Evidence from 254 Cities in China.*
3. **Cem Kayatekin**, Assistant Professor, IE University, Spain.  
*Title: The Relationship between the Built World and the Nesting Habits of the European White Stork: A Case Study of Segovia, Spain.*
4. **Nestor Garza**, Assistant Professor, California State University, Dominguez Hills, USA.  
*Title: Land Values, High-rise Construction and Planning in the Long-run: The Case of Bogota, Colombia, 1960-2010.*

13:00-14:30 Session 3

**Moderator: Nestor Garza**, Assistant Professor, California State University, Dominguez Hills, USA.

1. **Panagiotis Giannakis**, Assistant Teaching Professor, The Pennsylvania State University, USA.  
**Dorothea Roumpi**, LER Alumni Endowed Early Career Professor, The Pennsylvania State University, USA.  
**John E. Delery**, Professor and Raymond F. Orr Chair, University of Arkansas, USA.  
*Title: Diffusion of Organisational LGBT-Friendly Practices and Geography: The Role of Localised LGBT-Friendliness Density.*
2. **Vera Dorofeeva-Lichtmann**, Chargé de Recherche, CNRS, France.

- Title: Translating Basic Geographical Texts into Maps: The Case of Pre-Modern China.*
3. **Anupriya Sharma**, Research Scholar, Chaudhary Charan Singh University, Meerut, India.  
*Title: Air Pollution and Human Health in Meerut (DELHI-NCR) Region, India: A Case Study.*
  4. **Toshiyuki Yokota**, Principal Evaluation Specialist, Asian Development Bank, Philippines.  
*Title: Application of Geographic Information Systems in Impact Evaluation of Transport Projects.*

**14:30-15:30 Lunch**

**15:30-17:30 Session 4**

**Moderator: Vera Dorofeeva-Lichtmann**, Chargé de Recherche, CNRS, France.

1. **Alioscia Mozzato**, Research Fellow, University Iuav of Venice, Italy.  
*Title: The Reinvention of Modernity. Gianugo Polesello and the Gruppo Architettura.*
2. **Iris Levin**, Senior Lecturer, RMIT University, Australia.  
*Title: Fit for Purpose: Social Housing and People from Refugee and Migrant Backgrounds.*
3. **Natalie Robertson**, PhD Candidate/Research Coordinator, University of Calgary, Canada.  
**Fabian Neuhaus**, Associate Professor, University of Calgary, Canada.  
*Title: Space and the Asocial Society: Changes in the Allocation of In-public Space in Calgary, Canada.*
4. **Fathia Elmenghawi**, Assistant Professor, American University of Ras Al Khaimah, UAE.  
*Title: Implications of Two Colonial Approaches on Urban Expansion of Tripoli, Libya.*
5. **Isra Tatlic**, Assistant Professor, University of Sarajevo, Bosnia and Herzegovina.  
**Senka Ibrišimbegović**, Associate Professor, University of Sarajevo, Bosnia and Herzegovina.  
*Title: Integration of Culture in Public Spaces – Cultural District Sarajevo.*

**20:30-22:30**

**Athenian Early Evening Symposium (includes in order of appearance: continuous academic discussions, dinner, wine/water, music)**

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**Tuesday 4 June 2024**

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**09:00-10:30 Session 5**

**Moderator: Toshiyuki Yokota**, Principal Evaluation Specialist, Asian Development Bank, Philippines.

1. **Michail Fragkias**, Professor, Boise State University, USA.  
*Title: Predicting Metropolitan Economic Output Globally: New Estimation Methods and Global Database on Gross Metropolitan Product and Innovativeness.*
2. **Gerald Zhiyong Lan**, Professor, Tsinghua University, China.  
**Dongquan Li**, Professor, Renmin University of China, China.  
*Title: Investing for Urban Life – A New Paradigm in Urban Community Renovation.*
3. **Friedemann Roy**, Adviser to the Vice President, International Finance Corporation, USA.  
*Title: The Impact of Demographic Developments and Climate Change in Urban Planning in Asia.*

**10:30-12:00 Session 6**

**Moderator: Michela Scaglione**, Research Fellow, University of Genoa, Italy.

1. **Xin Wang**, Associate Professor, Beijing Jiaotong University, China  
**Ye Liu**, Associate Professor, Beijing University of Civil Engineering and Architecture, China.  
**Yue Tang**, Assistant Professor, University of Nottingham, UK.  
*Title: The Heritagization Historical Process and Conservation Patterns of Canals in the UK.*
2. **Giulia Pellegrini**, Vice Dean & Associate Professor, Architecture-Polytechnic School, University of Genoa, Italy.  
**Daniela Pittaluga**, Associate Professor, University of Genoa, Italy.  
**Giacomo Calvi**, Professor, University of Genoa, Italy.

<p><i>Title: Conservation of Historical Port Architecture.</i></p> <p>3. <b>Faten Hatem</b>, PhD Student, University of the West of England, Bristol, UK. <i>Title: The Making of the Liveable City; The Overlooked Aspects of Smart Cities Design.</i></p> <p>4. <b>Seyedmoein Miremad</b>, PhD Student, Polytechnic University of Milan, Italy. <i>Title: Sustainable Urban Drainage Systems for Reducing Flood Risk at The Catchment Scale: The Seveso Watershed Case Study.</i></p>
<p><b>12:00-13:30 Session 7</b> <b>Moderator: Faten Hatem</b>, PhD Student, University of the West of England, Bristol, UK.</p>
<p>1. <b>Linda Weld</b>, Adjunct Professor, Wentworth Institute of Technology, USA. <i>Title: Building Identity Within the City: The Question of Outdoor Mural Art in Boston, Massachusetts.</i></p> <p>2. <b>Anna Paltseva</b>, Assistant Professor, University of Louisiana at Lafayette, USA. <i>Title: Combatting Soil Contamination in Urban Environments: Strategies for Sustainable City Parks and Communities.</i></p> <p>3. <b>Tiebei Li</b>, Senior Research Fellow, RMIT University, Australia. <b>Yina Sima</b>, Lecturer, University of Nottingham Ningbo China, China. <i>Title: Impacts of Worker Residential Migration on Urban Settlement, Commuting, and Employment Efficiency in an Australian City.</i></p> <p>4. <b>Carlo Arteni</b>, Retired Worker, Ministry of Education, Italy. <i>Title: A New Gaza.</i></p>
<p><b>13:30-14:30 Lunch</b></p>
<p><b>14:30-16:30 Session 8</b> <b>Moderator: Robert Hammarberg</b>, Faculty Associate &amp; Assistant Director, Public Health Practice and Engagement, The University of Texas Health Science Center at Houston (UTHealth Houston), USA.</p>
<p>1. <b>Kung-Jen Tu</b>, Professor, National Taiwan University of Science and Technology, Taiwan. <i>Title: Effective Property Management Model for Managing National Massive Social Housing Estates in Taiwan.</i></p> <p>2. <b>Mirosław Belej</b>, Associate Professor, University of Warmia and Mazury in Olsztyn, Poland. <b>Radosław Cellmer</b>, Associate Professor, University of Warmia and Mazury in Olsztyn, Poland. <i>Title: The Impact of Location in An Airport Limited Use Area on Real Estate Prices.</i></p> <p>3. <b>Maria Isabel Oliver</b>, Assistant Professor, American University of Sharjah, UAE. <i>Title: Parque Luis Muñoz Marín: An Incomplete Collection of Utopian Fragments.</i></p> <p>4. <b>Raghad Halawani</b>, PhD Candidate, University of Strathclyde, UK. <i>Title: Transforming Urban Spaces: A Multifaceted Exploration of Design, Development, and Planning in Saudi Arabian Cities.</i></p> <p>5. <b>Jingyuan Zhang</b>, Associate Professor, Harbin Institute of Technology, China. <i>Title: An Innovative Method to Assess Equity of Urban Parks Incorporating Microscale Demand Data.</i></p> <p>6. <b>Pelin Olcay</b>, Assistant Professor, Istanbul Kent University, Türkiye. <i>Title: Industrialisation, Deindustrialisation and Sustainable Development in Metropolitan Cities of Developing Countries: The Case of Istanbul Bağcılar Region.</i></p>
<p><b>17:00-20:00 Session 9</b> <b>Old and New-An Educational Urban Walk</b></p>
<p>The urban walk ticket is not included as part of your registration fee. It includes transportation costs and the cost to enter the Parthenon and the other monuments on the Acropolis Hill. The urban walk tour includes the broader area of Athens. Among other sites, it includes: Zappion, Syntagma Square, Temple of Olympian Zeus, Ancient Roman Agora and on Acropolis Hill: the Propylaea, the Temple of Athena Nike, the Erechtheion, and the Parthenon. The program of the tour may be adjusted, if there is a need beyond our control. This is a private event organized by ATINER exclusively for the conference participants.</p>

20:30-22:00  
Dinner

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**Wednesday 5 June 2024**  
**An Educational Visit to Selected Islands**  
**or Mycenae Visit**

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**Thursday 6 June 2024**  
**Visiting the Oracle of Delphi**

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**Friday 7 June May 2024**  
**Visiting the Ancient Corinth and Cape Sounion**



**Carlo Artemi**

Retired Worker, Ministry of Education, Italy

## **A New Gaza**

The history of every city can be seen as a series of constructions and destructions. Let's think about late antiquity, from Paganism to Christianity; pagan temples that become useless if not demonic, and are therefore destroyed, while the new Christian churches are built. What is happening in Gaza can be seen as a phase of destruction of a city. It is therefore obvious that this phase will necessarily have to be followed by a construction phase. It seems clear that this construction phase which could be extended to the whole city will have to be done such a way the most advanced concepts of architecture and urban planning are applied; in addition of course to the most recent techniques. Words such as "bio-architecture", "alternative energies", "mobility on rail" "men friendly", "children friendly" or "Nature friendly" cannot remain rhetorical formulas. In this speech, the author wants to outline the main characteristics of a "new Gaza" with some hints on the sizing of certain structures. The existence of an autonomous Palestinian government and financing of the works by the international community will be hypothesized. Author believes that, even if the project presented may seem utopian, many concepts contained in it may be useful if not indispensable in other situations.

**Mirosław Belej**

Associate Professor, University of Warmia and Mazury in Olsztyn,  
Poland

**Radosław Cellmer**

Associate Professor, University of Warmia and Mazury in Olsztyn,  
Poland

&

**Jan Konowalczyk**

Assistant Professor, Krakow University of Economics, Poland

## **The Impact of Location in an Airport Limited Use Area on Real Estate Prices**

This article analyses the impact of location in limited-use areas around airports on real estate prices in selected cities in Poland. Creating limited-use areas around airports is primarily stabilising the housing market. These zones typically set out increased technical requirements for buildings and place restrictions on the planning of land use for those purposes that, in economic and social terms, do not meet sustainability requirements.

Therefore, the adverse effects of being located near airports mean exposure to aviation noise and restrictions imposed on the use of and investment in such land. The consequence may be the emergence of a negative perception of these zones in society, which may result in a fall in prices in the area. On the other hand, the airport's proximity may also result in positive effects related to developing urban infrastructure and transport networks.

The studies examined the negative and positive effects of being in limited-use areas around airports. They attempt to answer the question of to what extent and in what way the specifics of these areas shape real estate transaction prices.

The study used both classical and spatial regression models. The study revealed the presence of high and low-price clusters in the vicinity of airports, which are distributed irregularly, indicating that the influence of both neighbourhood effects and use restrictions varies spatially.

The result of the study is the identification of a general causal relationship between location in use restriction areas around airports and property prices.

**Duo Chai**

Associate Professor, Central University of Finance and Economics,  
China

**How Does the Promotion Competitive Pressure among  
Chinese Cities' Officials Affect the Revenue and  
Expenditure Patterns of State-owned Land Sales:  
Evidence from 254 Cities in China**

For a long time, Chinese cities have relied on selling the use right of state-owned land for fiscal revenue, which has supported infrastructure construction and public services in Chinese cities and promoted rapid industrialization and urbanization. However, many studies have shown that obtaining revenue from land has exacerbated the expansion of urban construction land and the shrinkage of ecological space, as well as the waste of local fiscal expenditure and corruption. In the context of the difficulty of replacing land revenue, it is necessary to reduce the consumption of land resources for land fiscal revenue and enhance the rationality of land fiscal expenditure. The competition for promotion among local officials in China may be an important reason for the resource consumption and expenditure structure of the sale of state-owned land. This paper deduces the theoretical path of "official competition for promotion-change of financial pressure - rationality of land finance", designs the measurement indicators of "rationality" of land finance revenue and expenditure, as well as comprehensively uses panel data GMM regression, mediating effect model, threshold effect model etc. to test the impact of local officials' promotion competition on the "rationality" of land finance with financial pressure rising based on the data of 251 cities from 2009 to 2018. The results show that during the research period, the increase of officials' promotion competition intensity in sample cities has a negative impact on the rationality of land revenue and expenditure in general, and financial pressure has a significant mediating effect partly; around the threshold of financial pressure, the promotion of city officials has a nonlinear effect which is in a "negative - positive - negative" order on the rationality of land financial revenue, and has a negative to positive effect on the rationality of land financial expenditure; There is a significant difference on what influences mayors and municipal party secretaries. In the future, we should continue "controlling the increase and forcing the deposit", strengthen the performance appraisal of local officials' natural resource property and interests management, improve the land revenue

collection and audit supervision, and standardize the functional orientation of the mayor and the municipal party secretary.

**Vera Dorofeeva-Lichtmann**  
Chargé de Recherche, CNRS, France

## **Translating Basic Geographical Texts into Maps: The Case of Pre-Modern China**

Comprehensive and systematic textual descriptions of terrestrial space in China appear with the formation of the empire – during the time span from the 5<sup>th</sup> through century BC and the 2<sup>nd</sup> century AD, centered around the formal establishment of the first imperial dynasty in 221 BC. None of these descriptions, in which the basic Chinese cosmographical concepts such as, for instance, the “Nine Provinces” (*Jiuzhou* 九州), were formulated, were originally accompanied by maps.

The earliest extant cartographic representations of the imperial realm date from the twelfth century onwards. Although the majority of these maps appeared as part of commentaries on early texts – I refer to them as traditional “historical” maps – and are products of a continuous tradition of representing space, because of their late origins, they are rarely taken into consideration in studies of early terrestrial descriptions. Thus, contemporary scholarly works tend to use modern Western topographical maps when illustrating early Chinese terrestrial descriptions. At the same time, investigations of the “historical” maps often underestimate the complexities of the influence of the source text on them, and misjudge them as primarily characteristic of the period when they were created.

In the proposed paper I shall discuss a new method of reciprocal analysis of early Chinese terrestrial descriptions and traditional Chinese “historical” maps. In addition to philological analysis of the descriptions of terrestrial space, I apply an innovative method of investigation of them through landmarks, as the latter are positioned with respect to each other, described in texts in comparison with the “historical” maps. These “historical” maps can be defined as diagrammatic maps that are generally characteristic of traditional Chinese cartography. Such maps depict a selected group of landmarks, including non-existent places, as structural elements of a system of relative locations.

As an example, I take the version of the “Nine Provinces” found in the recently discovered *Rong Cheng shi* 容成氏 manuscript (ca. late 4th century BC). I shall demonstrate, that while according to philological analysis this version is congener to a cluster of transmitted descriptions of the “Nine Provinces”, its analysis in relation to “historical” maps allows one to see that it makes a bold claim at a conception of terrestrial

space, the centre of which is shifted considerably to the south, thus matching the “southern” (Chu 楚 kingdom) origins of the manuscript.

**Fathia Elmenghawi**

Assistant Professor, American University of Ras Al Khaimah, UAE

## **Implications of Two Colonial Approaches on Urban Expansion of Tripoli, Libya**

Colonizers interpret their colonies differently and many urban and planning approaches can be traced. The aim of this paper is to examine the colonial approaches of urban expansion in the city of Tripoli, Libya. It focuses on two distinguished colonial periods, the late Ottomans and the Italians, i. e. from 1830s to 1940s. Both colonizers have approached the concept of modernizing the city differently. Moreover, both had perceived their approaches to the city's expansion as means of practicing dominance over the colonized under the guise of facilitating the process of modernization of the city. The striking difference between the two colonizers' plans for the expansion of the city resided in the way they had treated the old city. While the Ottomans had made the growth outside the walled city as the basis for establishing connection with the old city, the Italians had shown little interest in weaving the urban fabric of the old city to their new city expansion -during their massive work for transforming and expanding the city towards south of the walled city- in what became for an Italian colonial city. Under the claim of respecting the 'indigenous culture; the Italians ghettoized old city while endowing the new one with an intense architectural and urban planning orders to project on the ground an Italian national representation. By exploring some archival documents and maps as well as the literature related to the Ottoman and Italian colonial periods, the paper will illustrate how these two colonial approaches not only influenced the urban growth of the city in the post-independence period (1950s - 1990s) and became an integral part of the subsequent planning visions and proposals of the city.

**Michail Fragkias**

Professor, Boise State University, USA

## **Predicting Metropolitan Economic Output Globally: New Estimation Methods and Global Database on Gross Metropolitan Product and Innovativeness**

Measurement of economic output for metropolitan areas could be considered as the Holy Grail for the interdisciplinary study of cities. We currently do not have data on a fundamental measure of economic well-being for the vast majority of human settlements in the world. Gross metropolitan product (GMP) is an indicator of economic output of metro areas for a particular time period (e.g., a year) and is consistently produced for U.S. and selected OECD metros at regular intervals. Even though it is critical for understanding an urban economy, GMP is not typically available for metros elsewhere.

We propose a new estimate the GMP for urban areas across the globe using a variety of publicly-available datasets (population, patents, nighttime lights, road networks) that act as proxies for labor, private and social overhead capital, energy, spatial form, and technology. We conduct exploratory data analysis for the U.S. metropolitan areas and OECD functional urban areas to calibrate and validate statistical models associating economic output with a multiplicity of proxy variables for inputs of production. We use a multiplicity of estimation techniques, informed by previous empirical work and the theoretical predictions of new science of cities. Our analysis utilizes various econometric specifications and a combination of statistical techniques.

We find substantial differences in the efficacy of various publicly available socioeconomic and satellite imagery data sets for the prediction of gross metropolitan product (GMP) globally. Our models showcase a high degree of predictive accuracy across multiple statistical learning methods. We thus apply the models to a more than 1000 metropolitan areas across the globe and produce a new predicted GMP measurement, as well as regional and global rankings of metro economic output across the world.



**Gregorio Froio**

Professor, Università della Calabria, Italy

## **Archaeology and Modern Architecture: A Comparative Reading**

This essay serves as an iconographic exploration of the interplay between archaeology and modern architecture. Its intent is not simply to delve into the archaeology of the modern era, a theme that has already been extensively examined, but rather to engage with the idea of an archaeology within the modern context. The presence of archaeology is traced from the Renaissance through the early 20th century, traversing the Modern Movement and the narrative of Italian Rationalism.

From the perspective of a modern architect, the intersection with archaeology raises questions about an architectural knowledge that cannot exist devoid of historical context. Today, however, there seems to be a prevailing amnesia, dismissing the significance of historical awareness in favor of a belief that considers the past as a constraint on artistic expression rather than as a reservoir of cultural understanding that informs future perspectives. This work is driven by the foundational principle that the past, contrary to being an obstacle, is an active participant in shaping the present.

The text also scrutinizes the nature of archaeology. It challenges whether it is solely a scientific discipline, or if it also embodies a sense of antiquarianism. It contends that there is a fusion of these two realms, where themes such as excavation, stratification, dating, and classification from the scientific sphere converge with elements like esotericism, magic, occult knowledge, collecting, and erudition inherent in antiquarian tastes. Throughout history, archaeology has been defined differently in each era. In the Renaissance, it aligned with *ars antiqua*, an antiquarian philosophy that viewed the ancient as the foundation of artistic principles. The dual nature of archaeological material is likened to the two-faced Janus, embodying both Dionysian and Apollonian aspects, offering an initiatory as well as a scientific perspective.

The work proceeds to reevaluate the relationship between archaeology and modern architecture through a series of carefully considered images. These visuals reveal a hidden archaeology that permeates various artistic expressions, spanning from Roman paintings, like the frescoes at the villas of Pompeii, depicting the orgiastic themes of mystery initiation rites, to the Middle Ages, exemplified by the spiritual ruinism in the frescoes of Giotto. The

narrative delves into literature as well, highlighting the contribution of Francesco Colonna, where ruin becomes the foundational image of psychic discomfort in his work, *Hypnerotomachia Poliphili*. The text also emphasizes the concept of the ancient as a constituent image, visually expressing an obsessive longing for the past. The essay also explores the contemporary vision offered by Giovanni Battista Piranesi, underlining the conceptual significance of his engravings and their prophetic metropolitan scenarios.

The piece culminates by contemplating ancient Roman and Greek antiquity, arguing for a unified vision of Romanitas and Greekness. The methodology employed in this study is a reasoned commentary on images, not necessarily organized in chronological order, akin to the approach advocated by Robert Venturi and Colin Rowe. Finally, a diversion sets in, as the analysis focuses on the case study of Villa Adriana, an example of past architecture that remains relevant in its spatial implications. This comparison underscores the evocative value of archaeology, particularly in its antiquarian sense, emphasizing the continued presence of the ancient amidst modernity.

**Nestor Garza**

Assistant Professor, California State University, Dominguez Hills, USA

### **Land Values, High-rise Construction and Planning in the Long-run: The Case of Bogota, Colombia, 1960-2010**

We use Urban Land Rent theory to design a system panel test of the long-run spatiotemporal association between buildings' height, planning and land values in Bogota, Colombia. Our analysis covers the period 1960-2010, comprising one of the first attempts at applied structural spatial economic analysis in this theoretical tradition. Our analyses distill in visualizations of the long-run relationships between land values, buildings height, and location: Differential Land Rents type II, determined by planning decisions. Our analyses demonstrate the epistemic strength of urban land rent theory in explaining contemporary capitalist urbanization, while highlighting the role of planning in the spatial configuration of an important global south city.

**Panagiotis Giannakis**

Assistant Teaching Professor, The Pennsylvania State University, USA

**Dorothea Roumpi**

LER Alumni Endowed Early Career Professor, The Pennsylvania State  
University, USA

&

**John E. Delery**

Professor and Raymond F. Orr Chair, University of Arkansas, USA

**Diffusion of Organisational LGBT-Friendly Practices and  
Geography: The Role of Localised LGBT-Friendliness  
Density**

In this research project, we investigated the contextual and organizational determinants influencing the probability of adopting practices supportive of lesbian, gay, bisexual, and transgender (LGBT) individuals. Grounded in institutional theory, our hypothesis posits that the likelihood of adoption of LGBT-friendly practices is directly impacted by state laws, state conservatism, and the localized LGBT-Friendliness density. Recognizing the observed disparities in the adoption of such practices, we also integrate insights from strategic choice and the upper echelons perspective. We theorize that the influence of institutional mechanisms is contingent upon the beliefs and values of influential organizational figures, specifically chief executive officers and boards of directors.

The key geographic measure, that of LGBT-friendliness density offers an additional geographic-dependent force on top of “more traditional” mechanisms recognized by extant management research. This density has been conceptualized in an effort to capture the spatial distribution of organizations that have already adopted such LGBT-friendly practices. To do so a power law was utilized that captured the effect of adopting organization minus the effect of non-adopters, normalized by the distance of that relationship, for every organization in our sample.

Our study involves an examination of 201 Fortune 1000 companies based in the United States over a seven-year period. To test our hypotheses, we employ a Cox proportional hazards survival analysis. Our findings provide evidence supporting the significance of state conservatism and the moderating impact of the political orientation of chief executive officers and boards of directors on this relationship. Furthermore, our results indicate that the density of localized LGBT-

friendly initiatives play a statically significant role in shaping the likelihood of adopting LGBT-friendly practices.

**Raghad Halawani**  
PhD Candidate, University of Strathclyde, UK

## **Transforming Urban Spaces: A Multifaceted Exploration of Design, Development, and Planning in Saudi Arabian Cities**

Urban Design is a dynamic and complex field to study the form of cities, including the physical, social, and environmental aspects. Its impact on residents' experiences and satisfaction cannot be overstated, especially in the context of Saudi Arabia's rapid urban evolution. As little is known about its effects on the experiences of people living there. Saudi Arabia urban landscape is at a crossroads, with modern Western architectural preferences increasingly overshadowing traditional public form. This preference for modern Western aesthetics, while visually appealing, may inadvertently erode the social fabric of communities, stripping cities of their unique identity and heritage of Saudi Arabia, where the need for cultural sensitivity and inclusivity is paramount to ensure sustainable urban environments. But not only in Saudi Arabia, it also reflects a global challenge in urban design. The adoption of contemporary design principles has sparked a sense of alienation among its inhabitants, particularly the elderly, who find themselves at odds with the evolving urban fabric. This study delves into the intricate relationship between urban design and the subjective well-being of residents, with a spotlight on Taif city—a vivid example of urban transformation within the Saudi Arabia Kingdom. The study employs a quantitative methodology, utilizing a targeted survey to assess the alignment between Taif city's current urban form and its residents' expectations. Preliminary findings suggest that the current urban form in one of major Saudi's cities (Taif city) may not fully cater to the community's needs, potentially leading to lower satisfaction levels, which hints at deeper issues of urban planning and design in Saudi Arabia. This research contributes to the discourse on sustainable urban environments, offering insights into creating more livable and high quality urban spaces in Saudi Arabian cities. This study not only highlights the importance of considering the unique cultural identity of urban areas in the design process but also provides valuable guidance for global urban planners and designers in fostering inclusive and culturally resonant urban environments.

**Robert Hammarberg**

Faculty Associate & Assistant Director, Public Health Practice and  
Engagement, The University of Texas Health Science Center at Houston  
(UTHealth Houston), USA

**Urban Odyssey: Navigating Multidimensional Strain,  
Innovative Mitigation, and Public Health Resilience in  
Rapidly Growing 'Hot Cities'**

Explore the dynamic challenges faced by rapidly growing 'hot cities' as they strive to adapt their planning and operations to the evolving needs of their populations. This engaging session unveils findings from a mixed-method, convergent parallel study involving urban planning officials from nine such U.S. cities. The study delves into the awareness and perception of rapid population growth and the subsequent responses from city departments through pre-interview surveys and qualitative key-informant interviews.

The results, distilled through thematic analysis, reveal two compelling themes—Multidimensional Strain and Mitigation Strategies—that encapsulate the urban planners' experiences with the effects of rapid population growth and their strategic responses. Across the diverse cities studied, a common thread emerges as planners grapple with stress on land usage, housing, transportation, programming, and service delivery. The shared experiences extend to response patterns, including evaluating and innovating growth management strategies, fostering enhanced collaboration, and embracing equity considerations.

This session provides a snapshot of the repercussions of rapid population growth and highlights current city mitigation strategies. The implications extend beyond the immediate challenges, offering valuable insights for public health and urban planning administrators in practical settings. Moreover, the shared results underscore the role of population data in shaping effective Mitigation Strategies and influencing community health. This session aims to be thought-provoking to better understand the complexities surrounding rapid urban growth and the strategies that pave the way for sustainable urban development.

**Faten Hatem**

PhD Student, University of the West of England, Bristol, UK

## **The Making of the Liveable City: The Overlooked Aspects of Smart Cities Design**

This article examines the real potential of smart cities to offer a better experience to residents as people with more than just basic needs. This is done through a lens of design, urban encounters and on-site sensations. The topic is presented and discussed in four main themes; Facilitating the Making of Liveable City and Quality Experience, Mental Associations of the City, The Unique Intimacy of the Night Experience, Emotional Responses: Safety, Stress and Discomfort, and the Taste of the City: Character, Wayfinding and Monotony. This is done to facilitate analysis and communication. Nevertheless, the topics presented here should not be separated from one another. Various qualitative methods were used in the analysis of the Milton Keynes case study; this includes interviews, field observations and visual comparisons with other cases, allowing for a deeper understanding of the different capabilities of the different approaches. The results help to further fill the knowledge gap in the literature on the overlooked aspects of smart cities and provide better information for smart city design.



**Cem Kayatekin**

Assistant Professor, IE University, Spain

## **The Relationship between the Built World and the Nesting Habits of the European White Stork: A Case Study of Segovia, Spain**

The European white stork (*Ciconia ciconia*) is listed as an Annex I species by Directive 2009/147/EC, adopted by the European Parliament and the Council of the European Union on 30 November 2009. This calls for special protective and supportive measures to be taken to create, maintain, or re-establish the biotopes the species relies upon for continued survival. This paper is anchored around a critical question pertaining to this topic – namely, given the historically urban nature of the species, how can the built world play a more supportive role in the nesting habits of *Ciconia ciconia*? Looking at the minutiae of the urban built environmental conditions of Segovia (Castille y Leon, Spain), the research seeks to understand whether there are specific built world parameters that play a supportive or hindering role in the urban nesting preferences of the European white stork. The existing discourse has tended to investigate this topic from a macro scale, oftentimes glossing over the weight exerted by the built world, in favor of a strictly ecological or resource-based analyses to the question. The findings presented within this paper on the other hand offer a more fine-grained exploration of the subject matter, underscoring that specific built world and built-world-to-habitat connections do appear to exert significant influence over the nesting preferences of the European white stork – namely, variations in height in the roofscape, total area of the potential nesting-location, roof slope and tree species, the strength of views to the habitats used for daily hunting and foraging by the species, and proximity to busy traffic arteries.

These findings not only frame further avenues for built-environmental research for scholars and researchers involved in this physical-ecological intersection, but also begin to shape a potential fine-grained toolkit for urban planners, policy makers, ecologists, landscape architects and architects to help support the intricate entanglement between the built environment and ecological systems, specifically in the context of the viability of urban sites for *Ciconia ciconia*, a species which plays a significant role within ecosystem food chains, as well as sociocultural narratives across Europe.

**Gerald Zhiyong Lan**

Professor, Tsinghua University, China

&

**Dongquan Li**

Professor, Renmin University of China, China

## **Investing for Urban Life - A New Paradigm in Urban Community Renovation**

The world has already had hundreds of years of urban history. While some are now becoming monumental cultural legacies, most are still dwelled by ordinary people struggling for better and modern life. Urban and community renovation has become urgently and massively needed undertaking. The paper reports cases of community renovation in a few well development Chinese cities and demonstrates some unique community renovation methods in these practices. Through detailed description and discussions, the authors argue that given the capabilities of today's technology and financial power, new vision, new mentality, and new paradigm should be adopted in the effort of building our future communities. The authors discuss in detail how some of significant innovations are achieved through collaborative efforts between the government, businesses, and urban dwellers themselves, and the implications and significance of these efforts for our urban life in the future.

**Iris Levin**

Senior Lecturer, RMIT University, Australia

**Fit for Purpose:  
Social Housing and People from Refugee and Migrant  
Backgrounds**

Social housing in Australia addresses the housing needs of the most disadvantaged groups in Australian society, and among them, people of migrant and refugee backgrounds (MRB) resettling in Australia. While people from migrant and refugee backgrounds live in public housing estates and homes, it is not clear how well these home environments address the specific needs of such individuals and communities. Moreover, anecdotal evidence indicates that the percentage of people from MRBs who live in community housing is relatively low. With current trends in many Australian jurisdictions of shifting from public housing to community housing construction and management, there is a need to further explore the barriers and enablers for people from refugee and migrant backgrounds to settling well in social housing in Australia. The article draws on the Lefebvre's concept of inhabitance to 'address migrants' struggles as a crucial manifestation of bottom-up production of the urban space, including housing' (Dadusc et al. 2019: 524). This paper reports on a pilot study using a survey with service providers to understand the housing needs and lived experience of people from MRBs in Melbourne, Australia. It aims to understand the social housing policies and practices for people from MRBs, their needs and lived experience, and how this shapes their longer term locational and housing decision making in the urban environment.

**Tiebei Li**

Senior Research Fellow, RMIT University, Australia

&

**Yina Sima**

Lecturer, University of Nottingham Ningbo China, China

## **Impacts of Worker Residential Migration on Urban Settlement, Commuting, and Employment Efficiency in an Australian City**

An important task in urban planning is to develop an urban structure that better links residents and employment activities to ensure economic viability and transport efficiency. The increased spatial flexibility and residential dynamic of the labour force add complexity to these tasks. This paper explores the patterns of both urban internal and external migration of workers in Melbourne and the effects of these movement dynamics on urban structure, commuting flows, and employment containment in urban areas. By comparing residential and commuting changes of different urban external and internal migration cohorts, our research demonstrates that the residential mobility of the existing residents is a key determinant of urban expansion and transport changes. The settlement of external migrants generally enhances employment interactions and short commutes in the central urban zones. However, after establishing employment, they will likely join the existing residents moving outwards, influencing employment containment and commuting patterns. By linking the spatial dynamics of urban migration and commuting changes, this paper offers valuable insights into urban policy. It suggests that urban land use and transport plans must engage with linked housing issues which are fundamental to meeting urban spatial development targets.

**Seyedmoein Miremad**

PhD Student, Polytechnic University of Milan, Italy

**Grazia Concilio**

Professor, Polytechnic University of Milan, Italy

&

**Arianna Azzellino**

Professor, Polytechnic University of Milan, Italy

## **Sustainable Urban Drainage Systems for Reducing Flood Risk at the Catchment Scale: The Seveso Watershed Case Study**

Flooding is widely recognized as one of the most severe natural disasters, destroying urban areas and costing tens of billions of dollars in property and human lives. In recent decades, urbanization has evolved as a global phenomenon marked by increasing population density and urban expansion. Rapid urbanization has a significant impact on the water balance and energy exchange of the land-atmosphere system by altering surface characteristics, increasing impervious surface area, and the risk of flood hazard due to the replacement of natural ecosystems, resulting in changes to the local hydrological cycle and climate system. The goal of this study is to determine the effect of urbanization on stormwater runoff and its management alternatives. The Seveso River watershed in the Lombardy region is among the most urbanized (44% of total area) watersheds in Italy and Europe. The watershed excessive urbanization and continuous residential and industrial expansion make it challenging to intervene with structural projects (i.e. retention and detention ponds).

This study will investigate the potential for mitigation of sustainable urban drainage systems (SUDS) such as green roofs and permeable pavement. The SCS-CN method was used to support scenario analysis of the alternatives. A specifically designed spatial grid, with a resolution of 1 km per cell, was constructed to facilitate the integration of precipitation data with the Digital Elevation Model (DEM), soil characteristics, and Land Use/Land Cover (LULC) layers. Precipitation data were interpolated using Inverse Distance Weighted (IDW) interpolation.

For each grid cell, the runoff was calculated using the SCS-CN method for different precipitation events to define the current scenario and to evaluate the potential mitigation of some SUDS solutions.

Finally, some damage functions were used for each LULC category to evaluate the damage risk mitigation potentially achieved by the suggested solution.

**Alioscia Mozzato**

Research Fellow, University Iuav of Venice, Italy

**The Reinvention of Modernity:  
Gianugo Polesello and the *Gruppo Architettura***

The theoretical constructs developed by Gianugo Polesello in the field of urban studies, which have characterized the research activity of the “Gruppo Architettura” since the second half of the twentieth century, provide a methodological reflection aimed at defining tools and operational categories for urban and territorial planning *sub specie architecturæ* conceived not as an ideological reconciliation of contradictions, but rather as a unifying logic capable of sustaining conflicts within a unitary construction that assumes the “dialectic of the distinct” as the only possible relationship between irreducible specificities.

To revisit these researches also entails questioning, today as then, the “legacy of the Modern” and its reflection in contemporary experience, with intentions that aim not so much at “orthodox” reformist agendas or ideological totalitarianisms, but rather at a “heterodoxy” very attentive to the thought and figures that represent an alternative vision of modernity. An “other modernity”, indeed, which, in our view, has its roots in the full acceptance of “partiality” and “conflict” as indispensable conditions of a “design thinking” that does not seek to dissolve multiplicities to overcome contradictions, but rather, to embrace their components as a constitutive principle of a new “idea of space” for the city and its territory.

**G. Pelin Olcay**

Assistant Professor, Istanbul Kent University, Türkiye

## **Industrialisation, Deindustrialisation and Sustainable Development in Metropolitan Cities of Developing Countries: The Case of Istanbul Bağcılar Region**

Deindustrialization is expressed as a continuous decline in the share of manufacturing in total employment and GDP. Deindustrialization is a topic of interest not only in developed countries but also in developing ones.

Turkey's economy still holds a significant share in manufacturing, particularly in labor-intensive industries such as textiles, making it one of the European Union's most important suppliers due to its proximity to the European market. Istanbul is a metropolitan city where the highest number of manufacturing companies choose to locate in Turkey. On the other hand, Istanbul has been undergoing deindustrialization since the 1980s. Unlike many developed and developing countries, Istanbul's deindustrialization process has been supported by state policies. Between 1980 and 2000, policies were implemented to remove industrial activities from Istanbul, while after 2000, policies were put in place to encourage the growth of the financial and real estate sectors in the city.

Bagcilar in Istanbul is a unique district where both the processes of industrialization and deindustrialization can be observed spatially. It remains a manufacturing hub with around 1000 manufacturing firms, while simultaneously transitioning towards the service sector. Unlike other areas in Istanbul that have completed their transformation to service sector, Bagcilar is still predominantly an industrial zone. Numerous offices and residences have been constructed, and some of these structures are built on former manufacturing lands. The chaotic environment created by the intermingling of manufacturing firms, residences, and offices, coupled with factors such as intense traffic and the inadequacy of infrastructure, significantly lowers the quality of life. Additionally, the region is losing its production capability. There is a need for a sustainable development and transformation model for the region.

This article aims to examine and discuss the sustainable development model for Bagcilar, which is currently being developed based on the findings of an ongoing research project numbered with 221K261 and supported by TUBITAK. A fieldwork was made to collect primary data on the numbers, characteristics, spatial distributions, and



location criteria of manufacturing and service sector firms in the region. Additionally, secondary data on the industrialization and deindustrialization dynamics of the area were gathered. Sector workshops with stakeholders were held to discuss the future forecasts of the industries. In the last stage, utilizing all collected data and findings, future scenarios and policies for the sectors will be developed.

**Maria Isabel Oliver**

Assistant Professor, American University of Sharjah, UAE

**Parque Luis Muñoz Marín:  
An Incomplete Collection of Utopian Fragments**

Few landscape restoration projects have considered political, civic, and urban dimensions as broad as Parque Luis Muñoz Marín in San Juan, Puerto Rico. The most recent intervention, completed in 2016 by architect Andrés Mignucci (1957-2022), represents the culmination of a series of proposals aimed at articulating a utopian synthesis of nature and city. Mignucci's project provided an incisive critique of the city's planning, subjugated to the jurisdictional segregation between central and municipal governance. However, his critique was inconclusive as only half of the project was completed, leaving the park as an autonomous urban piece with little relevance to the rest of the city.

The concepts underpinning this investigation are pivotal for elucidating the intricate interplay between urban planning and cultural, fiscal, and political governance dynamics. The research draws upon three seminal texts: "Regional Plan San Juan Metropolitan Area" by Eduardo Barañano, which outlines the conceptualization of a regional plan for Metropolitan San Juan; "Thirdspace" by Edward W. Soja, which explores the construction of individual and collective spatiality; and "La cabeza de Goliath: Microscopía de Buenos Aires" by Ezequiel Martínez Estrada, which contemplates the essence of the city, questioning whether it is best apprehended as a collection of disparate images or through a cohesive narrative.

The history of Parque Luis Muñoz Marín dates to the mid-20th century when it was inaugurated to honor Governor Luis Muñoz Marín, who played a crucial role in shaping Puerto Rico's political, economic, and social landscape. As the island's first elected governor, Muñoz Marín implemented progressive policies under the engine of Operation Bootstrap to attract US investors and make tourism a primary industry. This led to increased industrial jobs and tourism, drawing Puerto Ricans from rural areas to the city and increasing migration between the island and major eastern US cities. This resulted in unprecedented levels of urbanization and new demands on the urban planning apparatus. The park emerged in 1956 as part of the Regional Plan for the San Juan Metropolitan Area under Uruguayan urbanist Eduardo Barañano (1915-2004). Like F.L. Olmstead's Emerald Necklace in Boston (1894), the plan introduced a network of urban parks that functioned as a green belt. This paper explores the influence

of political governance on public spaces spanning from 1956 to 2016, focusing on four pivotal projects within the park: the original master plan by the local firm Pedro A. Miranda & Associates, in collaboration with Sasaki, Walker & Associates; the establishment of two sports facilities, namely the Hiram Bithorn Stadium designed by Pedro Miranda & Associates with Orval Sifontes, and the Roberto Clemente Coliseum by Pedro Miranda & Associates with Nicolas Quintana; a recreational facility situated amidst the sports venues designed by Ricardo Bofill and the Taller de Arquitectura, in partnership with the local firm Basora y Rodríguez; and the rehabilitation and integration of the park into the urban fabric of the city proposal overseen by the office of Andrés Mignucci Arquitectos.

**Anna Paltseva**

Assistant Professor, University of Louisiana at Lafayette, USA

## **Combatting Soil Contamination in Urban Environments: Strategies for Sustainable City Parks and Communities**

This presentation expands on the critical challenges and innovative solutions associated with soil contamination in urban parks and gardens. Highlighting the work of the Delta Urban Soils Laboratory, it presents a dual focus on the detection of heavy metals in urban soils and the deployment of advanced remediation techniques. The research introduces a comprehensive approach to managing soil health in cities, encompassing both the rejuvenation of contaminated sites through bioremediation, and the promotion of urban agriculture as a tool for community resilience. By detailing successful case studies and participatory research methodologies, the presentation offers valuable insights into scalable models for urban soil remediation. These strategies not only address public health concerns but also enhance green spaces, contributing to the broader goals of urban regeneration and sustainable development.

**Giulia Pellegrì**

Vice Dean & Associate Professor, Architecture-Polytechnic School,  
University of Genoa, Italy

**Daniela Pittaluga**

Associate Professor, University of Genoa, Italy

&

**Giacomo Calvi**

Professor, University of Genoa, Italy

## **Conservation of Historical Port Architecture**

Is it possible to preserve historic buildings, pass on their memory, make their history understood and at the same time give them new functions? How much can the new demands of life and work be reconciled with the maintenance of historical structures? These are some of the main questions that we tried to answer with a research project focused on some historic buildings in the port area of Genoa. The project is part of a broader research plan already started some years ago at Department of Architecture and Design (University of Genoa). In this essay we want in particular to address the issue of warehouses serving the port; medieval warehouses, transformed several times in different eras. In particular, the methodology applied for the Salt Warehouse in the Molo District will be illustrated. In this case a detailed historical analysis was carried out in various city archives. This first part of the research was accompanied by a complex archaeological high level analysis.

The historical research work began by proceeding backwards, on the basis of the only certain source of the presence of the Vico Malatti Salt Warehouse (currently identified with the number 13r), the Fon-do Tipi (the collection of documents), kept at the State Archives of Genoa. Through the investigation of the warehouse under study, numbered according to the Fund as the twenty-second, it was possible to trace the surname of the owner of the building, that is Rovereto, literally quoted as "[..] *warehouses I buy from Rovereti*". From this single documentary trace, the first existing documents on the Molo district were subsequently analyzed, namely the "cabel-la embulorum" and the register "embulorum figuratis", the latter dated 1 March 1544. Since it could be seen inside, we found out it contains information dating back to a century earlier (1444). This precious document contains the painted list of all the houses and shops on the pier, accompanied by their measures. Following the verification carried out on the building located in plan at the tenth-eighth angle (fig. 14), the correspondence was

found, albeit with the relative approximations due to the non-rigorous representation, with the current location of the Magazzino del Sale in Vico Malatti 13r.

The novelty of this intervention is that, unlike the previous examples which had involved the university, the institutions responsible for control and public bodies, this time the privileged interlocutor is a private property. This represents a novelty of no small importance. In fact, there are multiple constraints related to use and sometimes different aspirations. In the case in question, the property has shown to be attentive and collaborative. In this case we had to deal with a property aware of the importance of the building in order to understand a part of the history of the city. Awareness that, in part, was present from the beginning but that was consolidated during this research up to the precise intention of making this building complex partially visible to the territory. And from this understanding a whole other series of study and research possibilities arose.

This is not always the case. The reflection that we want to bring here is on how necessary it is to induce this awareness also in the private citizens. Only in this way will they be available for a real collaboration with the institutions responsible for research and protection. And this is not only for encumbered assets but also for unencumbered assets which constitute an extensive, widespread and sometimes little-known but very characteristic asset of most of the sites that overlook the Mediterranean. This could be the turning point for their survival.

**Natalie Robertson**

PhD Candidate/Research Coordinator, University of Calgary, Canada  
&

**Fabian Neuhaus**

Associate Professor, University of Calgary, Canada

## **Space and the A-social Society: Changes in the Allocation of In-public Space in Calgary, Canada**

Because human interactions are influenced by the configuration and design of built form, it follows that municipal development policies contribute to human behavioural outcomes. Policies impacting the built environment are not stagnant, however, but change to reflect contemporary societal norms and priorities. And so, there is a symbiotic relationship between policy as reflecting society and policy outcomes as influencing society. This project exists at the intersection of these two municipal development policy realities. By examining the design of public space emerging from contemporary land use and/or development policies, insight into changing expectations for human interaction can be revealed, impacts of policies contextualized, and comparisons across time become possible.

Within a sociological backdrop of concern regarding increasing levels of social isolation or a lack of social connectivity, particularly in suburban environments, this project provides insight into the role development policies play in human interaction. Here the amount and availability of public space is examined for its potential for interaction as a 'use area'.

Using the city of Calgary, Canada as a case study, three (sub)urban residential neighbourhoods are examined at a micro (lot/block) scale using policy-based cross-sectional street geometry analysis. For this project, the distinction between *public* and *private* space, a delineation based on ownership, is set aside, and replaced by the concept of *in-public* space, a delineation based on visibility. This approach recognizes that human interaction occurs between individuals occupying different combinations of space: public, semi-public, semi-private, and private, thereby acknowledging the fact that not all social connectivity requires exclusively 'public' space.

Research reveals four foundational findings: first, that the relative amount of in-public space offers an important avenue for examining land use policy outcomes spatially; second, though changes to residential in-public space have ebbed and flowed, allocation for personal vehicles remains relatively constant; and third, that the

relative spatial relationship between use areas is as important as their provision; and fourth, that the concept of 'lingering potential' provides an important and largely overlooked element when considering social connectivity. Emerging from these results are questions relating to policymaking for the public good; measuring policy effectiveness; and the role of, and the right to, public space by residents.



**Friedemann Roy**

Adviser to the Vice President, International Finance Corporation, USA

## **The Impact of Demographic Developments and Climate Change in Urban Planning in Asia**

The ability of cities to adapt to climate change is crucial for a country's growth agenda and the transition to a low-carbon economy. Urban planning has traditionally focused on climate change adaptation and mitigation. However, one aspect that has received limited attention is the impact of demographic dynamics on the urban planning process. This aspect varies significantly across different regions of the world.

This paper aims to examine the influence of demographic changes and climate change on urban planning in Asia. It will be organized as follows: (1) identifying the challenges, (2) exploring existing solutions, particularly in cities like Singapore, Bangkok, and Manila, and (3) extracting lessons learned and providing recommendations for urban planners in other cities within the region. Additionally, the paper will include an analysis of potential solutions for cities in other parts of the world.

China and East Asian countries are grappling with declining and aging populations, a trend similar to that seen in Europe and Latin America. Therefore, it is advisable to review current urban designs and future policies. In the pursuit of creating sustainable and environmentally friendly cities, urban planners should adapt existing housing and urban landscapes to meet the needs of an aging society. They should also develop distinct urban structures for growing populations in a changing economy. These adjusted policies will ensure ongoing job creation and long-term well-being for their citizens."

**Michela Scaglione**

Research Fellow, University of Genoa, Italy

## **Nudging and the Architecture of Choices: The Tools of Behavioral Economics for a More Sustainable City**

There are many similarities between choice architecture and more traditional forms of architecture. An important one is that no product of architecture can be considered neutral. (R. H. Thaler, C. R. Sunstein, 2008)

The concept of nudging was introduced by Nobel laureates Thaler and Sunstein in 2008 in their book *Nudge. Improving Decisions about Health, Wealth, and Happiness* has found applications in various areas, from politics to economics, from urban design to environmental policies: it is based on the idea of positively influencing people's behaviours through the design of a decision-making environment that favours specific options over others, however limiting the individual's freedom of choice.

These behavioural strategies can be particularly effective in the context of policies aimed at incentivising recycling, a critical sector for environmental sustainability: numerous studies demonstrate the close correlation between recycling, urban quality, and the reduction of CO<sub>2</sub> in the atmosphere (C.A.P. Pimenteira, A.S. Pereira, L.B. Oliveira, L. P. Rosa, 2004; I.S.A. Baud, S. Grafakos, M. Hordijk, J. Post, 2001).

The correct design of the "gentle nudges" can provide concrete help in disseminating and understanding the importance of recycling practices at the urban level, which positively affect the marine and terrestrial environment.

This abstract explores how nudging can improve the quality of recycled material through innovative behavioural strategies. The article proposes a series of projects to analyse examples and understand the state-of-the-art research in this field. Some projects identified as case studies on which subsequent reflections will be based will be presented.

The article will conclude with the results of the Workshop "Driving Change: Nudging for Recycling in the Department of Education," which aimed to develop a Web Communication strategy through social networks to encourage recycling practices in the spaces of the Department of Architecture and Design of the University of Genoa by applying the theories of Nudging and behavioural economics.

The project results from a research agreement with AMIU Genova Spa. This company manages the city's waste and will be the prototype

for a series of interventions to educate young people at the University of Genoa on recycling issues.

**Anupriya Sharma**

Research Scholar, Chaudhary Charan Singh University, Meerut, India

## **Air Pollution and Human Health in Meerut (DELHI-NCR) Region, India: A Case Study**

Urban air quality in DELHI-NCR region has been found to be critical and the Meerut city is no exception to this. In this study an attempt has been made to analyze the ambient air quality in Meerut City by applying the Exceedance Factor (EF) method, where the presence of listed pollutants' (PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>2</sub>, and SO<sub>2</sub>) annual average concentration are classified into four different categories; namely high, moderate, and low pollution. Out of a total of 3 ambient air quality monitoring stations operating in Meerut city, one fall under the high category of NO<sub>2</sub> concentration, other for PM<sub>10</sub>, and third one for SO<sub>2</sub>. The causes towards the high concentration of pollutants in the form of NO<sub>2</sub> and PM<sub>10</sub> have been identified in earlier studies as industrial sources (41%) (%), followed by vehicular emission (30%) and dust particles (12%) Vehicular emissions that occur at ground level, are the most important emission. Later, a health assessment was undertaken with a structured questionnaire at 3 locations nearby monitoring stations. For this a total of 150 respondents were surveyed from (March-April) 2022. It shows that respondents with Eye infection/irritation (22.1%) have outnumbered person with Nose blockage (12.9%) and include Skin disease (12.5%), cough (9%), sneezing (8.7%), Dry Cough (5.5%) Asthma (4.4%) and Bronchitis (2.7%). Around 47.9% of the Respondents stay outdoor for 5-9 hours daily. With the pollution level been recorded as critical, 23.6% of the respondents visited the Doctor for the mentioned health problems in last 3 months (including the survey time period).

**Isra Tatlic**

Assistant Professor, University of Sarajevo, Bosnia and Herzegovina  
&

**Senka Ibrišimbegović**

Associate Professor, University of Sarajevo, Bosnia and Herzegovina

## **Integration of Culture in Public Spaces – Cultural District Sarajevo**

Communication among stakeholders who determine the use and planning of public space only occurs within the framework of contemporary practices. The accelerated transformation of the urban landscape of the Sarajevo Canton increasingly becomes a space of contention among various interest groups - citizens, planners, investors, heritage disciplines, and local authorities. Establishing a model that involves respecting the interests of each of these groups or increasing the level of inclusivity in the decision-making process will lead to humane and sustainable solutions for the future use and visual shaping of public spaces. Unlike other design disciplines, the specificity of designing public spaces lies in the imperative of participation, mediation, and balancing the interests of multiple actors, ranging from the public and private sectors to planners, designers, researchers, and citizens. The practice of local government levels in the municipalities of the Sarajevo Canton and other Bosnian-Herzegovinian cities in this area has excluded this form of participatory approach. This project proposes an alternative methodological approach in the public space planning strategy as a critical response to the mismatch between the existing institutional approach of "top-down" planning with the technological and social dynamics of the digital age, as well as the real needs of the local community.

Changing the approach requires adaptation to the local context and education of all involved in the spatial planning process: decision-makers, planners, residents, academia, and public and private sectors. It is crucial to conduct a comprehensive capacity analysis, create comprehensive databases on public space, prepare a co-creation methodology, and opt for pilot projects of participatory planning on more minor scales, including sociological-anthropological tools, which will be based on the integration and synchronization of spatial planning, all while using modern digital tools and applying knowledge - aiming to return public space to the community of citizens, contrary to the idea of approaching "design for the sake of design" or "space as profit."

### Case study:

Due to accelerated urbanization without clearly defined mechanisms for control and valorization of changes in the urban matrix in Sarajevo, Bosnia and Herzegovina, spatial by-products have emerged: neglected "pockets" of urban space without identity and precise function, known in urbanism theory as "urban voids" (De Sola Morales). Such "urban voids," due to the lack of official initiatives, become spaces of "spontaneous management," which determines their identity (for example, the space between the future Ars Aevi Museum, the Historical Museum, and the National Museum, which becomes a stage for musical events and festivals, open galleries, etc.).

**Martina Tazzara**

PhD Student, University of Milan/University of Turin, Italy

**Public Transport Implementation: A Policy-Making Process  
for or against Poverty? Between Germany and Italy:  
A Comparative Study**

The project explores major implementation plans related to urban transportation, the decision-making processes behind them, and their consequences for the low-income population in terms of gentrification and displacement. Following Harvey's (1978) approach that considers space-shaping processes as a facet of capitalistic class reproduction, the objective is to identify which public and private actors are involved, in terms of policies and investments, and which is the target of these implementation plans, considering a higher or lower level of local population engagement in their creation. I will consider two European metropolises, specifically Berlin and Milan, as scenarios of major processes attributable to transit-oriented development (TOD), selecting two neighborhoods as the scene of processes of demographic growth, mixed-income population, and gentrification. Applying a mixed research method, I'll proceed with a longitudinal quantitative observation of the variation of demographic and socio-economic indicators, which will allow me to identify the presence or not of an exacerbation of ongoing gentrification processes as a result of the implementations put in place by TODs. Meanwhile, I'll conduct semi-structured interviews in the respective fields, with policy-makers, urban planners, and employees from the two local transportation agencies involved, through which I will try to build a picture of the actors behind the transport implementation plans and their goals. In addition, I will conduct focus groups with the local citizenry to investigate their involvement level and to get feedback on their current socio-economic condition considering the actuation of the plans.

**Kung-Jen Tu**

Professor, National Taiwan University of Science and Technology,  
Taiwan

**Effective Property Management Model for Managing  
National Massive Social Housing Estates in Taiwan**

The recent housing policy of Taiwan Government is to supply 120,000 units of social housing over an eight-year period (2016~2024). Among this vast amount of total supply, the National Housing and Urban Regeneration Center (HURC) is responsible for building and managing 69,000 units in roughly 200 social housing estates across the whole country. In the upcoming years when these estates are gradually put into operation, the HURC is expected to face great challenges in the effective property management (PM) of its massive social housing estates in dispersed locations and the cost control of long term operation and maintenance (O&M) costs of all social housing estates. The author of this paper has conducted in-depth study on several social housing estates operated by the HURC, and has participated in many design-build social housing projects. Given the research results and 30 social housing projects data available, this study intends to (1) reveal the existing PM model of social housing estates and the financial issues faced by the HURC; (2) conduct statistical analyses on the relationship among factors such as the number of households in social housing estates, their estimated monthly O&M costs, and the number of on-site staff dispatched by the PM service providers; (3) propose two O&M cost control KPIs and effective strategies to the HURC to formulate a better PM model in managing its national massive social housing estates. The research results of this study are:

1. The HURC has adopted the 'turnkey' approach hiring a PM service provider to offer comprehensive services for each social housing estate put into operation. The appointed PM service provider will dispatch on-site crew (e.g. roughly ten-member crew for a 300-unit social housing estate) to offer tenant services and conduct daily administrative, cleaning, security, and maintenance tasks requested. This labor-intensive PM approach has resulted in high personnel expenses (70~80% of provider's total contracted service fee) and potentially imposes a heavy and long term financial burden on the HURC. Lack of labor, rising wages, and inflation will pose a huge challenges in managing national massive social housing assets.
2. The statistical analyses conducted on 30 social housing projects data



have revealed the followings: (1) the number of on-site crew members for an estate is highly correlated with its number of households (positive linear relationship); (2) the monthly O&M cost for an estate is highly correlated with its number of households (positive linear relationship); (3) the number of on-site crew members per 100 households for an estate is highly correlated with its number of households (negative exponential relationship); (4) the monthly O&M cost per square meter of floor area for an estate is highly correlated with its number of households (negative exponential relationship).

Based on the statistical analysis results, this study suggests that the HURC adopts two cost control KPIs: (1) the number of on-site crew members/100 households, and (2) the monthly O&M cost/m<sup>2</sup> floor area. This study further proposes the following effective cost control strategies for the HURC to manage its national massive social housing estates: try to limit the number of on-site crew members/100 households for one or several adjacent estates to be 3~4 members/100 households, and limit the monthly O&M cost/m<sup>2</sup> floor area for one or several adjacent estates to be 18~24 New Taiwan Dollar/m<sup>2</sup>.

**Xin Wang**

Associate Professor, Beijing Jiaotong University, China

**Ye Liu**

Associate Professor, Beijing University of Civil Engineering and  
Architecture, China

&

**Yue Tang**

Assistant Professor, University of Nottingham, UK

## **Value Recognition and Utilization Strategies for Waterfront Industrial Heritage: A Case Study of the Nottingham Region Section of the River Trent in East Midlands of the UK**

This research investigates the spatial distribution, functional evolution, and adaptive reuse of industrial heritage sites along the Trent River in the United Kingdom. The primary objective is to develop a systematic methodological framework for planning, revitalizing, and repurposing waterfront industrial heritage communities.

The Trent River, situated in the central region of the UK, ranks as the second-largest river in terms of flow nationwide. Over the past six centuries, the Trent River system has served as a critical water source for settlements along its banks, fulfilling domestic water needs and facilitating navigation for vessels transporting goods. Following the Industrial Revolution, the river system emerged as a vital power source for factories, establishing various industrial spaces along its course. The period from the early 19th century to the early 20th century is often recognized as the Golden Age of Trent River development, characterized by the Canal Mania. However, during the 1960s, the river's spatial network transformed significantly from production-oriented spaces to ecological and residential areas.

Consequently, the built environments along the river faced shifts in land use patterns. By the late 20th century, several waterfront industrial heritage zones were established, notably represented by canal and river trusts. This study focuses on the Beeston town area in the East Midlands, specifically within Nottingham City and its southwestern precincts. Through a combination of literature research and field investigations, we conducted a statistical analysis of the diverse types of industrial heritage distributed along the river system. These heritage sites include docks, wharves, warehouses, textile factories, and railway stations. These built heritage assets have undergone adaptive reuse during the Industrial Revolution, reflecting shifts in social structures and evolving cognitive values. The Trent River system significantly

shapes the collective cultural understanding of the region. Integrating efforts to revitalize industrial heritage can serve as a catalyst for adapting to contemporary societal needs. Through adaptive updates and transformations, these built heritage assets can find new, hybrid, or expanded uses, generating social and economic benefits while promoting sustainable development. The Beeston Cut stands out as a representative case in the empirical analysis. This 8-kilometre section, established along natural watercourses and artificial canals, features diverse spatial types, including nature reserves, farmland, industrial structures, water transport facilities, pathways, towpaths, and railway bridges. This waterside corridor connects Nottingham's city centre with its urban fringe. Former docks, warehouses, office spaces, and factories have been repurposed, now serving as contemporary urban spaces for dining, entertainment, sports, education, and cultural experiences. These adaptive heritage platforms engage hundreds of thousands of residents and visitors.

Our study employs a comprehensive approach, combining historical research, data analysis, and field surveys to categorize waterfront industrial heritage zones' scale, types, and uses. The findings aim to inform similar industrial heritage spaces' revitalization and reuse, culminating in a systematic set of strategies and methods.

**Linda Weld**

Adjunct Professor, Wentworth Institute of Technology, USA

## **Building Identity within the City: The Question of Outdoor Mural Art in Boston, Massachusetts**

The city of Boston, Massachusetts attracts visitors from around the world; tourists come to explore the city's historic sites, engage in a variety of waterfront activities, and increasingly in the twenty first century visitors are drawn by the city's growing public art scene. As a prominent element of public art, outdoor mural art has become important in fueling cultural tourism in Boston. Outdoor mural art in Boston is also recognized as playing an important part in creating memorable visual environments and meaningful places in the city and, increasingly, it is recognized for the part it plays in promoting development of specific areas throughout the city. Mural art projects aided in the stabilization of marginalized neighborhoods in the city as Boston emerged from an economic slump in the 1970s and 1980's. With the creation of the Mayor's Mural Crew in 1991 outdoor mural art projects were charged with eliminating graffiti, usually an indication of an area in decline. Strategically located, murals became visual anchors, establishing identifiable places in the neighborhood, prominently featuring identifiable personalities, local landmarks in their imagery, and local artists in their creation. These visual anchors effectively strengthened community identity within the larger context of the city. With the creation of a recognized role in the city's overall urban design strategy, and in the city's budget for public art, the effect of these original outdoor mural art projects has gone beyond initial expectations. Since its original engagement by the city, the character and content of outdoor mural art has changed as well as its role in the city. Public attitudes have also shifted as outdoor mural art has become widely acknowledged as a legitimate artistic endeavor. Conceived in 2015, "The Boston Mural Map", identifies over seventy outdoor murals commissioned by the city as well as numerous others initiated by community and private organizations. The number continues to grow as projects by artists with international reputations are engaged by the city in its efforts to create memorable visual environments throughout the city and to promote cultural tourism. With the city's commitment to outdoor mural art as part of an enhanced visual environment, private entities have accelerated their engagement with outdoor mural art. However, its presence as a signifier of desirable locations in the city has caused a reversal of the initial stabilizing effect of the outdoor mural art

program begun in 1991. Neighborhoods that initially benefitted from the presence of outdoor mural art are now experiencing the destabilizing effect of gentrification that often accompanies development. Presented as a case study, this examination of the role of outdoor mural art in Boston foregrounds some of the conflicts and challenges existing neighborhoods face as outdoor mural art has become an increasingly commodified and commercialized element of urban design. An examination of some of the outdoor mural art in the Boston neighborhood of Lower Roxbury foregrounds some of the issues that have emerged as a consequence of the realization of the city's larger vision for engaging public art in the city.

**Toshiyuki Yokota**

Principal Evaluation Specialist, Asian Development Bank, Philippines

## **Application of Geographic Information Systems in Impact Evaluation of Transport Projects**

New technologies and global datasets enable development assistance to be assessed more effectively and efficiently. Geospatial data are available retrospectively and remotely, which is particularly useful for evaluators working in countries with data limitations and in the context of fragility, conflict, and violence. Another advantage is that data quality is the same and comparable across countries. Geospatial locations connect data to data and associate them with projects. It helps us monitor changes, understand trends, and identify corresponding solutions to promote Sustainable Development Goals.

I will present the results of geospatial portfolio analysis and economic impact analysis with geospatial data as follows:

The geospatial portfolio analysis about 160 projects generated several interesting findings. For example, the contribution of projects carried out by the Asian Development Bank became visible, as about 290 million people live along the road alignments of Asian Development Bank projects and are therefore potential beneficiaries. Their presence and greater economic activity are indicated by increases in the radiance of nighttime light. The data also demonstrated which countries need to make additional efforts to reduce CO<sub>2</sub> emissions from the project areas.

Two project-level impact analyses using nighttime light were carried out in rural and urban areas. The first assessed a national highway project in Armenia. The second assessed the metro system in Jaipur of India. I will also present comparative analysis of impact assessed by nighttime light with conventional economic analysis using economic internal rate of return, observing a positive correlation between the two.

**Jingyuan Zhang**

Associate Professor, Harbin Institute of Technology, China

## **An Innovative Method to Assess Equity of Urban Parks Incorporating Microscale Demand Data**

Urban parks have been widely recognized for the critical functions they provide in enhancing health and wellbeing of urban dwellers. However, parks are known to be inadequately provided and non-uniformly distributed in cities, leading to an increasing interest to examine spatial equity of park distribution. Such studies have mostly focused on the distributional attributes of park supply in determining spatial equity, while the role of residents' demand for using park services is usually ignored or not adequately assessed. In addition, people's preferences for park use were normally ignored and nearest parks were assumed as supplier of park services. Moreover, even though equity assessment is scale-dependent, few studies adopt a multi-scale assessment. We report on a study to address these gaps. A multi-scale Supply-Demand Equity Index (SDEI) was developed to assess spatial equity of park distribution from the perspective of supply and demand interactions, and data were collected at a fine scale of neighborhood level. We explained the conceptual basis for SDEI, and applied it to four residential towns in Singapore, which are from subzone (neighborhood) to planning area (town) scale. Residents' accessibility to their most often used parks and nearest parks were used to assess and compare supply level; while residents' perceptions obtained from surveys, and population density were used to assess and compare demand level. Results showed that supply measured by accessibility to most often used park more accurately reflects supply, and demand assessment on the basis of perception could reflect variations among different social groups and reveal otherwise hidden patterns of spatial inequity. It was also shown that SDEI could identify areas where mismatch between supply and demand occurs. We demonstrated in a single study that different definitions and approaches of quantifying spatial equity can lead to distinct conclusions, therein highlighting that the complex nature of equity requires nuanced approaches. Our findings also support the proposition that multi-scale equity analysis from the perspective of supply and demand interactions provides a broader view of equity assessment. In addition, the implications of this study for urban park planning and management were highlighted.

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