

BOOK REVIEW

Soushi Suzuki and Roberto Patutelli (Eds),
A Broad View of Regional Science - Essays in Honor of Peter Nijkamp
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As announced in the Preface of the book, *A Broad View of Regional Science* is a collective volume that “celebrates the life and work of Peter Nijkamp, as well as his strong research focus on regional science”. The volume is a tribute by former doctoral students, colleagues and guest researchers to Peter Nijkamp, on the occasion of his 75th birthday and provides an in-depth understanding of different analytic approaches in regional science.

Peter Nijkamp is one of the most active scientists in the international science community, whose contributions and accomplishments are acknowledged worldwide. Professor Nijkamp is the past president of both the European Regional Science Association (ERSA) and the Regional Science Association International (RSAI) and the co-founder of The Regional Science Academy; he has also contributed to the establishment of regional science associations throughout the world. In his career, Peter Nijkamp has authored or co-authored over two thousand scientific papers and has edited hundreds of books and special journal issues promoting regional science to various audiences. He is a member of approximately 30 editorial or advisory boards of scientific journals in the field and he has served as a mentor and supervisor for about 100 PhD students, many of which are now among the world’s leading regional scientists. His excellence in scholarship and outstanding contribution to regional science has been recognized on many occasions and he has received prestigious international awards and recognitions such as the Spinoza Prize – the most prestigious scientific award in the Netherlands, the Founder’s Medal of the RSAI – the highest international scientific award in the area of regional science, the Walter Island Award for Scholary Acheievements in Regional Science or the Doctor Honoris Causa degree from a number of universities across the globe.

Like Professor Nijkamp's research, the volume edited by Soushi Suzuki and Roberto Patutelli spans the theoretical, methodological and applied perspectives on a wide range of regional science topics. The book is organized in four parts, as follows.

Part I - *New Perspectives, Modelling and Methodology in Regional Science* showcases novel methodological standpoints and new frontiers in regional science research.

In **Chapter 1** (*The Cost of Missed EU Integration*), Roberta Capello and Andrea Caragliu highlight what GDP growth would be in the case of missed integration, by comparing the GDP growth expected from two scenarios: a reference one of greater integration and one of missed integration. Their results show that a more integrated scenario leads to faster economic growth across all EU countries, but the gains of integration are not spatially even and some regions gain more than others.

Amitrajeet A. Batabyal and Hamid Beladi (**Chapter 2: *On the Existence of an Equilibrium in Models of Local Public Good Use by Cities to Attract the Creative Class***) analyze a stylized model of competition between two cities that use a local public good (LPG) to attract members of the creative class. Their findings demonstrate that an equilibrium does exist in the model if the *representative* artist and the engineer treat the LPG provision levels in each city as exogenous.

In **Chapter 3** (*Canadian Regional Science 2.0*), Eric Vaz takes a retrospective approach to the advances and contributions of Regional Science and explores its new emerging directions. The example of Canada is brought as an outstanding case for Regional Science 2.0, which finds its strongest aid in the evolution of geo-computation and artificial intelligence.

Chapter 4 (*Dynamic Sustainability: Back to History to Advocate for Small- and Medium-Sized Towns*) by Teresa de Noronha, Eric Vaz and Waldemar Ratajczak propose a debate related to the real "net" value of agglomeration economies and the potential capacity of medium and small-sized towns (SMTs) to be full participants in development processes in a long-term perspective. Their analyses claim for the promotion of new innovative processes and products for development in SMTs.

In **Chapter 5** (*Peripheral Urban Areas: Perspectives on Sustainable Regeneration*), Gabriella Vindigni, Teresa Graziano, Vito Martelliano and Bruno Messina provide new perspectives on the innovative planning approaches that may improve urban sustainability in peripheral areas. Their analysis builds on a place-based case study, the project G124 carried out by the Renzo Piano Foundation, which was aimed at "mending" Italian peripheries and empowering local communities to become agents of change.

Finally, in **Chapter 6** (*Cities and Spatial Data in the New Urban World: A Data-Analytic Exploration*) Karima Kourtit discusses the fuzzy concept of cities in the Modern Age and pays particular attention to the way in which the presence and use of extensive spatial data and statistics may influence the mechanisms of sustainable urban development and data-oriented urban planning.

Part II - *Society and Culture* is organized into five chapters that address concepts and processes specific to complex multicultural societies.

In **Chapter 7** (*Group-Size Bias in the Measurement of Residential Sorting*), Mohana Mondal, Michael P. Cameron and Jacques Poot use New Zealand data to demonstrate group-size impact on bias in residential sorting. Their analysis shows that the *Entropy Index of Systematic Segregation* measure of residential sorting is least affected by group size variation and, consequently, is the most recommended.

Chapter 8 (*Entrepreneurial Interest of University Students in a Multicultural Society*) by Tüzin Baycan investigates the diverse attitudes, career motivations and perceived leadership skills of university students in the Netherlands. The findings show that there are gender and ethnic-based differences that explain students' entrepreneurial interest, which should be carefully considered in strategic policy and educational initiatives.

In **Chapter 9** (*How Can Small-Scale Measures of Human Development Index (HDI) be Used to Study the Local Potential for Sustainable Economic Growth?*), Umut Türk, Marina Toger and John Östh advance a local version of the human development index (HDI) and show that patterns at the municipality levels in Sweden are strongly correlated with commonly used resilience indexes. These results lead to the conclusion that HDI can be used as an indicator/ proxy for engineering resilience - where data at the local level is difficult to generate or obtain.

Chapter 10 (*Ceteris Paribus and Fixed Effects in Regional and Cultural Economics*) by Annie Tubadji is inspired by Peter Nijkamp's reflections on the deficiencies of using the ceteris paribus assumption in regional economic modelling. Based on data on religion from the World Value Survey, the author outlines how significant effects from cultural complexity can be lost in the interpretative analysis of empirical findings, when fixed effects are used in the spirit of the ceteris paribus assumption.

In **Chapter 11** (*Horizontal Transmission of Civic Capital and the Emergence of Cooperation: An Agent-Based Modelling Approach*), Roberto Patuelli, Eveline van Leeuwen, Lorenzo Zirulia and Aura Reggiani propose an agent-based model to simulate transmission of civic capital in a spatial interaction setting within the context of threshold models. By means of regression analysis, the authors test the effect of model parameters on the amount of civil capital and on its level of spatial clustering.

Part III *Tourism and Information* explore theoretical, conceptual and methodological perspectives that stay at the intersection between tourism studies and modern IT-based computational techniques.

This part starts with a contribution from João Romão (**Chapter 12: *Peter Nijkamp on the Move: Crossing Borders Between Regional Science and Tourism Studies***). Inspired by Peter Nijkamp's contributions to the field, the author discusses how different academic disciplines contribute to the creation of synergies in terms of objectives, methodologies and approaches between tourism and regional science, while acknowledging the multidisciplinary character of research in both fields.

Subsequently, in **Chapter 13 (*Revisiting Bruges: Investigating the Importance of Tourist Crowding Perception in the Visitor Experience Through Computational Text Analysis*)**, Bart Neuts evaluates tourist crowding perceptions in Bruges with a computational text analysis applied on a number of TripAdvisor reviews, thus showing the large opportunities offered by the consumer-generated data (as an alternative to traditional survey research).

Chapter 14 (*Exploring User Behavior in Destination Websites: An Application of Web Mining Techniques*) by Maria Francesca Cracolici and Furio Urso explore the website surfing behavior of potential tourists logging on to a website promoting the island of Sicily. In this respect, based on web-mining techniques, the authors find differences in behavior between the users from Western countries and those from China, which may have important implications in defining the marketing strategies of tourist destinations.

In **Chapter 15 (*The Role of Visualisation in Spatial Planning: A GIS-Based Approach*)** Maria Giaoutzi and Chrysaida-Aliki Papadopoulou discuss the concept of visual representation under the framework of Geographical Information Systems (GIS) and illustrate the potential integration of Multiple Criteria Decision Analysis (MCDA) into GIS, to achieve further advancements in spatial decision support processes.

Finally, the five chapters included in **Part IV** offer a broad perspective of topical issues related to ***City, Environment and Sustainability***.

In **Chapter 16 (*Towards the Implementation of the Circular Economic Model in Metropolitan Cities: The Case of Naples*)**, Luigi Fusco Girard proposes a multidimensional and multicriteria assessment method to support the planning process in the metropolitan city of Naples. The "territorialized" model underpins the development of the port area from the perspective of the circular economy and circular city model.

Chapter 17 (*Large Cities as the Cradle of Sustainable Energy Innovation*) by Marina van Geenhuizen, Razieh Nejabat and Pieter questions to what extent large cities act as concentrations of sustainable energy innovation and how its performance is related to agglomerations factors. Their

analysis yields to mixed results, given that the relationship also depends on other factors, such as the location of some sustainable energy sources.

Chapter 18 (*Are CO₂ Emission Targets of C40 Cities Realistic in View of Their Mayoral Powers Regarding Climate Policy?*) by Martina Siskova and Jeroen van den Bergh Stek evaluates the level of cities' ambitions regarding CO₂ emission targets and implementation of climate policies. The authors rely on a dataset for a subset of C40 cities, which supposedly are at the forefront of mitigation action and reveal the relationship between emission targets, mayoral powers and cities attributes.

In **Chapter 19** (*Economic Impact Analysis of Installing Renewable Energy: A Multiregional Input–Output Model for a Small Region and the Rest of the Country*), Yoshifumi Ishikawa use a versatile regional input-output model to estimate the economic effects of installing renewable energy facilities, based on the example of an affected region of the Great East Japan Earthquake. The results reveal that installing renewable facilities in such a region and supplying the remaining energy resulted from conventional power sources to the rest of Japan have larger effects on the regional economy.

In **Chapter 20** (*A Performance Assessment of Japanese Cities by Means of Data Envelopment Analysis*) Soushi Suzuki assesses the relative economic performance of 16 Japanese big cities by means of a Dynamic Target-Oriented Data Envelopment Analysis. The findings reveal a statistically significant relationship between city performance and population density, which is support of a policy of concentration in urban areas, so that to improve city performance.

With its broad view of regional science, this volume displays a variety of insightful perspectives and forms a valuable reference for researchers, scholars and policymakers in many disciplines.