

Manfred SCHRENK, Vasily V. POPOVICH, Peter ZEILE, Pietro ELISEI (Eds.)

# RE-MIXING THE CITY

TOWARDS SUSTAINABILITY AND RESILIENCE?



## PROCEEDINGS TAGUNGSBAND

Multiversum Schwechat, Austria, 14-16 May 2012

[www.corp.at](http://www.corp.at)



*There is nothing permanent except change. (Heraclitus)*

**REAL CORP 2012**

17<sup>th</sup> International Conference on Urban Planning, Regional Development and Information Society



CEIT ALANOVA  
Institute of Urbanism,  
Transport, Environment  
and Information Society



ISBN 978-3-95031 10-2-0  
(CD-ROM)  
ISBN 978-3-95031 10-3-7  
(PRINT)



**REAL CORP 2012. Re-Mixing the City.  
Towards Sustainability and Resilience?**

*Proceedings of*

17<sup>th</sup> International Conference on Urban Planning, Regional Development and Information Society

*Beiträge zur*

17. internationalen Konferenz zu Stadtplanung, Regionalentwicklung und Informationsgesellschaft

Edited by

**Manfred SCHRENK, Vasily V. POPOVICH, Peter ZEILE, Pietro ELISEI**

Schwechat, 2012

**CD-ROM-Edition**      ISBN: 978-3-9503110-2-0

**Print-Edition**        ISBN: 978-3-9503110-3-7

Im Selbstverlag des Vereins

**CORP – Competence Center of Urban and Regional Planning**

Kompetenzzentrum für Stadtplanung und Regionalentwicklung

Lerchergasse 4, A-2320 Schwechat-Rannersdorf

office@corp.at, <http://www.corp.at>

---

# REAL CORP 2012

## TEAM

**Manfred SCHRENK**

**Clemens BEYER**

**Christian EIZINGER**

**Flora STROHMEIER**

Linda DÖRRZAPF

Patrick KREJCI

Adela MARCOCI

Katharina MITTERER-REINISCH

Michael MÜLLNER

Julia NEUSCHMID

Petrina PAPAZEK

Daniela PATTI

Slobodan POPOVIĆ

Wolfgang W. WASSERBURGER

All rights reserved. – Alle Rechte vorbehalten.

Editors – Herausgeber:

**DI Manfred SCHRENK**, CEIT ALANOVA – Central European Institute of Technology, Schwechat, Austria

**Prof. Dr. Vasily V. POPOVICH**, SPIIRAS, St. Petersburg, Russia

**Dr.-Ing. Peter ZEILE**, TU Kaiserslautern, Kaiserslautern, Germany

**Dr.-Ing. Pietro ELISEI**, URBASOFIA, Bucharest, Romania

Publisher – Medieninhaber und Verleger:

**CORP – Competence Center of Urban and Regional Planning**

Kompetenzzentrum für Stadtplanung und Regionalentwicklung

Lechergasse 4, A-2320 Schwechat-Rannersdorf

office@corp.at, <http://www.corp.at>

**CD-ROM Edition:** ISBN 978-3-9503110-2-0

**Print Edition:** ISBN 978-3-9503110-3-7

Contributions by the authors reflect their own findings, views and opinions which may not necessarily be consistent with the views and opinions of the editors.

Die Arbeiten geben die Erkenntnisse und Ansichten des jeweiligen Autors wieder und müssen nicht mit den Ansichten der Herausgeber übereinstimmen.

**Table of contents – Inhaltsverzeichnis:**

<b>A New Urban Sensing and Monitoring Approach: Tagging the City with the RADAR SENSING App</b> .....	17
Peter Zeile, Martin Memmel, Jan-Philipp Exner.....	17
<b>A Preliminary Study of the Impact of Urban Energy Consumption with Urban Form in Taiwan</b> .....	27
Chin-Ying Chen, Hsueh-Sheng Chang.....	27
<b>A Spatial Assessment for Re-Mixing Buildings on the Rural Fringe of Spain</b> .....	33
Jin Su Jeong, Lorenzo Garcia-Moruno, Julio Hernández-Blanco.....	33
<b>Addressing Environmental Problems in the Coastal Urban Area of Attica</b> .....	39
Agisilaos Economou.....	39
<b>An Exploration of Efficiency and Influencing Factors of Low Carbon City</b> .....	47
Wei-Han Cheng, Hsueh-Sheng Chang.....	47
<b>Anknüpfungspunkte für Web-2.0- und AR-Instrumente in Verkehrsplanungs- und Beteiligungsprozessen und ihre Umsetzung</b> .....	55
Florian Reinwald, Sandra Murg, Doris Damyanovic.....	55
<b>Application of Knowledge Management Framework as a Decision-Support System for Disaster Management in Metropolitan Areas – Tehran as the Case Study</b> .....	63
Zohreh A. Daneshpour, Alireza Fallahi, Asrin Mahmoodpour.....	63
<b>Aufbau einer partizipativen Planungscommunity am Beispiel von Nexthamburg</b> .....	73
Daniel Kulus, Alenka Poplin, Rajiv Patwardhan.....	73
<b>BIBBIDI-BOBBIDI-BOO: The Reinvented Magic of Urban Shopping?</b> .....	85
Mira Milakovic, Aleksandra Stupar.....	85
<b>Can Universities Facilitate Cities to Function Better?</b> .....	93
Asif Khan, Mohsen Mohammadzadeh.....	93
<b>Changing Sub-Urban Land Uses to Urban</b> .....	101
Despina Dimelli.....	101
<b>City Region of Short Distance for ALL? Planning the ‘Everyday’ for a Diversity and Mixity of Users in Functional Areas</b> .....	109
Heidrun Wankiewicz.....	109
<b>Climate Change in Cities – Can Remote Sensing Help to Optimise Mitigation Strategies?</b> .....	121
Wieke Heldens, Thomas Esch, Hannes Taubenböck.....	121
<b>Compact Development as Land Use Planning Tool for Urban Disaster Management</b> .....	129
Neha Bansal, Mahua Mukherjee, Ajay Gairola.....	129
<b>Comparing Metropolitan Governance in Germany and the US: A Social Network Analysis</b> .....	141
Alexander Masser, Alan E. Alvarez, David C. Prosperi, Diana Mitsova.....	141
<b>Concepts Of Urban Renewal in an Aging Society in the XXI Century – Case Studies in Polish Cities</b> .....	151
Agnieszka Labus.....	151
<b>Considering the Impact of Future Climate Change on the Resilience of a City – Surface Run-Off due to Heavy Storm Events in the City of Wuppertal</b> .....	161
Frank Michel, Daniel Steffen, Sascha Schlobinski, Stefan Sander.....	161
<b>Deconstructing Smart Cities: An Intertextual Reading of Concepts and Practices for Integrated Urban and ICT Development</b> .....	171
Marc Wolfram.....	171
<b>Der Pfalzfinder – mobiler Service im regionalen Tourismus</b> .....	183
Sebastian Althoff, Norman Kratz, Gregor Landwehr.....	183
<b>Der Weg zum Smart Citizen – soziotechnologische Anforderungen an die Stadt der Zukunft</b> .....	191
Bettina Mandl, Petra Schaner.....	191
<b>Development and Application of Urban Micro-Climate Management System for Creating Low-Carbon and Green City</b> .....	201
Daewuk Kim, Eung-Ho Jung, Jiwon Ryu, Jae-Gyu Cha, Jeong-Sik Yun.....	201
<b>DGNB Zertifizierungssystem: Neubau gemischte Stadtquartiere</b> .....	211
Stephan Anders.....	211
<b>Do New Urban Densities Provide Urban Landscape Identity? A Concept for Operationalizing Qualitative Factors Combining Sophisticated Visualization Workflows</b> .....	221
Thomas M. Klein, Ulrike Wissen Hayek, Noemi Neuenschwander, James Melsom, Adrienne Grêt-Regamey.....	221
<b>“Dream” Regional Planning – “Real” Estate Development Based on Shopping Center Developments as Examples of “Real” Re-Mixing</b> .....	231
Evelyn Susanne Ernst.....	231

<b>3-Plus der Initiierung und Umsetzung smarter Mobilitätslösungen: Die Gunst der Stunde nutzen!</b> .....	<b>237</b>
Martin Berger, Ulrich Bergmann, Markus Frewein, Mario Platzer .....	237
<b>Durchmischung verstehen – neue Einsatzfelder von 3D-Stadtmodellen zur Visualisierung und Simulation urbaner Prozesse</b> .....	<b>247</b>
Henning Stepper, Ingo Wietzel.....	247
<b>Ecological Problems of Motor Transport of Azerbaijan</b> .....	<b>257</b>
Piriyeve Yakub Maksim oglu, Gozalov Sulhaddin Kamal oglu .....	257
<b>Effects Comparison of Tools to Control the Traffic Demand as an Instrument of Urban Environmental and Climate Policy</b> .....	<b>263</b>
Dietrich Leihns .....	263
<b>Enriching Public Spaces in Iran – Challenges and Opportunities</b> .....	<b>269</b>
Nasim Iranmanesh, Elham Amini.....	269
<b>Environmental Challenges of Peri-Urban Settlements in the Lagos Megacity</b> .....	<b>275</b>
Taibat Lawanson, Omoayena Yadau, Idris Salako .....	275
<b>Evaluation of the Current Municipal Slaughterhouse of Babolsar and Locate an Appropriate Site via Fuzzy Logic in GIS for the Future One</b> .....	<b>287</b>
Farhad Amiri Fard, Sadjad Mohammad Zahraei .....	287
<b>Explore the Effect of Urban Flood with the Integration of Spatial Analysis Technique</b> .....	<b>299</b>
Hsueh-Sheng Chang, Chin-Hsien Liao .....	299
<b>Fill in the Blanks: Challenging the Modernism, Satisfying the Users' Needs?</b> .....	<b>305</b>
Aleksandra Djukic, Aleksandra Stupar.....	305
<b>Geographic Views on Regional Planning and Development of Bosnia and Herzegovina</b> .....	<b>315</b>
Rahman Nurkovic.....	315
<b>Geschlechterverhältnisse und Mobilität–Welchen Beitrag leisten Mobilitätserhebungen?</b> .....	<b>321</b>
Mechtild Stiewe, Juliane Krause.....	321
<b>Gesunde Kommune – Chancen für eine nachhaltige Stadtentwicklung durch Sport und Bewegung</b> .....	<b>331</b>
Gerhard Steinebach, Henning Stepper, Lukas Esper, Cordula Uhlig.....	331
<b>GIS for Urban Environmental Management Plan: Making it through the Crisis</b> .....	<b>341</b>
Piyali Bandyopadhyay .....	341
<b>High Building Density around Subway Stations, Policies and Solutions</b> .....	<b>349</b>
Abdolhossein Ardekani .....	349
<b>How Is Mobility Behaviour Affected by a Migrant Background?</b> .....	<b>359</b>
Kerstin Suhl, Janina Welsch, Ulrike Reutter .....	359
<b>Humans as Sensors to Enhance the Built Environment: a Case Study of the Eastern Harbor, Alexandria, Egypt</b> .....	<b>367</b>
Dina Taha, Rania Raslan, Benjamin Sebastian Bergner .....	367
<b>Improvement of City Competitiveness by Re-Mixing of Inner Strengths</b> .....	<b>377</b>
Sanja Simeunčević Radulović, Biserka Mitrović, Danilo Furundžić .....	377
<b>Integrating Disaster Management and Metropolitan Planning in Tehran</b> .....	<b>387</b>
Alireza Fallahi, Zohreh A. Daneshpour, Vahideh Ebrahimi .....	387
<b>Integrative Urban Design Game as a Method for Creating Liveable Urban Ambients</b> .....	<b>399</b>
Tatjana Mrdenović.....	399
<b>Integrierte Simulation von Raumentwicklung und Verkehr bei stark steigenden Energiepreisen</b> .....	<b>407</b>
Max Bohnet, Carsten Gertz, Jacqueline Maaß, Sven Altenburg.....	407
<b>Intra-Urban Differentials in Poverty and Livelihoods in Selected Residential Neighbourhoods of Lagos Metropolis</b> .....	<b>417</b>
Taibat Lawanson.....	417
<b>Ivan: Creator of Sustainability in Iranian Old Houses</b> .....	<b>427</b>
Javad Eiraji, Pouya Joudi Gollar, Ayub Nalbandi Bukani .....	427
<b>Key Impacts of Economic Integration of Kazakhstan on Spatial Development of Its Settlements</b> .....	<b>431</b>
Madina Junussova.....	431
<b>LIMES – Large Scale Innovative and Mobile European Services for Culture Tourism in Rural Areas</b> .....	<b>441</b>
Sebastian Althoff, Norman Kratz, Gregor Landwehr .....	441
<b>Livability and Social Integration vs. Economic Crisis and Trends of Transition: Case Study of Local Planning in Belgrade</b> .....	<b>447</b>
Biserka Mitrović, Sanja Simeunčević .....	447
<b>Mitnahmesysteme als Ergänzung des öffentlichen Personennahverkehrs (ÖPNV) in ländlichen Räumen – das Beispiel „Mobifalt“</b> .....	<b>453</b>
Volker Schmitt, Carsten Sommer .....	453



<b>Mixed Building use Promotes Mixed Urbanity: Insights from Historical Use-neutral Architecture</b> .....	463
Angelika Psenner .....	463
<b>Mobile Digitalisierung von Baulücken – Baulückenerfassung mit GIS, iPad und Geoweb</b> .....	475
Julia Biwer, Daniel Broschart, Stefan Höffken .....	475
<b>Modelling Affective Responses to Space</b> .....	485
Silvia Klettner, Georg Gartner .....	485
<b>Möglichkeiten der ökonomischen Bewertung des Verlusts der Nacht</b> .....	493
Robert Hänsch, Benjamin Könecke, Merle Pottharst, Florian Wukovitsch.....	493
<b>MORÉCO – Mobility and Residential Costs: Improving the Settlement Development in the Transnational Alpine Space Region</b> .....	505
Benjamin Büttner, Susanne Franz, Ulrike Reutter, Gebhard Wulfhorst .....	505
<b>Multi-Channel-Konzepte als Chance für eine nachhaltige und zukunftsfähige Entwicklung der Innenstädte?</b> .....	513
Martina Hengst, Gerhard Steinebach.....	513
<b>Negative Space and Positive Environment: Mapping Opportunities for Urban Resilience</b> .....	523
Mirko Guaralda, Magdalena Kowalik.....	523
<b>Noise Pollution Management Issues in Tirana, the Capital of Albania</b> .....	533
Dorina Pojani .....	533
<b>Offene Ganzheit in der europäischen Stadt der Zukunft</b> .....	541
Beate Niemann, Priscilla Schädler .....	541
<b>Parking Regulations and Urban Development – Poznań’s Case Study</b> .....	547
Michał Beim, Bogusz Modrzewski, Adam Radzinski.....	547
<b>Pathology of Urban Space Based on Standard Designs for Wheelchair Users, Sari 2011</b> .....	559
Mehdi Golestanibakht, Khadijeh Rabiei, Reza Lahmian.....	559
<b>Pedestrian Crossing Behaviour in Signalized Crossings in Middle Size Cities in Greece</b> .....	563
Athanasios Galanis, Eliou Nikolaos .....	563
<b>Pedestrian Evacuation Planning for Major Events – a New Approach Combining Planning Aspects and Human Factors</b> ...	571
Verena Reuter, Benjamin Sebastian Bergner, Annette Spellerberg.....	571
<b>Planning Emergence via Sustainable Partnerships in Urban Ethiopia</b> .....	581
Tendayi Gondo.....	581
<b>Planning Re-Mixed: Conceptual Framework of New Planning Ideas</b> .....	593
Izabela Mironowicz, Derek Martin .....	593
<b>Potenziale und Wirkungen standortbezogenen Mobilitätsmanagements</b> .....	605
Mechtild Stiewe, Heike Mühlhans, Max Bohnet, Torben Fricke, Sebastian Heller .....	605
<b>Prospects for Brownfields at the Edge of Nicosia Buffer Zone</b> .....	615
Mohsen Shojaee Far, Resmiye Alpar Atun .....	615
<b>Providing Web Maps for Everyone. Understanding Users and their Requirements</b> .....	627
Sabine Hennig, Antonia Osberger, Julia Neuschmid, Manfred Schrenk, Wolfgang Wasserburger, Fritz Zobl .....	627
<b>Raum.Sicherheit.Bewusstsein – Sicherheitswirkung und Sicherheitsverständnis räumlich handelnder Akteure</b> .....	637
Jan Abt, Josiane Meier .....	637
<b>Raumpioniership in sozial benachteiligten Großstadtquartieren: Akteurstypen aus Berlin-Moabit und Hamburg-Wilhelmsburg</b> .....	647
Petra Jähnke .....	647
<b>Re-Mixing and Re-Using: the Urban Integration of the Specialized Filamentary Morphologies in Metropolitan Lisbon</b> .....	657
Inês de Castro Luís Lopes Moreira.....	657
<b>Real Estate Taxation in Poland and its Influence on Spatial Development</b> .....	667
Adam Radzinski .....	667
<b>Rebuilding Old Downtowns: the Case of Doha, Qatar</b> .....	677
Rania F. Khalil, Khaled Shaaban .....	677
<b>Regeneration of Heritage Urban Space of Delhi, Shahjahanabad, the Walled City</b> .....	691
Bikram Kumar Dutta, Sanhita Bandyopadhyay .....	691
<b>Remixing New Ideas with Old Countries—the Attempt to Apply Airport City Concept and Special City Quartier Concepts to the Armenian Landscape</b> .....	703
Stephanie Betz.....	703
<b>Resilience, Resistance, Reinvention of the Right to the City</b> .....	709
Judith Ryser.....	709
<b>Resizing/Re-Seizing the City – Requirements for Diversity</b> .....	721
Harald Frey, Iva Kovacic, Maja Lorbek.....	721

<b>Seismic Risk Reduction: a Proposal for Identifying Elements Enhancing Resilience of Territorial Systems</b> .....	<b>729</b>
Giuseppe B. Las Casas, Lucia Tilio.....	729
<b>Sensing the City – How to Identify Recreational Benefits of Urban Green Areas with the Help of Sensor Technology</b> .....	<b>737</b>
Benjamin Sebastian Bergner, Jan-Philipp Exner, Peter Zeile, Martin Rumberg.....	737
<b>Sharing is Caring – Will Users Comply with the Current Smart City Approach?</b> .....	<b>747</b>
Claudia Kaefer, Martin Eder.....	747
<b>Sicherheit im demographischen Wandel</b> .....	<b>749</b>
Gerhard Steinebach, Cordula Uhlig.....	749
<b>Social and Spatial Behaviour in Shared Spaces</b> .....	<b>759</b>
Robert Schönauer, Martin Stubenschrott, Helmut Schrom-Feiertag, Karl Menšik.....	759
<b>Socio-Technical Assisted Neighborhoods</b> .....	<b>769</b>
Annette Spellerberg, Lynn Schelisch.....	769
<b>“Spaces-In-Between” – Reweaving the City along its Inner Edges</b> .....	<b>775</b>
Silja Tillner.....	775
<b>Städtebauliche Methodenentwicklung mit GeoWeb und Mobile Computing</b> .....	<b>785</b>
Peter Zeile, Guido Kebbadies, Bernd Streich .....	785
<b>Stadtplanerische Herausforderungen einer funktionalen Durchmischung am Beispiel der Landeshauptstadt Innsbruck</b> .....	<b>795</b>
Antonia Roither, Anne Weidner .....	795
<b>Strategic Forecasting and Planning that City Planners can do Themselves: Examples of Simple but Powerful Visual Techniques for Specifying Urban Outcomes in Growing Metropolitan Regions</b> .....	<b>805</b>
Jeremy Dawkins .....	805
<b>Studying Industrial Symbols in Contemporary Shiraz Urban Landscape</b> .....	<b>817</b>
Mohsen Akbarzadeh, Katayoun Izadi, Meysam Mansouri .....	817
<b>Testing the Resilience of Underground Infrastructure Solutions through an Urban Futures Methodology</b> .....	<b>825</b>
Dexter Hunt, Ian Jefferson, Chris Rogers .....	825
<b>The Ability of Wheelchair Users in Utilizing Urban Facilities, Sari 2011</b> .....	<b>835</b>
Mehdi Golestanibakht, Khadijeh Rabiei, Reza Lahmian .....	835
<b>The Effects of Mobility Management for Companies in the Course of the German Mobility Management Action Programme “effizient mobil”</b> .....	<b>841</b>
Conny Louen, Reyhaneh Farrokhkhiavi, Mechtild Stiewe, Doris Bäumer .....	841
<b>The Egyptian Revolution from the Perspective of an Urban Planner: Demonstrations on the Streets of Alexandria, Egypt</b> .....	<b>851</b>
Dina Taha, Rania Raslan, Benjamin Sebastian Bergner .....	851
<b>The Evaluation of Daily Urban System in the City of Rasht</b> .....	<b>859</b>
Hekmat Baghaei Roudsari, Farhad Amiri Fard.....	859
<b>The Netherlands in Transition. The Planning of Low Carbon, Sustainable and Liveable Cities in the Utrecht Region</b> .....	<b>867</b>
Martin Dubbeling .....	867
<b>The Urban Risk Dilemma: Urbanisation, Modernisation and Disaster Risks in Ho Chi Minh City</b> .....	<b>881</b>
Harry Storch, Nigel Downes, Le Thanh Hoa.....	881
<b>The Way to Plan a Sustainable “Deep City”: From Economic and Strategic Aspects</b> .....	<b>889</b>
Huanqing Li.....	889
<b>The “Open Cities” Approach: a Prospect for Improving the Quality of Life in Alexandria City, Egypt</b> .....	<b>899</b>
Mai M.Abdo, Hany A.Ayad, Dina Taha.....	899
<b>Tischlein, deck dich! Über städtische Gastronomielandschaften und was Stadtplanung damit zu tun haben könnte</b> .....	<b>911</b>
Ricarda Pätzold.....	911
<b>Tourism Continuity Plan after the 2003 Bam Earthquake</b> .....	<b>923</b>
Mohammad Hossein Sharifzadegan, Alireza Fallahi, Sahar Nedae Tousi .....	923
<b>Toward Mixed-Use Communities by Transit-oriented development (TOD) in the United States</b> .....	<b>935</b>
Hanieh Shamskooshki .....	935
<b>Traffic Impact Analysis as a Tool for Planning Permiot Consideration in Lagos, Nigeria: Guidelines and Procedures</b> .....	<b>947</b>
Taofiki Salau .....	947
<b>Transition Analyses on Land Use and Land Price in Nagoya CBD during the Deregulation Decade</b> .....	<b>955</b>
Toshiyuki Kaneda, Tomohiko Misaka, Tatsunori Sakai .....	955
<b>Understanding the Relationship between Resilience and Sustainability: Emergency Planning and the Design of Urban Space</b> .....	<b>965</b>
Julie Fisher, Steven Harre-Young, Lee Boshier.....	965
<b>Urban Development 2050: Resource Efficiency as Guiding Principle for Rebuilding European Cities</b> .....	<b>975</b>
Christof Schremmer, Ursula Mollay, Barbara Saringer-Bory.....	975



<b>Urban Governance and Contribution of Climate Change Consideration and Energy Efficiency: Case Study of Hashtgerd New Town, Iran</b> .....	<b>985</b>
Ghazaleh Jasbi.....	985
<b>Urban Nomads. Building Shanghai: Migrant Workers and the Construction Process</b> .....	<b>995</b>
Ulrike Bronner, Clarissa Reikersdorfer.....	995
<b>Urban Safety of the Public Spaces in Belgrade, Serbia</b> .....	<b>1007</b>
Nataša Danilović Hristić.....	1007
<b>Urban Structure as a Repository of Social Content – the Case Study of the Lodz ‘Jewish District’</b> .....	<b>1017</b>
Małgorzata Hanzl.....	1017
<b>Urban Time and Energy (UTE) – Time-Space-Energy Scenarios in Urban Areas</b> .....	<b>1031</b>
Edeltraud Haselsteiner, Veronika Gaube, Alexander Remesch, Barbara Smetschka.....	1031
<b>Urban Types and Transformation of the City</b> .....	<b>1041</b>
Mohammed Qasim Abdul Ghafoor Al Ani.....	1041
<b>Urbane Sicherheit – eine Gemeinschaftsaufgabe vieler Akteure</b> .....	<b>1055</b>
Holger Floeting, Antje Seidel-Schulze.....	1055
<b>Using Current Condition of Cities to Change them to Dynamic Cities – Case Study of Rasht, Guilan, Iran</b> .....	<b>1063</b>
Seyed Mehdi Amirikiaei, Seyedeh Roshanak Amirikiaei.....	1063
<b>Visibility Analysis of the Capital District in the 2030 Master Plan of Abu Dhabi</b> .....	<b>1071</b>
Rim Meziani.....	1071
<b>Wayfinding Performance of Visually Impaired Pedestrians in an Urban Area</b> .....	<b>1081</b>
Aida E. Afrooz, Toktam Hanaee, Bruno Parolin.....	1081
<b>Without Planning? Incremental Emergence of High Density Mixed Use Centres in Mega Manila</b> .....	<b>1093</b>
Stefan Rau, Art Corpuz.....	1093
<b>Zielgruppeneinbindung in Verkehrsplanungsprozesse mittels neuer Technologien?</b> .....	<b>1103</b>
Martina Jauschneg, Christoph Stoik.....	1103
<b>A Planning Support System as a Tool for Sustainable Urban Planning</b> .....	<b>1111</b>
Yeon Mee Kim, Jaesung Bang, Hyeon Soo Kim.....	1111
<b>An Introduction to Major Challenges of Urban Transportation in Metropolises of Iran</b> .....	<b>1121</b>
Eshagh Rasouli Sarabi, Shahryar Shaghaghi G.....	1121
<b>An Introduction to Socio-spatial Consequences of Urban Poverty in Iran</b> .....	<b>1125</b>
Mir Saeed Moosavi.....	1125
<b>Analysis of the Fabric of Hawramane Takht Village from Natural and Climatic Point of View</b> .....	<b>1129</b>
Shahryar Shaghaghi G., Sangar Sharafi, Abdolrahman Panahandeh.....	1129
<b>ARGUS: Assisting Personal Guidance System for People with Visual Impairment</b> .....	<b>1137</b>
Oihana Otaegui, Estibaliz Loyo, Eduardo Carrasco, Caludia Föslleitner, John Spiller, Daniela Patti, Adela, Marcoci, Rafael Olmedo, Markus Dubielzig.....	1137
<b>Building up Land Use Management Skills</b> .....	<b>1143</b>
Jiřina Bergatt Jackson.....	1143
<b>CARBOTRAF – A Decision Support System for Reducing CO<sub>2</sub> and Black Carbon Emissions by Adaptive Traffic Management</b> .....	<b>1149</b>
Martin Litzemberger, Wolfgang Ponweiser, Michael Schramm, Alfred Paukerl, Marie-S. Marcinek.....	1149
<b>CentrepeSTATISTICS – Working Interactively with Cross-Border Statistic Data</b> .....	<b>1153</b>
Clemens Beyer, Walter Pozarek, Manfred Schrenk.....	1153
<b>City on the Edge of Moscow Agglomeration: a Chance for Sustainable Development</b> .....	<b>1159</b>
Alexander Antonov, Anna Shagova.....	1159
<b>Conceptual Approaches on the Development of the Territory of the Republic Kazakhstan</b> .....	<b>1167</b>
Turlybek Mussabayev, Karlygash Muldagaliyeva.....	1167
<b>Cooperation between AAL-related Research and Caregiving for Seniors in the Municipality of Schwechat</b> .....	<b>1173</b>
Walter Hlauschek, Helene Meissl, Ulrike Barta, Katharina Werner, Paul Panek.....	1173
<b>Development of Managed Real Estate–International Case Studies on Principles and Success Factors</b> .....	<b>1179</b>
Dietmar Wiegand, Marijana Sreckovic.....	1179
<b>Enhancing the Social Inclusion of Seniors by Using Tablets as a Main Gateway to the World Wide Web</b> .....	<b>1187</b>
Franz Werner, Katharina Werner.....	1187
<b>Evaluation Performance Comparison of Surveying and Mapping Systems for Updating the City Geospatial Progress</b> .....	<b>1193</b>
Mahmoud Al-Hader.....	1193
<b>Feedback for Urban Planning and Solutions</b> .....	<b>1201</b>
David Pešek, Bohdana Fialová, Ing Arch. Eva Špačková.....	1201

<b>From 5 to 10 %. The Challenge to Double Vienna's Modal Share of Cycling</b> .....	<b>1207</b>
Andrea Weninger .....	1207
<b>Geosimulation of Urban Housing Market Conditions: A Preliminary Investigation</b> .....	<b>1213</b>
Harald Scherthanner, Hartmut Asche .....	1213
<b>I-Scope–Interoperable Smart City Services through an Open Platform for Urban Ecosystems</b> .....	<b>1219</b>
Raffaële de Amicis, Giuseppe Conti, Daniela Patti, Martin Ford, Pietro Elisei .....	1219
<b>Identification of Innovative Solutions to Decarbonise Transportation of People and Goods in Smart Cities</b> .....	<b>1227</b>
Clemens Schober, Susanne Roiser, Martin Eder .....	1227
<b>Implications of Land Use Mix on the Sustainability of African Urban Centres: A Case Study of Stellenbosch, South Africa</b> .....	<b>1237</b>
Walter Musakwa, Adriaan van Niekerk .....	1237
<b>Innovative Informationstechnologien als Bausteine einer nachhaltigen Stadtentwicklungspolitik</b> .....	<b>1245</b>
René Krug, Marcel Heins, Claus Dießenbacher, Einar Kretzler .....	1245
<b>Integrated Action Plans and Training Course for Circular Land Management</b> .....	<b>1253</b>
Uwe Ferber, Dagmar Petrikova, Maic Verbücheln, Jiřina Bergatt Jackson, Thomas Preuss, Anna Starzewska-Sikorska .....	1253
<b>Introducing Integrated Eco-Mobility to the New Asian Urban Model – Filling Systemic Transit Convenience Gaps. A Case in Chongqing’s High-Density Jiangbei Centre</b> .....	<b>1259</b>
Stefan Rau, Jianfeng Xu, Hang Yi Chen, Yi Hua Zhang .....	1259
<b>It’s the Footprint, Stupid! Urban Assessment by Footprinting Public Transit</b> .....	<b>1267</b>
Markus Ossberger .....	1267
<b>Kostenreduktion im Bereich der Infrastruktur durch LifeCycle-Management</b> .....	<b>1275</b>
Martin Farthofer .....	1275
<b>Land Uses: Anything Anywhere &amp; Anytime? Yes, but How Thematically and Where Areally?</b> .....	<b>1279</b>
Ioannis Tsouderos, Despina Dimelli .....	1279
<b>Looking for New Ideas of Public Space – Public Space Projects in Gdansk Reinforced by Art Activities</b> .....	<b>1285</b>
Magdalena Rembeza .....	1285
<b>Memorable Square: Identities, Meanings and the Production of Urban Space in Yogyakarta, Indonesia</b> .....	<b>1291</b>
Dyah Widiyastuti .....	1291
<b>Mobility Pass for Residential Real Estate – An Online Tool for the Calculation of Mobility Costs and the Awareness on Housing Decisions</b> .....	<b>1301</b>
Manfred Schrenk, Patrick Krejci, Linda Dörrzapf, Christian Eizinger, Wolfgang W. Wasserburger .....	1301
<b>Modelling the Coverage of Public Utility Providers</b> .....	<b>1307</b>
Nicole Vojtech, Roland Grillmayer, Brigitte Rudel, Mario Wunsch, Martina Dürauer, Manuela Weissenbeck .....	1307
<b>Möglichkeiten zum Einsatz von Augmented-Reality-Technologien in Verbindung mit WebGIS-Services in der urbanen Pflanzenverwendung</b> .....	<b>1311</b>
Marcel Heins, René Krug, Einar Kretzler, Wolfram Kircher, Christina Werner .....	1311
<b>Partizipationstool – Tool zur Überwindung von prozessbedingten Barrieren in Infrastrukturprojekten</b> .....	<b>1319</b>
Alexander Neumann, Sonja Busch, Wiebke Unbehaun .....	1319
<b>„Pedestrianize Your City“ – Elemente und Vorteile einer Fußgängerstrategie sowie eines Fußgängerchecks für Ihre Stadt</b> .....	<b>1325</b>
Dieter Schwab, Martina Strasser .....	1325
<b>People Articulating “the Urban” in Serbia: On-line Platform for the Dialog about Public Spaces, their Availability and Public Usage</b> .....	<b>1331</b>
Marija Cvetinovic, Dobrica Veselinovic .....	1331
<b>Recognition of Sustainable Approaches in Urban Structure of Historical Cities in Iran</b> .....	<b>1337</b>
Alireza Soltani .....	1337
<b>Re-Mixing City vs. Re-Mixing the Cities: Interactive Cities, Zipped Regions and Regional Coalition Model. The Case of Orange County as a Successful Illustration of Regional Coalition Model</b> .....	<b>1341</b>
Eric R. P. Farr, Poorang Piroozfar .....	1341
<b>Remixing Music in the City and Music online: How Listening to Music Changes because of Piracy</b> .....	<b>1353</b>
Olivier Lefebvre .....	1353
<b>Remixing the (Suburban) City – Institutional Frame, Strategies, Projects in the Vienna Region</b> .....	<b>1359</b>
Andreas Hacker .....	1359
<b>Revitalizing Urban Neighborhoods with a Community Approach to Sustainable Development</b> .....	<b>1367</b>
Raouf Zabeih, Pouya Joudi, Ramez Zabeih .....	1367
<b>Sharing the Land Knowledge: The HLANDATA Way to Harmonized Information on Land Cover/Land Use</b> .....	<b>1371</b>
Tomas Soukup, Tomas Loukotka, Antonin Orlik .....	1371

<b>Smart Cities – wie Systeme intelligent werden .....</b>	<b>1377</b>
Daniela Kain, Elvira Lutter, Theresia Vogel .....	1377
<b>Spatial Planning and Open Space Integration in Urban Ethiopia: a Sustainable Accessibility Exegesis .....</b>	<b>1383</b>
Tendayi Gondo.....	1383
<b>Stakeholder Process in the City of Bruck an der Mur: Lessons Learned in Developing a Vision and Designing an Action Plan for a Smart City .....</b>	<b>1391</b>
Ute Gigler, Olivier Pol, Martin Berger, Robert Hermann, Harald Raupenstrauch, Walter Pölzl, Lukas Lippert .....	1391
<b>Sustainable Urban Development in Germany in the 1990s – a Situation Report after 20 Years.....</b>	<b>1397</b>
Axel Laistner, Hermann Laistner .....	1397
<b>The Effect of Fourth Dimension on the Behavior of Urban Dwellers .....</b>	<b>1411</b>
Anahita Mahmoudi, Shabnam Farboud.....	1411
<b>The Resource-Saving Enterprise Zone Liesing.....</b>	<b>1417</b>
Gudrun Maierbrugger, Andrea Faast.....	1417
<b>The Walkable City – the Concept of Stockholm .....</b>	<b>1423</b>
Michael Erman .....	1423
<b>Three Dimensional Mixtures of Different Activities in Buildings around Railway Stations in Tokyo – Shibuya, Azabu-Juban and Kasai.....</b>	<b>1429</b>
Keiji Yoshimoto, Yoko Hatori, Tatsuya Kishimoto .....	1429
<b>TURaS: Transitioning to Urban Resilience and Sustainability .....</b>	<b>1435</b>
Marcus Collier, Louise Dunne and Zorica Nedović-Budić .....	1435
<b>Urban Nomads: How to Remix the Demography of the City .....</b>	<b>1439</b>
Ehsan Bazafkan .....	1439
<b>Urbane Zentren für alle Menschen nutzbar machen .....</b>	<b>1441</b>
Dagmar Everding .....	1441
<b>Utility Tunnels – Proven Sustainability Above and Below Ground .....</b>	<b>1445</b>
Axel Laistner, Hermann Laistner .....	1445
<b>Wir schützen uns zu Tode. Schallschutz ohne Ende oder akustische Raumplanung? .....</b>	<b>1457</b>
Peter Androsch .....	1457

## Improvement of City Competitiveness by Re-Mixing of Inner Strengths

*Sanja Simeuncevic Radulovic, Biserka Mitrovic, Danilo Furundzic*

(Arch. Sanja Simeuncevic Radulovic, Faculty of Architecture, University of Belgrade, Bulevar kralja Aleksandra, Belgrade, Serbia, [simsanja@arh.bg.ac.rs](mailto:simsanja@arh.bg.ac.rs))

(Msc. arch. Biserka Mitrovic, Faculty of Architecture, University of Belgrade, Bulevar kralja Aleksandra, Belgrade, Serbia, [biserkamitrovic@gmail.com](mailto:biserkamitrovic@gmail.com))

(M.arch. Danilo Furundzic, Faculty of Architecture, University of Belgrade, Bulevar kralja Aleksandra, Belgrade, Serbia, [dfurundzic@gmail.com](mailto:dfurundzic@gmail.com))

### 1 ABSTRACT

Globalization was marked by mobility – mobility of people, goods, capital, ideas and knowledge. As a result, development strategies in many cities have concentrated on the attraction of new investments, multinational headquarters, international events, tourists and high-skilled workforce, on the attraction of part of the global capital. The question is have these strategies been truly successful in the previous decades, can the attraction of foreign capital still be adequate in the challenging times and economical crises.

This paper will explore another possible approach to strategies for improvement of city competitiveness, ones that are more based on inner city strengths and possibilities, which might be more suitable for contemporary times. Some of most recent research shows that global capital and workforce are not as mobile as it was considered, that are rooted in the economical path, social and cultural network of the city. The inner values of the city such as – inner social and business networks, identity and living conditions have strong impact on city competitiveness in global market. Local inner strength of city and its citizens can be the source of city's wealth and resilience in the era of globalization.

This paper will try to give a new way of looking on city development strategies for the improvement of its competitiveness on regional and global scale. It will elaborate the possibilities to reuse existing inner strengths of local production, creativity and innovations in the city, to remix existing and new values and qualities, with the aim of creation of city's growth in the present global conditions.

### 2 INTRODUCTION

The beginning of contemporary globalization is connected to the technological advances that made transfer of information and people easier and quicker, decreasing the importance of space distance. It is primarily perceived as the process marked by high and quick mobility. Globalization is connected with the transfer of capital across national borders, in order to reduce costs and expand markets (IMF, 2002). On the other hand, it is characterized by high mobility of people, as individual high-skilled professionals and massive low skilled immigrants.

Development strategies of many cities tried to respond adequately to globalization and its processes, looking for the best way to position themselves on the global market of cities. In a struggle for competitiveness cities, relying on the perception of globalization as mobility of capital, concentrated on attraction of global investment, multinational companies, international events and high-skilled workforce. The sustainable positive effects of these strategies on city wealth are questionable, especially in the challenging times of economical crises.

Another perception of globalization sees it as less mobile and more rooted in local environment and relations. Some new research shows that globalization is closer to inter-national mode of economy than borderless global one (Hirst and Thompson, 1996). High mobility of companies and people in globalization is connected to the small elite groups (Birkinshaw, 2006, UNDESA, 2005). Others are embedded in the economical and cultural path of the city, connected to the local social and business networks.

New approach to globalization opens a new understanding of city competitiveness. Inner values of the city, such as inner social and business networks, living conditions and innovation, became the main motors of competitiveness rise for many. The way how cities improved their competitiveness, based on the inner strength, differ from the support to local business and their expansions, increasing its number and their market; creation of conditions for higher cooperation between local companies and knowledge transfer, to making of needed high-skilled and creative workforce.

This paper will explore possible strategies for improvement of city competitiveness based on inner strengths. It will elaborate the possibilities to reuse existing inner strengths of local production, creativity and innovations in the city, to remix existing and new values and qualities with the aim of creation of city's growth in the present global conditions. The aim of this paper is to give new way of looking on city development which might be more suitable for contemporary challenging times.

### **3 IMPROVEMENT OF CITY COMPETITIVENESS IN GLOBALIZATION MARKED BY MOBILITY**

#### **3.1 Perception of globalization as highly mobile**

Globalization is not presenting completely new phenomenon. Capital accumulation and its spread over the world existed in the sixteenth century. What is new is the speed of change and transfer. The beginning of contemporary globalization is connected with the 80's of the 20th century, when this term came into use. The term came into use to reflect technological advances that made it easier and quicker to do international transactions and financial flows, movement of people (labor) and knowledge (technology) across international borders (IMF, 2008). Remarkable development in computing power and communications capacity transformed and globalised financial system and production networks (Friedman, 1999).

The contemporary globalization is defined as increasing integration of economies around the world, particularly through the movement of goods, services and capital across borders (IMF, 2002). It is acknowledged that globalization induced high mobility of capital across national borders, in order to reduce costs, improve market access and enhance competitive advantage. Companies internationalized their production process, diffused it to the foreign countries with potentials for more efficient production, while at the same time concentrating headquarters in the globalization centers of world cities (World Bank, 1999).

Beside the high movement of capital, globalization is seen as characterized by high mobility of people, tourists and workforce (Appadurai, 1996, Urry 2000). Deregulation of labour market in globalization induces migration of high-skilled workforce and immigrants. Global elite (Castells, 2000) of managers, creative and high-skill workforce, is seen as individuals that move around freely building portfolio careers rather than looking for steady jobs (Williams, 2009). On the other hand, globalization is manifested through international migration, especially transnational migration (Vertovec, 2004) faster and unpredictably shaped, with no clear point of arrival or departure (Urry, 2000).

"Hyper globalization" theses predicts a "borderless world" of global homogeneity, world of non embedded production and consumption chains, placeless capital, homeless subjects, world where all socialites are formed within context of global flows (Robertson, 1992).

#### **3.2 Strategies for city competitiveness based on attraction of global capital**

Globalization has intensively affected cities, provoking rapid and dramatic changes to the cities in the past 30 years. Competitiveness between cities has intensified. Although the competitiveness is not a new phenomenon, what is different in contemporary globalization is complexity and global wideness (Sassen, 2002, p.25). Competition, which was previously primarily between cities of the same nation or same region has expanded to the global level.

Perception of globalization as process of high mobility of capital and people have stressed the position of cities as replaceable entities (Lever and Turok 1999), which can be easily changed, capital or production process can relocate to some other place, people can move to other city. This new position of cities in the constant struggle for better global position has induced the need for new strategies of cities' development. The perception of globalization as mobile has influenced these strategies, putting the emphases on attraction of global capital (investment and workforce) as most important elements for cities' growth and wealth. These strategies, according to the basic element of global capital which wanted to attract, can be divided in the following groups: 1) strategies for attraction of global companies and investment, 2) strategies for attraction of global events 3) strategies for attraction of workforce and 4) strategies for attraction of creativity.



Strategies for attraction of global companies and investment

Modern communication has made it far easier to manage dispersed business operations from centrally located headquarters. Most large corporations found advantageous to locate in the main urban centres in order to have full access to the desired mix of services and other companies (Yusuf and Wu, 2002, p. 1215). In the theory the importance of the cities in the global urban hierarchy has been measured by the concentration of headquarters of important international corporations (Sassen, 2001, Hall, 1966, Borja and Castells, 1997). The higher the concentration of main headquarters the higher is the importance of the city in the global networks and flows.

This theoretical approach had its implications in the development strategies of the cities. Many cities around the world tried to improve their global competitiveness and importance by creating attractive ambience for international companies. By developing attractive international business centres in their cities, enhancing business capabilities and services, creating open market and labour conditions they tried to attract global transnational corporations to the city (Yusuf and Wu, 2002, p. 1215). Reason for this informal competition for global companies is that the existence of high ranking companies reflects economic prestige and instils confidence in future investors (Benton-Short, Price and Friedman, 2005, p. 946). The results varied, from success stories to failures, which invested huge amount of financial and human resources in creating alluring conditions without results. It is questionable whether the attraction of international headquarters improves the city competitiveness or the arrival of international companies is the consequence of cities' global position improvement.

Strategies for attraction of global events

The mobility of people, in the first place the mobility of tourist and travelers, has influenced another strategy for city development – the attraction of global events in the city. Important element of the competition between cities is big global events and festivals, with the aim of attracting attention to city and creating a good image (Stahre, 2004, p.73). The promise of world wide exposure and economic gain has made hosting these major and regularly scheduled cultural and sporting events a lucrative goal for aspiring cities around the world (Short and others, 2000). Gaining some global cultural or sport event presented an opportunity for the city to build new image through big architecture and change in urban development. Significant improvement of city competitiveness through use of global events is questionable in the long run. Next event in the next city averts attention to another city.

Strategies for attraction of workforce

As an equally mobile and important component of globalization is seen migration of people (Sassen, 1999). Castells and Miller say that “while movement of people across borders have shaped states and societies since time immemorial, what is distinctive in recent years is their global scope” (2003, p.1). Globalization, mobility of people and the increasing economic integration of states is accepted that creates a global labour market. In that global market top cities are magnets for the skilled workforce, on a permanent or transient basis (Perrons, 2009). Consequently, migration is a significant component of interregional economic relationships.

The perception of high workforce mobility in global network; the possibility of cities to attract new skilled workforce or lose existing one; have influenced intensely city development strategies. Taking into consideration that human resources play the most important element of city development and wealth, especially high-skilled as they are the base of creation and innovation and at the same time of consumption, and that for demographic, economic and social reasons, all highly-developed economies are relying on immigrant labour at all skill levels (Castles, 2006) it is not strange that strategies for attraction of high-skilled personnel are part of city development. Strategies for attraction of workforce and keeping of the existing differ between cities. They range from creating lucrative tax environment, work environment and network to creation of attractive high qualities of life. That skilled people influence cities' competitiveness is easy to prove, but is the city competitiveness enough to attract needed labour is questionable.

Strategies for attraction of creativity

Successful city development in contemporary globalization and post-industrial society is, by some authors, seen as based on creativity. Richard Florida (2002) argues that the leading element of contemporary city



competitiveness is the creative industry; such as IT, design and art, on which cities should concentrate. He argues that capitalism is moving from a system defined by large companies to a more people-driven one and gives the assumption that all cities should compete for creative people, 'the creative class'. To be able to attract dynamic and mobile individuals of 'the creative class' cities need to offer attractive living conditions, e.g. urban buzz, varied cultural life, diversity and tolerance. The concentration of creative people will attract companies. The theoretical work of Florida had strong influence on strategies of large number of cities, large global centres as well as small peripheral ones. They tried to develop environment for 'creative class' and through that improve its competitiveness. But the magnetism of large global cities for creative workforce cannot be created in small cities, or in all big cities.

#### 4 COMPETITIVENESS OF CITIES BASED ON THE INNER CITY STRENGTHS

All the strategies for city development presented above have been based on the attraction of global capital in its different forms with the assumption that global capital in contemporary globalization is highly mobile. These strategies have not been proven to be efficient in practice and lead to sustainable city development. What if the basic assumption is not right, if the global capital is more rooted than presented through these theories?

Most recent research shows that globalization is not characterized by high mobility and that global capital is more connected to local social networks and resources than to global flows, that city competitiveness in globalization, even for the high ranked cities in global urban hierarchy, is more result of the long determined development path based on existing inner city competitive elements and resources than on the short term attraction of global capital.

##### 4.1 Perception of globalization as more rooted

Although the mobile elements of globalization, moving of companies, capital and people, are evident and easy to perceive they are not the only elements of contemporary globalization. Easy transfer of information, images, capital and people emphasizes this part of global process, hiding other important elements. Some critics of globalization argue that such process is occurring (Petras and Veltmeyer, 2001). For example Hirst and Thompson (1996) see it as inter-national mode of economy, seen as well at the end of 19th century, which is not drastically new.

More recent research shows that globalization is closer to inter-national mode of economy rooted in the local societies and networks. Globalization of companies, and creation of big international headquarters is present, but they are not too mobile. Headquarters relocation to new cities, and even more to new countries, is still relatively rare decision. Relocation projects reflect company's long-term identity as well as short-term continuity (Sweeney, 2003). Opening of new regional branches is usual choice of companies with the aim of exploitation of new markets and network benefits. Data support this thesis. Relocation to new countries is present in only 20% of multinational companies. The percentage is higher within large companies and it decreases in medium and especially small companies (Birkinshaw, 2006). For the medium and small companies local social and business ties and networks are more important for development than positioning in major competitive cities. In the decision for the location of companies existing personal links of managers and owners is the most important factor. This as well influences large companies (Musterd and Murie, 2010).

Although there have been growing levels of human mobility and higher levels of circulation in recent decades as opposed to long-term migration and settlement, this is not exceptional (King, 1998). What is deferent in contemporary globalization is individualization of migration process (Beck and Besk-Gemsheim, 2002), with migration becoming an instrument for personal employment responsibility. But mobility is privilege of small group of people. Only 3% of the world's population are international migrants (UNDESA, 2005). In addition far more people move within their own countries than internationally (Skeldon, 2006). Individual migration decisions are understood as investment decisions based on lifetime economic returns and balanced against the known and unknown costs and risks associated with migration (Stark, 1991). The decision for movement is not light decision, especially when the family is involved, and people are more rooted than placeless. For skilled migrants it is even more difficult, no matter that they are targets of many development strategies, since they face additional employment barriers in the professional regulations of some occupations (Williams, 2009). The temporary skilled professional migration, for a period of several weeks, is more present and used by multinational companies (Millar and Salt, 2008). Even here, rootless

professionals are mostly young and male, while others prefer steady connection with family. The most recent research of Musterd and Murie (2010) shows that people choose places to live, beside the job opportunities, according to the personal links they have in those places.

#### **4.2 Improvement of city competitiveness as a result of growth of its inner strengths**

When the globalization is seen from another perspective a new perception of city competitiveness in contemporary globalization opens. Even when the globalization is perceived as less mobile and more rooted the global competition between the cities for the development and part of the global market cannot be excluded. Today it is difficult to find isolated national markets. World Bank indicated significance of competition, saying that cities which manage to use their comparative advantages in global markets will prosper and those who stay isolated will fight for survival. Competition between cities does not just take place on global but also on a regional scale (Brenner, 1999), and it is not only important for big but as well for small and medium cities. What changes with the new perception of globalization is the understanding of how cities can be competitive on global markets. Instead of competing for the part of the global capital city compete for the development ratio and its wealth. This corresponds to the standard competition between cities with the difference in market size.

Development of cities and the rise of their wealth as a result of attraction of global capital have not been proven completely successful. Even the new top global cities tend to be the old global cities reinvented – New York, Los Angeles, London, Paris, Tokyo, Hong Kong... (O'Connor, 2006). The emergence of new top level global cities such as Singapore, Beijing, Sao Paulo, Tay Pay, Mexico City..., are result of the expansion of global market and inclusion of new countries in the global networks. When the cities which managed to improve their competitiveness on global level and their position in urban global hierarchy are examined the results indicate that their advancement was not result of arrival of new companies, investments or skilled labour. The main motor of their rise in competitiveness were inner strengths. The successful cities relied on their development paths and reinvented and re-mixed their potentials to the contemporary globalized market and society (Musterd and Murie, 2010). This supports the Jan Jacobs (1984) theory that cities in order to have successful economy must be innovative. Prosperity or stagnation of cities is based on their ability to continue import/export cycle, on their resources and capacity to come up with innovative response. This is applicable on the import/export cycle of global capital, knowledge, innovation, companies and workforce in the contemporary knowledge global society.

The way how cities improve their competitiveness, based on the inner strength, differ from the support to local business and their expansions, increasing its number and their market; creation of conditions for higher cooperation between local companies and knowledge transfer, to creation of needed high-skilled and creative workforce. For example, Amsterdam had stable trajectory of development towards creative knowledge city, long-term strategies and urban development (Streit, Bontje and dell'Agness, 2010). On the other hand, Munich kept developing its existing competitive industry and complementing it with R&D, which is in connection to their recognizable sectors (Goebel and Thierstein, 2006). Helsinki and Stockholm improved their competitiveness by creation of innovation and IT industry. Helsinki invested in formation of new skilled workforce as generators of development and in the period of 30 years rose a level of high educated people from 6% to 30% (Martin-Brelot and Kepsu, 2010).

The possibilities to improve cities' competitiveness by re-mixing and advancing inner strength do not mean that the success is not possible with strategies based on attraction of global capital. The aim is more to show the other possible way and the side of globalization, less used and marketed.

#### **4.3 Strategies for improvement of city competitiveness based on re-mix of inner strengths**

Improvement of cities' competitiveness and their position in the global networks can be achieved by different strategies of enhancement of inner strengths. According to the elements on which emphasis is putted strategies can be divided in the five groups: 1) strategies that enhance cities companies, 2) strategies that enhance cities productivity, 3) strategies that improve workforce, 4) strategies that enhance creativity and innovation and 5) strategies that improve tourism.

### Strategies for improvement of cities production

Jan Jacobs (1984) said in her import-replacement theory that successful economy of cities is based on replacement of imports with the local production. In order to be competitive and ensure wealth cities should enhance their productivity, lower import and become exporters of goods. Translated to the strategies for development, this would mean that cities should invest in improvement and development of their own production of goods, based on the existing production trajectories and specific possibilities.

Improvement of cities' production and its regional and global competitiveness can be achieved in different ways, depending on specific conditions. One approach is through government and tax support to preferred production, which has already marked city economy and made it regionally and globally recognisable and competitive. In most cases following the existing production path and further development of its strengths showed to be successful. This approach advantage is in low investment, because of the continuity and already existing elements of preferred production. On the other hand, it is applicable, only if the production has shown to be prosperous. Other approach can be in creation of competitive innovative production from the scratch, changing production specialisation. This asks for higher investment and deeper change of city's functioning. For the cities that have no successful production this might be the only choice.

If the production is not innovative other cities will develop same production of goods and export will decrease, or they would create more efficient ways for the production of same goods and take their position in global market. Relationships between dynamic firms stimulate the circulation of knowledge and improvement of innovation. To achieve this improvement a possible strategy is to create development-production clusters. As Alan Scott (2006) says transfer of ideas in production happens when there is spatial proximity and specialization. Companies profit from each other by exchanging information and knowledge about certain products. Clusters are geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities. The prerequisites for the emergence of clusters are qualified labour and strong networks between actors, the existence of universities and research centres (Porter, 1998). To ensure the production innovation a strong cooperation between R&D and production is preferable. This is accelerated by the spatial proximity of institutions and companies, adequate framework for knowledge exchange and the importance of social capital. "It is assumed that innovation generation proceeds most efficiently either in specialized clusters, where inter-firm links play a part, or in areas where industry, academia and other regional actors collaborate with each other" (Zientara, 2008, p.62).

### Strategies for improvement of cities companies

In the present economic conditions marked by the global economic crisis, relying on foreign investment is not productive. Instead, cities should concentrate on intensification of relationships among the existing firms and seeking the establishment of new firms. Translated to the strategies for development it would mean that cities' government should support local companies by creating favourable tax, service and business conditions. Existence of adequate and competitive services and infrastructure in city helps companies to develop and enhance their business.

Beside business environment, similarly as with the improvement of city production, governments should encourage cooperation of local companies, the exchange of ideas and knowledge, and collective global presentation. Governments cannot force firms and other participants to cooperate, but they can provide them with favourable conditions. This would mean creation of spatial agglomerations of companies with similar speciality. Firms with similar or closely complementary capabilities should be concentrated. In order to survive on world markets, it is imperative for small and medium companies, which are the carriers of contemporary globalization, to cooperate with each other (Pratt, 2004). For example, Gibney et al. (2009) have argued that in the knowledge-based economy, leadership of place involves leading and holding together a consortium of potentially separate interests that shape place. Supporting cooperation between business and creation of local special business networks is one way to improve local strength and global competitiveness.

The other imperative of cities' government for improvement of competitiveness is helping their local companies to expand and invest in markets abroad. Through cooperation and common performance on broader markets this can be achieved. The other precondition is cities belonging to the global urban networks. The opportunity for cities to position themselves in global networks lies in careful developing of the unique character by segmentation and specialization. Cities should direct their policies towards strategic

sector. With the involvement in special urban networks the cities create conditions for their companies to integrate in global flows. The more networks it is involved the conditions for development of more sectors are created.

#### Strategies for improvement of cities workforce

Richard Florida stresses that “the key factor of global economy is no longer goods, services or flows of capital, but the competition for people” (Florida, 2007. P.16). This assumption is based on the mobility of creative and global elite. But taking into consideration that permanent movement of high-skilled workers is low and is mostly connected to young professionals the strategies of attraction of skilled workforce show their unsustainability. For the cities that do not belong to the top level global cities and creative centres this is even stronger. As a lack of social capital diminishes a region’s ability to capture the gains of economic growth (Putnam, 1993) cities must find the ways to provide needed workforce. The sustainable strategies for this should rely on the creation of workforce, primarily high-skilled and creative. Ways to realize this strategy can be education of citizens, keeping the young professionals in the city and creating the connections with emigrated experts. The effects should not be expected to be visible immediately. They require decades.

Education and increase of high educated people is correlated with density of universities. The higher importance and quality of education stronger and more competitive city’s human resources are. Glaeser and Saiz (2003) found that more educated cities grow more quickly than comparable cities with less human capital, because they become more economically productive. The city’s government should invest and support initiatives for opening of universities. They should create spatial conditions for universities and research centres. What is important is the connection between the universities and labour market demands. The education should support preferred development and specialization of city. Human resources can be fully activated only if a city’s economic base permits the generation of quality jobs. “That is why achieving a smooth integration between the supply from the education system and employers’ demand becomes an essential objective for every city” (Mendez and Moral, 2010, p.5).

University centres, together with the adequate job opportunities in the city, are one of the most important elements for keeping the demography positive. Universities attract young people which afterwards decide to stay in that city. On the other hand, the availability of qualitative university keeps the present young from moving to other cities and raises high education by increasing the availability of student places and decreasing costs (Frenette, 2007). Most highly skilled workers in cities have had previous links with the city, either through family networks or the networking established during their studies. About 80% of young creative and knowledge workers have been educated within the region and very often the first reason for being there relates to the presence of a good university (Musterd and Murie, 2010). The connection of university with labour market insures that investment in education will be payable.

Evan when the emigration of citizens is present it can be used for the enhancement of cities inner strengths and global competitiveness. With the rooted cosmopolitanism individuals move cognitively and physically outside their spatial origins, but continue to be linked to the place, to the social networks of their origin. Professionals which are part of the complex international society have primary connection with domestic (Tarrow, 2005). Cities need to develop strategies for keeping connections with their emigrants and ways to keep collaborations with them, especially with innovative and creative elite.

#### Strategies for improvement of cities creativity and knowledge

Reliance on the outside creative class, when taken into consideration that is not as movable as it was assumed, is under the question. Charles Landry (2000) stresses the importance of creativity of city management, its resident businesses and citizens. The city gets its creative potentials from within itself. This brings the strategies for city competitiveness improvement back to the inner creative potentials and ways how to use, stimulate and enhance it.

The approaches for improvement of cities creativity are overlapping with already mentioned strategies for improvement of production innovation and education workforce. What differs is emphasize on creativity stimulation. The mere presence of creative people in the city is not sufficient to sustain the urban creativity over long period of time. Creativity needs to be mobilised and channelled, to emerge in practical forms of learning and innovation (Scott, 2006). Transferred to the strategies of city development it means that cities



need to develop stimulating environment for creativity. This can be achieved through creation of special creative clusters, artistic quarters and vibrant public places and events. Creation of spaces for meeting and interaction of creative people presents a precondition for exchange of ideas and stimulation of innovations. Of course, this is not enough. To sustain creativity cities need to support creative activities and help them organize common presentation on global market. Even more important is mobilisation of creativity for the real purposes in the city.

On the other end is the correlation between creative clusters and citizens. Through interaction in public arena the spill over effect of creativity on citizens can be achieved, at least in the openness to newness. This spill over effect is important for resident businesses as well. The creativity of city management is crucial. It needs to be creative in finding solution for stimulation of city development and competitiveness on regional and global scale; it needs to be flexible and adoptive to new conditions that change quickly in contemporary globalization. This can be achieved through inclusion of creative and talented people in city government or through the strong collaboration with them.

Creative cities cannot be created from scratch (Hall, 2004), they need history development path. Not all cities can become creative in the way Florida suggests, but they need to be creative in a sense of innovation and adaptability to competitive challenges of global city market.

Different strategies for improvement of city competitiveness based on re-mixing and enhancement of inner strengths are mutually interlinked and influence one another. The success in improvement city competitiveness usually is connected with use of several different approaches that re-use inner strengths, where one or two are more dominant and others complement. The presented strategies do not present the only that can be developed from inner strength of the city. They more present a short reminder how city development and competitiveness can be tackled depending on the city itself.

## 5 CONCLUSION

The aim of this paper was to bring attention to another perception of globalization, and emphasize another approach to strategies for cities development, strategies which will more use inner cities' strengths and potentials, re-mix them to correspond to contemporary needs in globalized world. This approach is not the only possible, but rather one more alternative for cities.

The global economical crises, which has affected almost all countries and cities around the world in the last four years, has putted under the question the contemporary globalization process and its possibility to induce sustainable development and growth. The fall in available free capital has drastically decreased movement of capital, primarily foreign investment, travel and high-skilled people migration. As a result the strategies for improvement of cities competitiveness, and consequently wealth, based on the attraction of the foreign capital and skilled workforce cannot be adequate. Cities in a need to counteract recession and induce development have to turn to themselves, aiming to create more resilient communities and resilient cities. In a time of ever-increasing uncertainty, the quest for new strategies of city development which will stand unpredictable turbulences is more important than ever.

## 6 REFERENCES

- APPADURAI, A: *Modernity at large, cultural dimensions of globalization*. London: University of Minnesota Press, 1996.
- BENTON-SHORT, L., PRICE, M.D. and FRIEDMAN, S: *Globalization from Below: The Ranking of Global Immigrant Cities*. In: *International Journal of Urban and Regional Research*, Vol. 29, Issue 4., pp. 945-959, 2005.
- BECK, U and BESK-GERNSHEIM, E: *Individualization*. London: Sage, 2002.
- BIRKINSHAW, J and others: *Why do some multinational corporations relocate their headquarters overseas?*. In: *Strategic Management Journal*, Vol. 27, Issue 7, pp. 681-700, 2006.
- BORJA, J. and CASTELLS, M: *Local and Global: Management of Cities in the Information Age*. London: Earthscan, 1997.
- BRENNER, N.: *Globalisation as reterritorialisation: the Re-scaling of urban governance in the European Union*. In: *Urban Studies*, Vol. 36, Issue 3, pp. 431-451. 1999.
- CASTELLS, M: *The Rise of the Network Society, The Information Age: Economy, Society and Culture Vol 1*. Cambridge MA; Oxford UK: Blackwell, 2000
- CASTELLS, M. and MILLER, M: *The age of migration*. New York: Guildford Press, 2003.
- CASTLES, S: *Guestworkers in Europe: A Resurrection?*. In: *International Migration Review*, Vol.40, Issue 4, pp.741-766, 2006
- FLORIDA, R.: *The Rise of the Creative Class*. New York: Basic Books. 2002.
- FLORIDA, R. *The flight of the creative class. The new global competition for talent*. New York: HarperCollins. 2007.
- FRENETTE, M: *Do universities benefit local youth? Evidence from university and college participation and graduate earnings following the creation of a new university*. Catalogue No. 11F0019MIE2006283, Research Paper Series, Analytical Studies Branch, Statistics Canada, Ottawa, 2007.

- FRIEDMAN, T: *The Lexus and the Olive Tree*. London: Harper Collins, 1999.
- GIBNEY, G, J., COPELAND, S. and MURIE, A. :Toward a 'new' strategic leadership of place for the knowledge-based economy. In: *Leadership*, Vol. 5, pp. 5–23. 2009.
- GLAESER, E.L. and A. SAIZ: The rise of the skilled city. In: HIER (Harvard Institute of Economic Research). 2003. <http://www.economics.harvard.edu/pub/hier/2003/HIER2025.pdf> (accessed 6 March 2009).
- GOEBEL, V and THIERSTEIN, A: The Mega-City-Region of Munich: A kingdom of its own or a space of inter-connected flows?. ERSA-Conference Paper 2006. <http://www-sre.wu-wien.ac.at/ersa/ersaconfs/ersa06/papers/291.pdf>. Last used Dec. 2008.
- HALL, P: *The World Cities*. London: Weidenfeld and Nicolson, 1966.
- HALL, P.: Creativity, culture, knowledge and the city. In: *Built Environment*, Vol. 30, Issue 3, pp.256–258. 2004.
- HIRST, P and THOMPSON, G: *Globalization in question, the international economy and the possibilities of governance*. Cambridge: Polity Press, 1996.
- IMF: *Globalization: Threat or Opportunity*, 2002, <http://www.imf.org/external/np/exr/ib/2000/041200.htm#I>, used on May 2005.
- IMF: *Globalization: A Brief Overview*, 2008. <http://www.imf.org/external/np/exr/ib/2008/053008.htm>, used on Feb. 2012.
- JACOBS, J.: *Cities and The Wealth of Nations cities and the wealth of nations*. New York: Vintage books. 1984.
- KING, R: From Guestworkers to Immigrants: Labour Migration from the Mediterranean Periphery. In: Pinder, D. (ed.): *The New Europe: Economy, Society and Environment*. Chichester: Wiley, 1998.
- LANDRY, C.: *The Creative City: A Toolkit for Urban Innovators*, London: Earthscan, 2000.
- LEVER, W. F. and TUROK, I.: Competitive cities: Introduction to the review. In: *Urban Studies*, Vol. 36, pp. 791–793. 1999.
- MILLAR, J. and SALT, J: Portfolios of Mobility: the Movement of Expertise in Transnational Corporation in Two Sectors- Aerospace and Extractive Industries. In: *Global Networks*, Vol.8, Issue 1, pp. 25-50, 2008.
- MARTIN-BRELOT, H and KEPSU, K: Changing Specialistaions and Sibgle Sector Dominance. In: Musterd and Murie (ed.) *Making Competitive Cities*. Oxford: Blackwell Publishing. pp. 113-135- 67. 2010.
- MENDEZ, R and MORAL, S.S: Spanish cities in the knowledge economy: Theoretical debates and empirical evidence. In: *European Urban and Regional Studies*, Vol.20, Issue 10, pp. 1-20.
- MUSTERD, S. and MURIE, A.: *Making Competitive Cities*. Oxford: Blackwell Publishing. 2010.
- O'CONNOR, J: *Creative cities: The role of creative industries in regeneration*. 2006.
- PERRONS, D: *Migraton: Cities, Regions and Uneven Development*. In: *European Urban and Regional Studies*, Vol. 16, pp. 219-223, 2009.
- PETRAS, J and VELTMEYER, H: *Globalization Unmasked: Imperialism in the 21st Century*. New Yor: Zed Books, 2001.
- PORTER, M.E.: Clusters and the new economics of competition. In: *Harvard Business Review*, Vol.76, Issue 6, pp. 77–91. 1998.
- PRATT, AC: Creative clusters: towards the governance of the creative industries production system? In: *Media International Australia* Vol.112, 50–66.2004.
- PUTNAM, R.D.:The Prosperous Community: Social Capital and Public Life. In: *The American Prospect*, Vol. 3, Issue 13, pp.35-42. 1993.
- ROBERTSON, R: *Globalization, social theory and global culture*. London: Sage, 1992.
- SASSEN, S: *Gues and aliens*. London: The New Press, 1999.
- SASSEN, S.: *The Global City*: New York, London, Tokyo. Oxford: Princeton University Press, 2001
- SASSEN, S. (ed.): *Global Networks, Linked Cities*. New York: Routledge. 2002.
- SCOTT, A. : Creative cities: conceptual issues and policy questions. In: *Journal of Urban Affairs*, Vol. 28, pp. 1–17.2006.
- SHORT, J.R., BREITBACH, C, BUCKMA, S. And ESSEX, J: From World Cities to Gateway Cities. In: *City*, Vol. 4, Issue 3, pp.317-340, 2000.
- SKELDON,R: Interlinkages between internal and international migration and development in the Asian region. In: *Population, Space and Place*, Vol. 12, pp. 15-30, 2006.
- STAHRE, U: *City in Change: Globalization, Local Politics and Urban Movements in Contemporary Stockholm*. In: *International Journal of Urban and Regional Research*, Vol.28. Issue 1., pp. 68-85, 2004.
- STARK, O: *The Migration of Labour*. Oxford: Blackwell, 1991.
- STREIT, von A, BONTJE, M and DELL'AGNESE, E: Stable Trajectories Towards the Creative Knowledge City?. In: Musterd and Murie (ed.) *Making Competitive Cities*. Oxford: Blackwell Publishing. pp. 43- 67. 2010.
- SWEENEY, M: *The Corporate Headquarters Challenge*. In: *Bussiness Facilites*, 2003. <http://www.mccallumsweeney.com/uploads/ARTICLE-26-13%20-%20Corporate%20Headquarters%20Challenge%20-%20Business%20Facilities%20-%202004-03.pdf>. Last used Feb. 2012.
- TARROW, S: *The New Transnational Activism*. Cambridge University Press, 2005.
- UNDESA: *Trend in Total Migran Stock: the 2005 Revision*. New York: United Nations Department of Economic and Socila Affairs,2005.
- URRY, J: *Sociology Beyond Societies-mobilities for the twenty-first century*. London: Routledge, 2000.
- VERTOVEC, S: Trends and Impacts of Migrant Transnationalism', Centre on Migration Policy and Society Working Paper No.3. Oxford: University of Oxford, 2004.
- WILLIAMS, A.M: *International Migration, Uneven Regional Development and Polarization*. In: *European Urban and Regional Studies*, Vol. 16, pp. 309-322. 2009.
- WORLD BANK: *World Development Report 1999/2000: Entering the 21st Century*. New York: Oxford University Press, 1999.
- ZIENTARA, P.: Polish Regions in the Age of a Knowledge-based Economy. In: *International Journal of Urban and Regional Research*, Vol. 32, Issue 1, pp.60-85. 2008.
- YUSUF, S. and WU, W: Pathways to a World City: Shangai Rising in and Era of Globalisation. In: *Urban Studies*, Vol. 39, pp. 1213-1240, 2002.