International Urban Planning
and Environment Association

UPE 12 Symposium

12th International Symposium on Urban Planning and Environment

1st UPE Lusophone Symposium

CITIES FOR US

ENGAGING COMMUNITIES AND CITIZENS FOR SUSTAINABLE DEVELOPMENT

CIDADES PARA NÓS

ENVOLVER COMUNIDADES E CIDADÃOS NO DESENVOLVIMENTO SUSTENTÁVEL

Book of Abstracts | Livro de Resumos

IGOT - ULisboa | May 31 - June 3 2016

31 de maio a 3 de junho 2016 - Lisboa, Portugal

ORGANIZATION//ORGANIZAÇÃO

U LISBOA | UNIVERSIDADE DE LISBOA

IGOT Instituto de Geografia e Ordenamento do Território UNIVERSIDADE DE LISBOA

CEG Centro de Estudos Geográficos

TÉCNICO LISBOA

SPONSORS//PATROCINADORES

FCT

Cities for Us - engaging communities and citizens for sustainable development / Cidades para Nós - envolver comunidades e cidadãos no desenvolvimento sustentável, 2016

Editors / Editores
Simões, J. M.; Marques da Costa, E.; Ferreira, C.C.; Antunes Ferreira, J.; Nunes da Silva, F.; Louro, A.; Fontes, I.

Format / Formato
E-book

ISBN
978-972-636-256-2

Contents | Índice

IUPEA
International Urban Planning and Environment Association
International Board of Directors | Direção Internacional 13

UPE12 & 1ST UPE LUSOPHONE | UPE12 e 1º SIMPÓSIO LUSÓFONO UPE
Organization Committee | Comité de Organização 13
Local Organizing Committee | Comité Local de Organização 13
Scientific Committee UPE12 | Comité Científico UPE12 13
Scientific Committee 1st Lusophone Symposium | Comité Científico 1º Simpósio Lusófono 14
Technical Secretariat | Secretariado 14
Sponsors | Patrocinadores 14

THEME | TEMA
UPE12 Presentation | Apresentação UPE12 15
1st UPE Lusophone Symposium | 1º Simpósio Lusófono UPE 15
UPE12 Tracks | Temas UPE12 16
1st UPE Lusophone Tracks | Temas 1º Simpósio Lusófono UPE 16

ALPHABETIC LIST OF PARTICIPANTS | LISTA ALFABÉTICA DE PARTICIPANTES 17

ABSTRACTS | RESUMOS 23

UPE Track 01 INCLUSION AND HEALTH: towards livable cities 25

Session T1.1

Berfu Guley Goren
DISABLED PEOPLE IN CITY AND LIVABLE CITY 27
Richard Milgrom; Ryan Woolrych
AGE-FRIENDLY CITIES AND REGIONS: ENGAGING OLDER ADULTS, PRODUCING SOCIALLY SUSTAINABLE COMMUNITIES 27
Susana Silva Pereira; Teresa Valsassina Heitor; Nuno Marques da Costa
FROM WALKABILITY TO HEALTH AND WELLBEING. GUIMARÃES A CASE STUDY. 28

Session T1.2

Donald Miller
FACTORING HAPPINESS INTO URBAN PLANNING SUSTAINABLE DEVELOPMENT 29
Emanuel Pereira
PHYSICAL ACTIVITY AND HEALTHY LIFESTYLES – EVIDENCES ABOUT URBAN ENVIRONMENT INFLUENCE IN A LISBON NEIGHBOURHOOD CASE STUDY 29
Kelly J. Clifton; Patrick Singleton
A REVIEW OF HEALTH INTEGRATION INTO US METROPOLITAN LONG-RANGE TRANSPORTATION PLANS 30
Nuno Marques da Costa; Ana Louro; Eduarda Marques da Costa
THE ROLE OF HEALTHY CITIES PROJECT TO MUNICIPAL GOVERNANCE IN FAVOR OF SUSTAINABLE DEVELOPMENT 31

Session T1.3

Amro Khaled Ahmed Abdelalim; Omnia Awni
CITIES: TOWARDS FULFILLING THE SOCIAL NEEDS OF PEOPLE 32
Ana Povoas
A THEORY OF SPATIAL JUSTICE, BETWEEN SOCIETY AND PLANNERS 33
Ibrahim Abaid; Tang Yue
LIFE IN PUBLIC SPACES OF NEIGHBORHOODS, A CASE STUDY OF MISURATA CITY, LIBYA 34
Pedro Franco; Tiago Raimundo
HEALTH STATUS QUANTITATIVE ANALYSIS – THE CASE OF LMA 36

Session T1.4

Alexandru Seltea
PLANNING FOR URBAN FOOD PRODUCTION.LEARNINGS FROM A CASE STUDY IN LUND, SWEDEN 36
Catherine Ross; Alex Karner; Peter Hylton; Elliot Sperling; Subhrajit Guhathakurta
QUALITY OF LIFE BENEFITS OF URBAN TRAILS: ANALYSIS OF THE ATLANTA BELTLINE 38
Dhia Eddine Zakaria Lacheheb; Amor Ballout; Said Madani
DENSE SUBDIVISIONS BETWEEN URBAN RENEWAL AND INCOMPLETION (CASE STUDY FOR SUBDIVISION IN SETIF, ALGERIA) 39
Isabel Loupa Ramos; Fátima Bernardo; Rosa Coelho
PERI-URBAN LANDSCAPES IN METROPOLITAN AREAS: EXPLORING CONTENTS OF PLACE IDENTITY 40

UPE Track 02 GREEN AND SUSTAINABILITY: towards effective cities 43

Session T2.1

Hansaem Kim; Seunghyun Jung; Hyomin Kim
URBAN HEAT ISLAND MAP MAKING BASED ON MOBILE COMMUNICATION NETWORK STATIONS 45
Hartmut Fünfgeld; Alianne Macarthur; Sophie Turner; Fiona Silke; Sarah Robertson
INTEGRATING CLIMATE CHANGE RISK INTO LOCAL GOVERNMENT PLANNING AND DECISION-MAKING: BARRIERS AND STRATEGIES 45
Melissa Julie Saunders; Peter B. Meyer
CLIMATE CHANGE, ECONOMIC DECLINE AND TERRORISM: EXTERNAL SHOCKS TO URBAN SUSTAINABILITY 46

Session T2.2

Catarina Rodrigo; Jorge Rocha; Killian Lobato; José António Tenedório
SOLAR POTENTIAL IN URBAN OPEN SPACE 46
Christian Zuidema; Katharina Gugerell
DESIGNING FOR THE ENERGY TRANSITION; BRIDGING SPATIAL AND INSTITUTIONAL DESIGN 47
Joao Fumega; S. Niza; P. Ferrao
UNDERSTANDING THE RELATION BETWEEN CITIES AND ENERGY: AN APPROACH ON MODELLING URBAN FORM AND ENERGY PERFORMANCE IN LISBON, PORTUGAL 48
Mendel Giezen; Didi Van Doren; Hens Runhaar; Peter Driessen
SCALING-UP OF ENERGY CONSERVATION INITIATIVES: BARRIERS AND LOCAL STRATEGIES 50

Session T2.3

Burcu Ateş
TOWARDS SOCIO-ECOLOGICAL CITIES: GREEN PUBLIC SPACES BY GUERRILLA GARDENING 51
Caitlin Pohle
ANALYSIS OF URBAN AGRICULTURE FOR LAND USE PLANNING IN ALMADA, PT 51
Hilda Blanco
INCORPORATING NEW METHODS FOR PLANNING MORE SUSTAINABLE CITIES 52
Roxana Maria Triboi
SPONTANEOUS LARGE SCALE PRACTICE, URBAN PASTORALISM AS AN ENVIRONMENTAL TOOL FOR RECREATING AND MAINTENANCE OF ECOLOGICAL CORRIDORS 53
Takayuki Kumazawa
A STUDY OF CULTURAL LANDSCAPE CONSIDERING ENVIRONMENT AND BEHAVIOR IN FOOD PRODUCTION PROCESSES 54

Session T2.4

Agatino Rizzo
EXPANDING THE GREEN/BLUE INFRASTRUCTURE CONCEPT: ISKANDAR MALAYSIA AS A CASE OF STUDY 54
Maria Giannopoulou; Konstantinos Lykostratis; Anastasia Roukouni
A GIS-BASED ANALYSIS TO ESTIMATE THE BENEFITS OF URBAN GREEN ROOFS 55
Melasutra Md Dali; Yasmin Mohd Adnan; Hasniyati Hassan Md Nasir Md Daud; Anuar Alias
SMART GREEN CITY: SEARCHING FOR DEFINITION AND FOCUSING ON FRAMEWORK DEVELOPMENT AND STRATEGIES OF PUTRAJAYA. 56
Robert Young
FROM SMART CITIES TO WISE CITIES: ECOLOGICAL WISDOM AS A NEW BASIS FOR SUSTAINABLE URBAN DEVELOPMENT 57

Session T2.5

David Sousa Vale; Mauro Pereira; Luis Sanchez Carvalho
MULTIMODAL ACCESSIBILITY AND COMMUTING TO CAMPUS: THE CASE OF THE UNIVERSITY OF LISBON 58
Diego Fernando Mafla Sanchez
URBAN FRAGMENTATION: RELATION OF THE LAND USED AND THE DISCONTINUATION OF TRANSPORT 58

Jacek Malasek 59
SMART MOBILITY FOR URBAN SUSTAINABILITY
Monokrousou Klio; Giannopoulou Maria
INTERPRETING AND PREDICTING PEDESTRIAN MOVEMENT IN PUBLIC SPACE THROUGH SPACE SYNTAX ANALYSIS 59

SessionT2.6

Carlos José Lopes Balsas
SOCCER IN SCOTTSDALE, ARIZONA, PLANNING IMPLICATIONS OF A SPORTS FACILITY 61
Nuno Marques da Costa; Ana Louro
COMMUTING FLOW PATTERS IN LMA: TOWARDS AN EFFECTIVE CONTRIBUTION TO SUSTAINABLE DEVELOPMENT? 61
Perry Yang; Yoshiki Yamagata
MODELING HIGH-DENSITY URBAN FORM FOR RESILIENT SYSTEM DESIGN – A CASE STUDY OF MANHATTAN AND TOKYO 62
Robin Ganser
PLANNING FOR HIGH DENSITY – A CONTRIBUTION TOWARDS SUSTAINABLE URBAN AREAS? TARGETS, PARAMETERS, PERCEPTIONS 63

Session T2.7

João de Abreu e Silva; Marcos Correia
DRIVERS OF URBAN SPRAWL IN PORTUGUESE MEDIUM CITIES BETWEEN 2001 AND 2011 64
Peter Hylton; Catherine Ross; Elliot Sperling; Alex Karner
URBAN REVITALIZATION: CHANGING ATLANTA'S LAND USE INTENSITIES 64
Seunghyun Jung; Hyeonsoo Kim
DEVELOPING A FRAMEWORK TO MODEL RESOURCE RECYCLING RESIDENTIAL COMPLEXES 65

Session T2.8

Ballout Amor; Pr.Yasmina Bouchahm; Dhia Eddine Zakaria Lacheheb
URBAN QUALITY THREW THERMAL COMFORT CONDITIONS IN AN URBAN SPACE."THE SQUARE OF INDEPENDENCE, SÉTIF, ALGERIA". 66
Dita Trisnawan
RUSUNDITO: AN INNOVATIVE PUBLIC HOUSING URBAN DEVELOPMENT PROJECT IN JAKARTA 67
Hyomin Kim; Seunghyun Jung; Hansaem Kim
EVALUATING METEOROLOGICAL OBSERVATION NETWORK TO ANALYZE URBAN THERMAL ENVIRONMENTS CONSIDERING CLIMATE CHANGE 67
Rafael Gonçalves Santos; Ezequiel Correia; Alessandra R. Prata Shimomura; António Lopes
ROUGHNESS LENGTH CHARACTERIZATION FOR URBAN CLIMATE MAPS IN THE CITY OF SÃO PAULO – SP, BRAZIL 68

UPE Track 03 INNOVATION AND INTELLIGENCE: towards competitive cities 69

Session T3.1

Bogna Anna Gebalska
WORKING WITH URBAN MEGATRENDS. 71
Daisuke Murakami; Yoshiki Yamagata; Takahiro Yoshida
A STATISTICAL ANALYSIS OF URBAN BIG-DATA TOWARD REAL-TIME AND STREET LEVEL HEATWAVE RISK MANAGEMENT 72
Paulo Morgado; Margarida Queiros; Mario Vale; Nuno Marques Costa; Nelson Mileu; Fábio Rodrigues; Júlia Maltez Ribeiro
REAL-TIME GIS OF GENDER MOBILITY. A TELEGEOMONITORING SYSTEM APPROACH 72

Session T3.2

Pedro Dias; José António Tenedório; Jorge Rocha
LISBON AS A SMART CITY: MAPPING STRATEGIC SECTORS 73
Takahiro Yoshida; Yoshiki Yamagata; Daisuke Murakami
VISUALIZATION AND EVALUATION OF 3D URBAN DESIGN FOR HEATWAVE RISK MANAGEMENT 74
Yinan Zhoua; Perry Pei-Ju Yang
URBAN FORM AND ENERGY PERFORMANCE BASING ON SHANGHAI DISTRICT ANALYSIS 75
Yoshiki Yamagata; Daisuke Murakami; Takahiro Yoshida
CLIMATE RESILIENT 3D URBAN DESIGN: A "WISE SHRINK" APPROACH 75

Session T3.3

Eduarda Marques da Costa; Patrícia Abrantes; Ana Louro; Nuno Marques da Costa; Paulo Morgado; Jorge Rocha
MONITORING AND EVALUATION OF POLICIES – THE ROLE OF SUPPORT TOOLS FOR SPATIAL DECISION SUPPORT SYSTEM APPLIED TO PORTUGUESE CASE 76

Mieko Saito; Yasuhiro Tajima; Genichiro Kikui 77
COMPONENTS OF AN AUGMENTED REALITY APP EFFECTIVE IN UNDERSTANDING FLOOD DISASTER PREVENTION
Wenwen Zhang; Subhrajit Guhathakurta; Catherine Ross
PARKING SPACES IN THE AGE OF SHARED AUTONOMOUS VEHICLES: HOW MUCH PARKING WILL WE NEED AND WHERE? 78

UPE Track 04 LEISURE AND TOURISM: towards attractive cities 79

Session T4.1

Demirović D.; Radosavac A.; Njegovan Z.; Pejanović R.
CITIES AND EVENTS – CITY OF NOVI SAD AND EXIT FESTIVAL (SERBIA) 81
Joana Almeida; Fátima Bernardo; Catarina Faria
URBAN IDENTITY AND TOURISM: DIFFERENT PEOPLE, DIFFERENT LOOKS, ONE SINGLE PLACE 81
Maria Luísa Rodrigues
THE NATURE AND THE CITY: INCLUSION OF NATURAL ELEMENTS IN URBAN LEISURE 82
Sarah Coffin
CULTURAL ECOSYSTEMS AS THE FOURTH LEG OF THE SUSTAINABILITY STOOL: BENEFITS FOR THE SHRINKING CITY 83

Session T4.2

Demirović D.; Radosavac A.; Njegovan Z.; Pejanović, R.
RELIGIOUS OBJECTS AND EVENTS AS RESOURCES FOR TOURISM DEVELOPMENT IN CITIES - CASE STUDY: MUNICIPALITY OF NOVI BEČEJ (SERBIA) 83
Katalin Juhász-Dóra
ANALYSIS OF LANDSCAPE ARCHITECTURE - AND URBAN DESIGN IMPACT ON HOTEL COMPETITIVENESS 84
Luis Encalada Abarca; Carlos Cardoso Ferreira; Jorge Rocha
GEOTAGGED PHOTOS FROM SOCIAL NETWORKS AND URBAN TOURISM: NEW SOURCES, NEWCHALLENGES. 84
Maria da Graça Moreira
TOURISM IN THE PARADIGM OF SMART CITIES 85

Session T4.3

Agustin Cocola Gant
HOLIDAY APARTMENTS AND DISPLACEMENT OF COMMUNITIES. NEW CHALLENGES FOR PUBLIC POLICY 85
Jeremy Németh
DEMOCRACY, PROTEST, AND PUBLIC SPACE: BUILDING SPACES OF RESISTANCE 86
Joana Almeida; José Antunes Ferreira; Ana Morais de Sá; Beatriz Condessa
AN APPROACH TO IMPROVE EFFECTIVENESS OF URBAN PROJECTS IMPLEMENTATION WITH MULTIPLE LANDOWNERS 87

UPE Track 05 GOVERNANCE AND POLICIES: towards learning cities 89

Session T5.1

David P. Varady; Fatima Matos
COMPARING PUBLIC HOUSING REVITALIZATION IN THE US AND PORTUGAL 91
Ernest Alexander
(HOW) CAN INSTITUTIONAL DESIGN OF URBAN GOVERNANCE PROMOTE LEARNING CITIES? 91
Robin Goodman
PLANNING PRACTICE AND ACADEMIC RESEARCH – VIEWS FROM THE PARALLEL WORLDS 92

Session T5.2

Aditi Chaturvedi
CITIZEN ENGAGEMENT IN INDIAN URBAN PLANNING: A JOURNEY FROM CITY DEVELOPMENT PLAN TO SMART CITY PLAN 93
Lurdes Barrico; Helena Freitas; Paula Castro
CITIZENS' ENGAGEMENT IN DRAWING STRATEGIES/PRIORITIES TOWARDS IMPROVING URBAN QUALITY OF LIVE 94
Mouhoubi Nedjima; Sassi Boudemagh Souad
INDICATIVE OF THE GOOD GOVERNANCE: ASSESSMENT OF THE DEGREE OF PARTICIPATION OF THE INHABITANTS IN THE LARGE URBAN PROJECTS. CASE: MODERNIZATION PROJECT OF THE METROPOLIS OF CONSTANTINE AND MASTER PLAN OF BRISBANE 95
Patrícia Abrantes; Margarida Queirós; Guilhem Mousselin; Claire Ruault; Étienne Anginot
BUILDING A PROSPECTIVE PARTICIPATORY APPROACH FOR A LONG-TERM AGRICULTURAL SUSTAINABILITY IN THE LEZÍRIA DO TEJO REGION (PORTUGAL) 96

Session T5.3

Cecília Delgado
CLARIFYING THE SCOPE OF URBAN AND PERI-URBAN AGRICULTURE TO IMPROVE ITS TERRITORIAL COMPETITIVENESS 97
Gonçalo Santinha; Teresa Sá Marques; Miguel Saraiva; Paula Guerra; Tânia Moreira
TERRITORIAL COHESION; FROM THE EUROPEAN TO THE REGIONAL AGENDA: CONCEPTUAL TRANSPOSITION OR CONCEPTUAL REDEFINITION? 99
Michael Elliott
THE ATLANTA BELTLINE DECISION SUPPORT TOOL: INTEGRATING STAKEHOLDER INVOLVEMENT AND TECHNICAL DESIGN 100
Rik Houthaeve
PUBLIC PARTICIPATION AND CO-DESIGN IN A PROCESS OF ENVIRONMENTAL IMPACT ASSESSMENT. 101

Session T5.4

Beatriz Condessa
INTEGRATED URBAN OPERATIONS IN PORTUGAL: HOW TO IMPROVE EQUITY AND EFFICIENCY? 101
Robin Ganser; Julia Mattei
MAKING EFFECTIVE USE OF LAND BY MEANS OF PLANNING POWERS AND FISCAL POWERS 102
Robin Ganser; Marten Runge
CONVERSION CHALLENGE - MAKING THE MOST OF INTEGRATED URBAN AND RURAL LOCATIONS 104
Rosa Danenberg
MUNICIPALITIES AS ENABLERS OF CITIZEN-LED URBAN INITIATIVES - POSSIBILITIES AND CONSTRAINTS 105

Session T5.5

Hartmut Fünfgeld; Robin Goodman; Stephen Rowley
MULTI-LEVEL CLIMATE CHANGE ADAPTATION GOVERNANCE AND LOCAL GOVERNMENT PLANNING PROCESSES IN AUSTRALIA 106
Karwan Taha
THE SIGNIFICANCE OF ENVIRONMENTAL SUSTAINABILITY IN ERBIL CITY URBAN PLANNING 106
Nurussaadah Mokhtar; Melasutra Md. Dali
LA21 IN URBAN COMMUNITIES: A SLOW BUT PROMISING BEGINNING OF GRASSROOT INNOVATION 107
Suyeon Lee; Seyeon Lee
IMPACT OF FLOODS AND TYPHOON ON LOW-INCOME HOUSING 108

Session T5.6

Antonio Dicampli; María de Los Ángeles Cuenca; María Fernanda Luzuriaga; Holger Patricio Cuadrado
DENSIFYING ECUADORIAN MIDDLE CITIES. QUESTIONS, PROBLEMS, DESIGN ISSUES 108
David Santiago Perez Rodriguez
ECO-VILLAGES TO JUST CITIES: AN ASSESSMENT OF FREIBURG AND ISLE OF EIGG 109
Elena Gilcher; Gerhard Steinebach
PILOT PROJECTS AND THEIR SIGNIFICANCE IN APPROACHING CHALLENGES – EXEMPLIFIED BY REFUGEE AID 110
Sónia Alves
THE QUEST FOR SOCIAL MIX – THE COPENHAGEN EXPERIENCE 111

SessionT 5.7

G. William Page
ENVIRONMENTAL PLANNING PROCESS RESEARCH 111
Paulo Castro Seixas; Ricardo Dias; Pedro Queirós Pereira
A GOOD CITY FOR LIVING. CITIZEN SCIENCE AND URBAN REGENERATION FOR SUSTAINABLE DEVELOPMENT 113
Robert Leiter; Rocky Piro
THE ONGOING TRANSFORMATION OF REGIONAL PLANNING IN THE UNITED STATES 113
Jorge L. Karol
GOVERNANCE TALES: CROSSING BOUNDARIES, BRIDGING DIVIDES, BUILDING-UP COMMON APPROACHES, INSTRUMENTS AND RULES 114

UPE Track 06 ECONOMY AND JOBS: towards equitable cities 117

Session T6.1

Carlos Gonçalves
HOUSEHOLDS INCOME VULNERABILITY DURING THE 2008 CRISIS IN FOUR PORTUGUESE CITIES 119
Célia Marisa Fonseca Ferreira; Teresa Sá Marques; Paula Guerra
ECONOMIC DYNAMICS AND COMPETITIVENESS IN THE CITY CENTRE OF OPORTO (PORTUGAL) 120
Rosinaldo Barbosa da Silva; Nelba Azevedo Penna
TECHNOLOGICAL PARK OF MATO GROSSO - CHALLENGES AND OPPORTUNITIES FOR REGIONAL-GLOBAL COMPETITIVENESS 120
Suyeon Lee; Seyeon Lee
THE IMPACT OF FLOODS AND TYPHOONS ON HOUSING WELFARE: CASE STUDY OF THUA THIEN HUE PROVINCE, VIETNAM 121

Session T6.2

Alex Karner; Catherine Ross; Peter Hylton; Richard Duckworth; Subhrajit Guhathakurta
PUBLIC TRANSIT EQUITY AND THE GEOGRAPHY OF OPPORTUNITY IN THE ATLANTA REGION 122
Ayse Akbulut; Ozlem Ozcevik
URBAN SUSTAINABILITY-CONSUMERISM-MEDIA: THE CASE OF GATED COMMUNITES IN İSTANBUL 123
Bernard Delpeche
SUSTAINABLE AND SOCIAL INTEGRATION OF THE INTERNATIONAL STUDENTS IN THE CANADIAN UNIVERSITIES 124

LS01 Planeamento urbano para o desenvolvimento sustentável em contextos lusófonos 125

Session LS1.1

Arthur Wippel de Carvalho; Bruno Franklin Lopes Gaspar; Jean De Bona Veronez; Tiago Umberto Pazolini
PROPOSTA DE EXPANSÃO URBANA PARA O MUNICÍPIO DE PALHOÇA/SC, BRASIL 127
Erica Cecília de Sousa Soares; Wilza Gomes Reis Lopes
O PLANEJAMENTO URBANO EM EVIDÊNCIA: ESTUDO DE CASO EM TERESINA, PIAUÍ, BRASIL 128
Helena Lucia Zagury Tourinho; Marco Aurélio Arbage Lobo; Samia Saady Morhy
REASONS TO LIVE IN THE HISTORIC CENTER: THE CASE OF BELEM, PARA, BRAZIL 129
Silvio Cesar Alves Rodrigues; Marcelo Bessa de Freitas
BAÍA DE SEPETIBA: UM EXEMPLO DE ANACRONISMOS NO PLANEJAMENTO 130
Wilza Gomes Reis Lopes; Antônia Jesuíta de Lima; Bartira Araújo da Silva Viana; Edmundo Ximenes Rodrigues Neto
REFLEXÕES SOBRE O PLANO DIRETOR COMO INSTRUMENTO DE GESTÃO EM MUNICÍPIOS BRASILEIROS 131

Session LS1.2

Antônia Jesuíta de Lima; Iane Leite P. Luz; Teresinha Queiroz; Leianny Da S. Reis
OS PLANOS DIRETORES E A GESTÃO AMBIENTAL NA RIDE GRANDE TERESINA (BRASIL) 132
Elcileni de Melo Borges; Celene Cunha A. Monteiro Barreira
HABITAÇÃO SOCIAL E DESENVOLVIMENTO SUSTENTÁVEL: O CASO DA REGIÃO METROPOLITANA DE GOIÂNIA 133
Francesca Poggi
REFORÇO DA EFICIÊNCIA ENERGÉTICA À ESCALA DO MUNICÍPIO.UM PROCESSO EM EVOLUÇÃO. 134
Ítalo Brener de Carvalho; Marlusa de Sevilha Gosling
PORQUE PASSEAR NO PARQUE? BENEFÍCIOS CONCEBIDOS E PERCEBIDOS PELA ÓTICA DA TRANSFORMATIVE SERVICE RESEARCH 135
Lidiane Aparecida Alves; Vítor Ribeiro Filho; Nuno Marques da Costa
ESPAÇOS VERDES URBANOS E QUALIDADE DE VIDA. UMA EXPERIÊNCIA EM UBERLÂNDIA. 135

Session LS1.3

Débora Ferreira da Cunha; Nuno Marques da Costa; Celene Cunha Monteiro A. Barreira
INTEGRAÇÃO E COOPERAÇÃO TERRITORIAL NA REGIÃO METROPOLITANA DE GOIÂNIA 136
Diogo Quintilhano
O PAPEL DA BR 101 PARA O FLUXO DE CARGAS AÉREAS NO ESTADO DE SANTA CATARINA 136
Geovana Alves Rocha Vieira; Wilza Gomes Reis Lopes
AGLOMERADOS SUBNORMAIS, MEIO AMBENTE E SOCIEDADE: CIDADE DE TERESINA, PIAUÍ COMO CENÁRIO 137
Miguel Pires Amado; Inês Ramalhete; João C. Freitas; Antonio Ribeiro Amado
INCREMENTAL URBAN REGENERATION: URBAN CELL AS DISSEMINATION UNIT 138
Vitor Hélio Pereira de Souza
A IIRSA/COSIPLAN: AS CONSEQUÊNCIAS DE UM MODELO DE INTEGRAÇÃO TERRITORIAL PREPONDERANTEMENTE RODOVIÁRIO 138

Session LS1.4

Débora Cavalcanti
LUTANDO POR UM LUGAR NA CIDADE DE MACEIÓ, BRASIL 140
Fernanda Siqueira Malta; Alessandra Magrini; Eduarda Marques da Costa
ANALYSIS OF SOCIO-ENVIRONMENTAL VULNERABILITY IN THE MUNICIPALITY OF RIO DE JANEIRO. 141
Filipe Costa Pinto de Lacerda Matos
COMMUNITY COALITIONS IN LISBON 142
Renata da Silva Oliveira
O CROWDSOURCING UTILIZADO COMO TÁTICAS DE RESILIÊNCIA EM UM PLANEJAMENTO COLABORATIVO 143
Wallace Wagner Rodrigues Pantoja; Maria de Fátima Rodrigues Makiuchi
POLÍTICAS E EQUIPAMENTOS CULTURAIS NA ÁREA METROPOLITANA DE BRASÍLIA – PENSANDO OS DESAFIOS DA ESPACIALIDADE PARTICIPANTE 144

LS02 Experiências de governança multinível para o desenvolvimento urbano e ambiental sustentável 147

Session LS2.1

Ana Mônica Medeiros Ferreira
PARTICIPAÇÃO POPULAR EM NATAL/RN E POSSIBILIDADES PARA UMA NOVA ESTRATÉGIA URBANA. 149

Carlos Gonçalves
GOVERNÂNCIA E VULNERABILIDADE NO SISTEMA URBANO DO OESTE ENTRE 2008 E 2014 150

Débora Cavalcanti; Regina Dulce Lins
O DESAFIO DA PARTICIPAÇÃO NA CONSTRUÇÃO DA NOSSA CIDADE: UMA ESCOLA DE PLANEJAMENTO URBANO POPULAR 151

Helsio Amiro Motany de Albuquerque Azevedo; Banze; Egídio Victor; Nhantumbo; Sónia Cardoso
POLÍTICAS PÚBLICAS E O DESENVOLVIMENTO DO TURISMO: ANÁLISE DA IMPLEMENTAÇÃO DO PLANO ESTRATÉGICO DO MUNICÍPIO DE INHAMBANE (2009-2019) 151

Luciano dos Santos Diniz
BELO HORIZONTE/MG: PRÁTICAS DE DESENVOLVIMENTO DO VETOR NORTE METROPOLITANO 152

Augusto César Pinheiro da Silva; Glaucio José Marafon
FEDERAÇÃO, COMPETIÇÃO E COOPERAÇÃO: ESTRATÉGIAS DE GESTÃO NA REGIÃO METROPOLITANA DO RIO DE JANEIRO, BRASIL 153

Samuel do Carmo Lima
VIGILÂNCIA E PREVENÇÃO CONTRA O AEDES AEGYPTI: ARTICULAÇÃO MULTINÍVEL, INETRSETORIALIDADE E MOBILIZAÇÃO SOCIAL 154

IUPEA

International Urban Planning and Environment Association

International Board of Directors | Direção Internacional

Donald Miller, Chair, University of Washington, Seattle, USA
Adrienne Keane, Macquarie University, Australia
Chris Zuidema, University of Groningen, Netherlands
Hilda Blanco, University of Southern California, USA
Jiang Wu, Tongji University, Shanghai, China
Jorge J. Karol, University of La Plata, Agentina
José Manuel Simões, Universidade de Lisboa, Portugal
Katie Williams, University of the West of England, United Kingdom
Nancey Green Leigh, Georgia Tech University, USA
Nicole Gurran, The University of Sidney, Australia
Perry Pei-Ju Yang, Georgia Institute of Technology, USA
Peter B. Meyer, The E.P. Systems Group, USA
Peter Phibbs, University of Western Sydney, Australia
Robin Ganser, University of Applied Sciences Lubeck, Germany
Rocky Piro, Denver Department of Community Planning and Development., USA
Sarah Coffin, Saint Louis University, USA

UPE12 & 1ST UPE LUSOPHONE | UPE12 e 1º SIMPÓSIO LUSÓFONO UPE

Organization Committee | Comité de Organização

IUPEA: International Urban Planning and Environment Association

CEG – IGOT – ULisboa: Centro de Estudos Geográficos, Instituto de Geografia e Ordenamento do Território, Universidade de Lisboa

IST – ULisboa: Instituto Superior Técnico, Universidade de Lisboa

Local Organizing Committee | Comité Local de Organização

José Manuel Simões (Chair), Universidade de Lisboa, Portugal
Carlos Cardoso Ferreira, Universidade de Lisboa, Portugal
Eduarda Marques da Costa, Universidade de Lisboa, Portugal
Fernando Nunes da Silva, Universidade de Lisboa, Portugal
José Antunes Ferreira, Universidade de Lisboa, Portugal

Scientific Committee UPE12 | Comité Científico UPE12

Adrienne Keane, Macquarie University, Australia
Armando Montanari, University La Sapienza, Roma, Italy
Arnaud Banos, Universite de Paris, France
Carlos Cardoso Ferreira, Universidade de Lisboa, Portugal
Caroline Scarles, University of Surrey, United Kingdom
Chris Zuidema, University of Groningen, Netherlands
Cristina Castel Branco, Universidade de Lisboa, Portugal
Daniel Rauhut, Norwegian Institute for Urban and Regional Research, Norway
Donald Miller, IUPEA Chair, University of Washington, Seattle, USA
Eduarda Marques da Costa, Universidade de Lisboa, Portugal
Elisabeth Hamin, University of Massachusetts, USA

Eran Razin, The Hebrew University of Jerusalem, Israel
Fernando Nunes da Silva, Universidade de Lisboa, Portugal
Hilda Blanco, University of Southern California, USA
Isabel Loupa Ramos, Universidade de Lisboa, Portugal
Jorge J. Karol, University of La Plata, Argentina
José Antunes Ferreira, Universidade de Lisboa, Portugal
José Manuel Simões, Universidade de Lisboa, Portugal
José Reis, Universidade de Coimbra, Portugal
Katie Williams, University of the West of England, United Kingdom
Manuel Laranja, Universidade de Lisboa, Portugal
Maria Prezioso, University of Rome Tor Vergata, Italy
Nicole Gurran, The University of Sidney, Australia
Nuno Marques da Costa, Universidade de Lisboa, Portugal
Paulo Morgado, Universidade de Lisboa, Portugal
Perry Pei-Ju Yang, Georgia Institute of Technology, USA
Peter B. Meyer, The E.P. Systems Group, USA
Peter Phibbs, University of Western Sydney, Australia
Robert Maitland, University of Westminster, United Kingdom
Robin Ganser, Nuertingen-Geislingen University, Germany
Rocky Piro, Denver Department of Community Planning and Development, USA
Samuel do Carmo Lima, Universidade Federal de Uberlândia, Brasil
Sarah Coffin, Saint Louis University, USA
Teresa Heitor, Universidade de Lisboa, Portugal

Scientific Committee 1st Lusophone Symposium | Comité Científico 1º Simpósio Lusófono

Dennilson Pinto, Direcção da Ordem dos Engenheiros de Angola, Angola
Glaucio José Marafon, Universidade do Estado do Rio de Janeiro, Brasil
Helsio Azevedo, Universidade Eduardo Mondlane, Moçambique
Isabel Loupa Ramos, Universidade de Lisboa, Portugal
Judite Nascimento, University of Cabo Verde, Cabo Verde
Margarida Pereira, Universidade Nova de Lisboa, Portugal
Margarida Queirós, Universidade de Lisboa, Portugal
Maria Encarnação Sposito, Universidade Estadual Paulista, Brasil
Maria Rosário Partidário, Universidade de Lisboa, Portugal
Neli Aparecida Mello, Universidade de Sao Paulo, Brasil
Nuno Marques da Costa, Universidade de Lisboa, Portugal
Teresa Alves, Universidade de Lisboa, Portugal

Technical Secretariat | Secretariado

Ana Louro, Universidade de Lisboa, Portugal
Márilisa Coelho, Universidade de Lisboa, Portugal

Sponsors | Patrocinadores

IGOT – Instituto de Geografia e Ordenamento do Território, ULisboa
FCT – Fundação para a Ciência e Tecnologia
CGD – Caixa Geral de Depósitos

UPE12 PRESENTATION

The city is an imagined and drawn space, a densified and volumetric landscape. But it is also a living space, and is memory, work and leisure, tradition and innovation, technology and capital markets; an asymmetric mosaic of wealth and misery, abundance and deprivation, inclusion and exclusion; a place of arrival, both to migrants and tourists, and for people seeking new opportunities.

The city is, first and foremost, people!

To build a city of citizens - **a city for us** - is a purpose and a greatest responsibility of a collective effort including elected officials, administration, technicians, business and citizens. This is why public participation in urban planning processes - from diagnosis to strategy and the intervention proposal - should become a more effective practice.

Sustainable spatial planning and urban design are keys to human well being. We need a new vision of cities and regions for sustainable urban life after human-cause or natural crisis.

Many of the decisions made today will have long-term consequences, and we are certain that we must strive towards creating more inclusive and healthy cities, that are more green and sustainable, more innovative and smart, with greater support for leisure and tourism, economically more robust, and supplying more and better jobs, with inclusive governance models, opening a new era where cities are more livable, effective, competitive, attractive, learning, equitable, and resilient.

APRESENTAÇÃO UPE12

A cidade é um espaço imaginado e desenhado, uma paisagem densificada e volumétrica. Mas também é um espaço vivo, é memória, trabalho e lazer, tradição e inovação, tecnologia e mercado de capitais; um mosaico assimétrico de riqueza e miséria, abundância e privação, inclusão e exclusão; um lugar de chegada, tanto para migrantes como para turistas, assim como para as pessoas que procuram novas oportunidades.

A cidade é, acima de tudo, gente!

Construir uma cidade dos cidadãos - **uma cidade para nós** - é um propósito e uma grande responsabilidade de um esforço coletivo, incluindo funcionários eleitos, administração, técnicos, empresas e cidadãos. É por isso que a participação pública em processos de planeamento urbano - desde o diagnóstico para a estratégia até à proposta de intervenção - deve tornar-se uma prática mais eficaz.

O ordenamento do território e urbanismo sustentáveis são fundamentais para o bem estar humano. Precisamos de uma nova visão de cidades e regiões para a vida urbana sustentável em contextos de crise de origem humana/natural.

Muitas das decisões tomadas hoje terão consequências a longo prazo, e estamos certos de que nos devemos esforçar para a criação de cidades mais inclusivas e saudáveis, mais verdes e sustentáveis, mais inovadoras e inteligentes, com um maior apoio ao lazer e turismo, economicamente mais robustas,e fornecedoras de mais e melhores empregos, com modelos de governança inclusivos, abrindo uma nova era onde as cidades são mais habitáveis, eficazes, competitivas, atraentes, equitativas e resilientes.

1st UPE LUSOPHONE SYMPOSIUM

The 1st UPE Lusophone Symposium will be a place to exchange knowledge and discuss the problems and dynamics of urban development in lusophone countries, and a discussion forum to cross planning and managing approaches towards sustainable urban and environmental development.

1º SIMPÓSIO LUSÓFONO

O 1º Simpósio Lusófono em Planeamento Urbano e Ambiental será um espaço de partilha de conhecimentos e discussão dos problemas e dinâmicas de desenvolvimento urbano nos países lusófonos, para cruzar abordagens de planeamento e gestão para um desenvolvimento urbano e ambiental sustentável.

UPE12 TRACKS

T01 / INCLUSION AND HEALTH: *towards livable cities*

T02 / GREEN AND SUSTAINABILITY: *towards effective cities*

T03 / INNOVATION AND INTELLIGENCE: *towards competitive cities*

T04 / LEISURE AND TOURISM: *towards attractive cities*

T05 / GOVERNANCE AND POLICIES: *towards learning cities*

T06 / ECONOMY AND JOBS: *towards equitable cities*

TEMAS UPE12

T01 / INCLUSÃO E SAÚDE: *para cidades habitáveis*

T02 / *GREEN* E SUSTENTABILIDADE: *para cidades eficazes*

T03 / INOVAÇÃO E CONHECIMENTO: *para cidades competitivas*

T04 / LAZER E TURISMO: *para cidades atrativas*

T05 / GOVERNANÇA E POLÍTICAS: *para cidades de aprendizagem*

T06 / ECONOMIA E EMPREGO: *para cidades equitativas*

1st UPE LUSOPHONE TRACKS

The discussion will be based on the following issues:

LS01 / Urban Planning for sustainable development in lusophone contexts;

LS02 / Multilevel governance experiences for sustainable urban and environmental development.

TEMAS 1º SIMPÓSIO LUSÓFONO

A discussão será focada nas seguintes questões:

LS01 / Planeamento urbano para o desenvolvimento sustentável em contextos lusófonos;

LS02 / Experiências de governança multinível para o desenvolvimento urbano e ambiental sustentável.

List of participants | Lista de participantes

(Alphabetic order | Ordem alfabética)

Authors and Title | Autores e Títulos	Session / Sessão	Page / Página
Aditi Chaturvedi CITIZEN ENGAGEMENT IN INDIAN URBAN PLANNING: A JOURNEY FROM CITY DEVELOPMENT PLAN TO SMART CITY PLAN	T5.2	93
Agatino Rizzo EXPANDING THE GREEN/BLUE INFRASTRUCTURE CONCEPT: ISKANDAR MALAYSIA AS A CASE OF STUDY	T2.4	54
Agustin Cocola Gant HOLIDAY APARTMENTS AND DISPLACEMENT OF COMMUNITIES. NEW CHALLENGES FOR PUBLIC POLICY	T4.2	85
Alex Karner; Catherine Ross; Peter Hylton; Richard Duckworth; Subhrajit Guhathakurta PUBLIC TRANSIT EQUITY AND THE GEOGRAPHY OF OPPORTUNITY IN THE ATLANTA REGION	T6.2	122
Alexandru Seltea PLANNING FOR URBAN FOOD PRODUCTION.LEARNINGS FROM A CASE STUDY IN LUND, SWEDEN	T1.4	36
Amro Khaled Ahmed Abdelalim; Omnia Awni CITIES: TOWARDS FULFILLING THE SOCIAL NEEDS OF PEOPLE	T1.3	32
Ana Mônica Medeiros Ferreira PARTICIPAÇÃO POPULAR EM NATAL/RN E POSSIBILIDADES PARA UMA NOVA ESTRATÉGIA URBANA.	L1.4	149
Ana Povoas A THEORY OF SPATIAL JUSTICE, BETWEEN SOCIETY AND PLANNERS	T1.3	33
Antônia Jesuíta de Lima; Iane Leite P. Luz; Teresinha Queiroz; Leianny da S. Reis OS PLANOS DIRETORES E A GESTÃO AMBIENTAL NA RIDE GRANDE TERESINA (BRASIL)	L1.2	132
Antonio Dicampli; María de Los Ángeles Cuenca; María Fernanda Luzuriaga; Holger Patricio Cuadrado DENSIFYING ECUADORIAN MIDDLE CITIES. QUESTIONS, PROBLEMS, DESIGN ISSUES	T5.6	108
Arthur Wippel de Carvalho; Bruno Franklin Lopes Gaspar; Jean De Bona Veronez; Tiago Umberto Pazolini PROPOSTA DE EXPANSÃO URBANA PARA O MUNICÍPIO DE PALHOÇA/SC, BRASIL	L1.1	127
Augusto César Pinheiro da Silva; Glaucio José Marafon FEDERAÇÃO, COMPETIÇÃO E COOPERAÇÃO: ESTRATÉGIAS DE GESTÃO NA REGIÃO METROPOLITANA DO RIO DE JANEIRO, BRASIL	L2.1	153
Ayse Akbulut; Ozlem Ozcevik URBAN SUSTAINABILITY-CONSUMERISM-MEDIA: THE CASE OF GATED COMMUNITES IN İSTANBUL	T6.2	123
Ballout Amor; Pr.Yasmina Bouchahm; Dhia Eddine Zakaria Lacheheb URBAN QUALITY T4HREW THERMAL COMFORT CONDITIONS IN AN URBAN SPACE.“THE SQUARE OF INDEPENDENCE, SÉTIF, ALGERIA”.	T2.8	66
Beatriz Condessa INTEGRATED URBAN OPERATIONS IN PORTUGAL: HOW TO IMPROVE EQUITY AND EFFICIENCY?	T5.4	101
Berfu Guley Goren DISABLED PEOPLE IN CITY AND LIVABLE CITY	T1.1	27
Bernard Delpeche SUSTAINABLE AND SOCIAL INTEGRATION OF THE INTERNATIONAL STUDENTS IN THE CANADIAN UNIVERSITIES	T6.2	124
Bogna Anna Gebalska WORKING WITH URBAN MEGATRENDS.	T3.1	71
Burcu Ateş TOWARDS SOCIO-ECOLOGICAL CITIES: GREEN PUBLIC SPACES BY GUERRILLA GARDENING	T2.3	51
Caitlin Pohle ANALYSIS OF URBAN AGRICULTURE FOR LAND USE PLANNING IN ALMADA, PT	T2.3	51
Carlos Gonçalves GOVERNÂNCIA E VULNERABILIDADE NO SISTEMA URBANO DO OESTE ENTRE 2008 E 2014	L2.1	150
Carlos Gonçalves HOUSEHOLDS INCOME VULNERABILITY DURING THE 2008 CRISIS IN FOUR PORTUGUESE CITIES	T6.1	119
Carlos José Lopes Balsas SOCCER IN SCOTTSDALE, ARIZONA, PLANNING IMPLICATIONS OF A SPORTS FACILITY	T2.6	61
Catarina Rodrigo; Jorge Rocha; Killian Lobato; José António Tenedório SOLAR POTENTIAL IN URBAN OPEN SPACE	T2.2	46
Catherine Ross; Alex Karner; Peter Hylton; Elliot Sperling; Subhrajit Guhathakurta QUALITY OF LIFE BENEFITS OF URBAN TRAILS: ANALYSIS OF THE ATLANTA BELTLINE	T1.4	38

Cecília Delgado CLARIFYING THE SCOPE OF URBAN AND PERI-URBAN AGRICULTURE TO IMPROVE ITS TERRITORIAL COMPETITIVENESS	T5.3	97
Célia Marisa Fonseca Ferreira; Teresa Sá Marques; Paula Guerra ECONOMIC DYNAMICS AND COMPETITIVENESS IN THE CITY CENTRE OF OPORTO (PORTUGAL)	T6.1	120
Christian Zuidema; Katharina Gugerell DESIGNING FOR THE ENERGY TRANSITION; BRIDGING SPATIAL AND INSTITUTIONAL DESIGN	T2.2	47
Daisuke Murakami; Yoshiki Yamagata; Takahiro Yoshida A STATISTICAL ANALYSIS OF URBAN BIG-DATA TOWARD REAL-TIME AND STREET LEVEL HEATWAVE RISK MANAGEMENT	T3.1	72
David P. Varady; Fatima Matos COMPARING PUBLIC HOUSING REVITALIZATION IN THE US AND PORTUGAL	T5.1	91
David Santiago Perez Rodriguez ECO-VILLAGES TO JUST CITIES: AN ASSESSMENT OF FREIBURG AND ISLE OF EIGG	T5.6	109
David Sousa Vale; Mauro Pereira; Luis Sanchez Carvalho MULTIMODAL ACCESSIBILITY AND COMMUTING TO CAMPUS: THE CASE OF THE UNIVERSITY OF LISBON	T2.5	58
Débora Cavalcanti LUTANDO POR UM LUGAR NA CIDADE DE MACEIÓ, BRASIL	L1.4	140
Débora Cavalcanti; Regina Dulce Lins O DESAFIO DA PARTICIPAÇÃO NA CONSTRUÇÃO DA NOSSA CIDADE: UMA ESCOLA DE PLANEJAMENTO URBANO POPULAR	L2.1	151
Débora Ferreira da Cunha; Nuno Marques da Costa; Celene Cunha Monteiro A. Barreira INTEGRAÇÃO E COOPERAÇÃO TERRITORIAL NA REGIÃO METROPOLITANA DE GOIÂNIA	**L2.1**	136
Demirović D.; Radosavac A.; Njegovan Z.; Pejanović, R. CITIES AND EVENTS – CITY OF NOVI SAD AND EXIT FESTIVAL (SERBIA)	T4.1	81
Demirović D.; Radosavac A.; Njegovan Z.; Pejanović, R. RELIGIOUS OBJECTS AND EVENTS AS RESOURCES FOR TOURISM DEVELOPMENT IN CITIES - CASE STUDY: MUNICIPALITY OF NOVI BEČEJ (SERBIA)	T4.2	83
Dhia Eddine Zakaria Lacheheb; Amor Ballout; Said Madani DENSE SUBDIVISIONS BETWEEN URBAN RENEWAL AND INCOMPLETION (CASE STUDY FOR SUBDIVISION IN SETIF, ALGERIA)	T1.4	39
Diego Fernando Mafla Sanchez URBAN FRAGMENTATION: RELATION OF THE LAND USED AND THE DISCONTINUATION OF TRANSPORT	T2.5	58
Diogo Quintilhano O PAPEL DA BR 101 PARA O FLUXO DE CARGAS AÉREAS NO ESTADO DE SANTA CATARINA	L1.3	136
Dita Trisnawan RUSUNDITO: AN INNOVATIVE PUBLIC HOUSING URBAN DEVELOPMENT PROJECT IN JAKARTA	L2.8.	67
Donald Miller FACTORING HAPPINESS INTO URBAN PLANNING SUSTAINABLE DEVELOPMENT	T1.2	29
Eduarda Marques da Costa; Patrícia Abrantes; Ana Louro; Nuno Marques da Costa; Paulo Morgado; Jorge Rocha MONITORING AND EVALUATION OF POLICIES – THE ROLE OF SUPPORT TOOLS FOR SPATIAL DECISION SUPPORT SYSTEM APPLIED TO PORTUGUESE CASE	T3.3	76
Elcileni de Melo Borges; Celene Cunha A. Monteiro Barreira HABITAÇÃO SOCIAL E DESENVOLVIMENTO SUSTENTÁVEL: O CASO DA REGIÃO METROPOLITANA DE GOIÂNIA	L1.3	133
Elena Gilcher; Gerhard Steinebach PILOT PROJECTS AND THEIR SIGNIFICANCE IN APPROACHING CHALLENGES – EXEMPLIFIED BY REFUGEE AID	T5.6	110
Emanuel Pereira PHYSICAL ACTIVITY AND HEALTHY LIFESTYLES – EVIDENCES ABOUT URBAN ENVIRONMENT INFLUENCE IN A LISBON NEIGHBOURHOOD CASE STUDY	T1.2	29
Erica Cecília De Sousa Soares; Wilza Gomes Reis Lopes O PLANEJAMENTO URBANO EM EVIDÊNCIA: ESTUDO DE CASO EM TERESINA, PIAUÍ, BRASIL	L1.1	128
Ernest Alexander (HOW) CAN INSTITUTIONAL DESIGN OF URBAN GOVERNANCE PROMOTE LEARNING CITIES?	T5.1	91
Fernanda Siqueira Malta; Alessandra Magrini; Eduarda Marques da Costa ANALYSIS OF SOCIO-ENVIRONMENTAL VULNERABILITY IN THE MUNICIPALITY OF RIO DE JANEIRO.	T2.7	141
Filipe Costa Pinto de Lacerda Matos COMMUNITY COALITIONS IN LISBON	L1.4	142
Francesca Poggi REFORÇO DA EFICIÊNCIA ENERGÉTICA À ESCALA DO MUNICÍPIO.UM PROCESSO EM EVOLUÇÃO.	L1.2	134
G. William Page ENVIRONMENTAL PLANNING PROCESS RESEARCH	T5.7	111
Geovana Alves Rocha Vieira; Wilza Gomes Reis Lopes AGLOMERADOS SUBNORMAIS, MEIO AMBENTE E SOCIEDADE: CIDADE DE TERESINA, PIAUÍ COMO CENÁRIO	L1.3	137

Gonçalo Santinha; Teresa Sá Marques; Miguel Saraiva; Paula Guerra; Tânia Moreira TERRITORIAL COHESION; FROM THE EUROPEAN TO THE REGIONAL AGENDA: CONCEPTUAL TRANSPOSITION OR CONCEPTUAL REDEFINITION?	T5.7	99
Hansaem Kim; Seunghyun Jung; Hyomin Kim URBAN HEAT ISLAND MAP MAKING BASED ON MOBILE COMMUNICATION NETWORK STATIONS	T2.1	45
Hartmut Fünfgeld; Robin Goodman; Stephen Rowley MULTI-LEVEL CLIMATE CHANGE ADAPTATION GOVERNANCE AND LOCAL GOVERNMENT PLANNING PROCESSES IN AUSTRALIA	T5.5	106
Hartmut Fünfgeld; Alianne Macarthur; Sophie Turner; Fiona Silke; Sarah Robertson INTEGRATING CLIMATE CHANGE RISK INTO LOCAL GOVERNMENT PLANNING AND DECISION-MAKING: BARRIERS AND STRATEGIES	T2.1	45
Helena Lucia Zagury Tourinho; Marco Aurélio Arbage Lobo; Samia Saady Morhy REASONS TO LIVE IN THE HISTORIC CENTER: THE CASE OF BELEM, PARA, BRAZIL	L1.1	129
Helsio Amiro Motany de Albuquerque Azevedo; Banze; Egídio Victor; Nhantumbo; Sónia Cardoso POLÍTICAS PÚBLICAS E O DESENVOLVIMENTO DO TURISMO: ANÁLISE DA IMPLEMENTAÇÃO DO PLANO ESTRATÉGICO DO MUNICÍPIO DE INHAMBANE (2009-2019)	L2.1	151
Hilda Blanco INCORPORATING NEW METHODS FOR PLANNING MORE SUSTAINABLE CITIES	T2.3	52
Hyomin Kim; Seunghyun Jung; Hansaem Kim EVALUATING METEOROLOGICAL OBSERVATION NETWORK TO ANALYZE URBAN THERMAL ENVIRONMENTS CONSIDERING CLIMATE CHANGE	T2.8	67
Ibrahim Abaid; Tang Yue LIFE IN PUBLIC SPACES OF NEIGHBORHOODS, A CASE STUDY OF MISURATA CITY, LIBYA	T1.3	34
Isabel Loupa Ramos; Fátima Bernardo; Rosa Coelho PERI-URBAN LANDSCAPES IN METROPOLITAN AREAS: EXPLORING CONTENTS OF PLACE IDENTITY	T1.4	40
Ítalo Brener de Carvalho; Marlusa de Sevilha Gosling PORQUE PASSEAR NO PARQUE? BENEFÍCIOS CONCEBIDOS E PERCEBIDOS PELA ÓTICA DA TRANSFORMATIVE SERVICE RESEARCH	L1.2	135
Jacek Malasek SMART MOBILITY FOR URBAN SUSTAINABILITY	T2.5	59
Jeremy Németh DEMOCRACY, PROTEST, AND PUBLIC SPACE: BUILDING SPACES OF RESISTANCE	T4.3	86
Joana Almeida; Fátima Bernardo; Catarina Faria URBAN IDENTITY AND TOURISM: DIFFERENT PEOPLE, DIFFERENT LOOKS, ONE SINGLE PLACE	T4.1	81
Joana Almeida; José Antunes Ferreira; Ana Morais de Sá; Beatriz Condessa AN APPROACH TO IMPROVE EFFECTIVENESS OF URBAN PROJECTS IMPLEMENTATION WITH MULTIPLE LANDOWNERS	T4.3	87
João de Abreu e Silva; Marcos Correia DRIVERS OF URBAN SPRAWL IN PORTUGUESE MEDIUM CITIES BETWEEN 2001 AND 2011	T2.7	64
João Fumega; S. Niza; P. Ferrao UNDERSTANDING THE RELATION BETWEEN CITIES AND ENERGY: AN APPROACH ON MODELLING URBAN FORM AND ENERGY PERFORMANCE IN LISBON, PORTUGAL	T2.2	48
Jorge L. Karol GOVERNANCE TALES: CROSSING BOUNDARIES, BRIDGING DIVIDES, BUILDING-UP COMMON APPROACHES, INSTRUMENTS AND RULES	T5.7	114
Karwan Taha THE SIGNIFICANCE OF ENVIRONMENTAL SUSTAINABILITY IN ERBIL CITY URBAN PLANNING	T5.5	106
Katalin Juhász-Dóra ANALYSIS OF LANDSCAPE ARCHITECTURE - AND URBAN DESIGN IMPACT ON HOTEL COMPETITIVENESS	T4.2	84
Kelly J. Clifton; Patrick Singleton A REVIEW OF HEALTH INTEGRATION INTO US METROPOLITAN LONG-RANGE TRANSPORTATION PLANS	T1.2	30
Lidiane Aparecida Alves; Vítor Ribeiro Filho; Nuno Marques da Costa ESPAÇOS VERDES URBANOS E QUALIDADE DE VIDA. UMA EXPERIÊNCIA EM UBERLÂNDIA.	L1.2	135
Luciano dos Santos Diniz BELO HORIZONTE/MG: PRÁTICAS DE DESENVOLVIMENTO DO VETOR NORTE METROPOLITANO	L2.1	152
Luis Encalada Abarca; Carlos Cardoso Ferreira; Jorge Rocha GEOTAGGED PHOTOS FROM SOCIAL NETWORKS AND URBAN TOURISM: NEW SOURCES, NEWCHALLENGES.	T4.2	84
Lurdes Barrico; Helena Freitas; And Paula Castro CITIZENS' ENGAGEMENT IN DRAWING STRATEGIES/PRIORITIES TOWARDS IMPROVING URBAN QUALITY OF LIVE	T5.2	94
Maria da Graça Moreira TOURISM IN THE PARADIGM OF SMART CITIES	T4.3	85
Maria Giannopoulou; Konstantinos Lykostratis; Anastasia Roukouni A GIS-BASED ANALYSIS TO ESTIMATE THE BENEFITS OF URBAN GREEN ROOFS	T2.4	55
Maria Luísa Rodrigues THE NATURE AND THE CITY: INCLUSION OF NATURAL ELEMENTS IN URBAN LEISURE	T4.1	82

Melasutra Md Dali; Yasmin Mohd Adnan; Hasniyati Hassan Md Nasir Md Daud; Anuar Alias SMART GREEN CITY: SEARCHING FOR DEFINITION AND FOCUSING ON FRAMEWORK DEVELOPMENT AND STRATEGIES OF PUTRAJAYA.	T2.4	56
Melissa Julie Saunders; Peter B. Meyer CLIMATE CHANGE, ECONOMIC DECLINE AND TERRORISM: EXTERNAL SHOCKS TO URBAN SUSTAINABILITY	T2.1	46
Mendel Giezen; Didi Van Doren; Hens Runhaar; Peter Driessen SCALING-UP OF ENERGY CONSERVATION INITIATIVES: BARRIERS AND LOCAL STRATEGIES	T2.2	50
Michael Elliott THE ATLANTA BELTLINE DECISION SUPPORT TOOL: INTEGRATING STAKEHOLDER INVOLVEMENT AND TECHNICAL DESIGN	T5.3	100
Mieko Saito; Yasuhiro Tajima; Genichiro Kikui COMPONENTS OF AN AUGMENTED REALITY APP EFFECTIVE IN UNDERSTANDING FLOOD DISASTER PREVENTION	T3.3	77
Miguel Pires Amado; Inês Ramalhete; João C. Freitas; Antonio Ribeiro Amado INCREMENTAL URBAN REGENERATION: URBAN CELL AS DISSEMINATION UNIT	L1.3	138
Monokrousou Klio; Giannopoulou Maria INTERPRETING AND PREDICTING PEDESTRIAN MOVEMENT IN PUBLIC SPACE THROUGH SPACE SYNTAX ANALYSIS	T2.5	59
Mouhoubi Nedjima; Sassi Boudemagh Souad INDICATIVE OF THE GOOD GOVERNANCE: ASSESSMENT OF THE DEGREE OF PARTICIPATION OF THE INHABITANTS IN THE LARGE URBAN PROJECTS.	T5.2	95
Nuno Marques da Costa; Ana Louro COMMUTING FLOW PATTERS IN LMA: TOWARDS AN EFFECTIVE CONTRIBUTION TO SUSTAINABLE DEVELOPMENT?	T2.6	61
Nuno Marques da Costa; Ana Louro; Eduarda Marques da Costa THE ROLE OF HEALTHY CITIES PROJECT TO MUNICIPAL GOVERNANCE IN FAVOR OF SUSTAINABLE DEVELOPMENT	T1.2	31
Nurussaadah Mokhtar; Melasutra Md. Dali LA21 IN URBAN COMMUNITIES: A SLOW BUT PROMISING BEGINNING OF GRASSROOT INNOVATION	T5.5	107
Patrícia Abrantes; Margarida Queirós; Guilhem Mousselin; Claire Ruault; Étienne Anginot BUILDING A PROSPECTIVE PARTICIPATORY APPROACH FOR A LONG-TERM AGRICULTURAL SUSTAINABILITY IN THE LEZÍRIA DO TEJO REGION (PORTUGAL)	T5.2	96
Paulo Castro Seixas; Ricardo Dias; Pedro Queirós Pereira A GOOD CITY FOR LIVING. CITIZEN SCIENCE AND URBAN REGENERATION FOR SUSTAINABLE DEVELOPMENT	T5.3	113
Paulo Morgado; Margarida Queiros; Mario Vale; Nuno Marques Costa; Nelson Mileu; Fábio Rodrigues; Júlia Maltez Ribeiro REAL-TIME GIS OF GENDER MOBILITY. A TELEGEOMONITORING SYSTEM APPROACH	T3.1	72
Pedro Dias; José António Tenedório; Jorge Rocha LISBON AS A SMART CITY: MAPPING STRATEGIC SECTORS	T3.2	73
Pedro Franco; Tiago Raimundo HEALTH STATUS QUANTITATIVE ANALYSIS – THE CASE OF LMA	T1.3	36
Perry Yang; Yoshiki Yamagata MODELING HIGH-DENSITY URBAN FORM FOR RESILIENT SYSTEM DESIGN – A CASE STUDY OF MANHATTAN AND TOKYO	T2.6	62
Peter Hylton; Catherine Ross; Elliot Sperling; Alex Karner URBAN REVITALIZATION: CHANGING ATLANTA'S LAND USE INTENSITIES	T2.7	64
Rafael Gonçalves Santos; Ezequiel Correia; Alessandra R. Prata Shimomura; António Lopes ROUGHNESS LENGTH CHARACTERIZATION FOR URBAN CLIMATE MAPS IN THE CITY OF SÃO PAULO – SP, BRAZIL	T2.8	68
Renata da Silva Oliveira O CROWDSOURCING UTILIZADO COMO TÁTICAS DE RESILIÊNCIA EM UM PLANEJAMENTO COLABORATIVO	L1.4	143
Richard Milgrom; Ryan Woolrych AGE-FRIENDLY CITIES AND REGIONS: ENGAGING OLDER ADULTS, PRODUCING SOCIALLY SUSTAINABLE COMMUNITIES	T1.1	27
Rik Houthaeve PUBLIC PARTICIPATION AND CO-DESIGN IN A PROCESS OF ENVIRONMENTAL IMPACT ASSESSMENT.	T5.3	101
Robert Leiter; Rocky Piro THE ONGOING TRANSFORMATION OF REGIONAL PLANNING IN THE UNITED STATES	T5.7	113
Robert Young FROM SMART CITIES TO WISE CITIES: ECOLOGICAL WISDOM AS A NEW BASIS FOR SUSTAINABLE URBAN DEVELOPMENT	T2.4	57
Robin Ganser PLANNING FOR HIGH DENSITY – A CONTRIBUTION TOWARDS SUSTAINABLE URBAN AREAS? TARGETS, PARAMETERS, PERCEPTIONS	T2.6	63
Robin Ganser; Julia Mattei MAKING EFFECTIVE USE OF LAND BY MEANS OF PLANNING POWERS AND FISCAL POWERS	T5.4	102
Robin Ganser; Marten Runge CONVERSION CHALLENGE - MAKING THE MOST OF INTEGRATED URBAN AND RURAL LOCATIONS	T5.4	104
Robin Goodman PLANNING PRACTICE AND ACADEMIC RESEARCH – VIEWS FROM THE PARALLEL WORLDS	T5.1	92

Rosa Danenberg MUNICIPALITIES AS ENABLERS OF CITIZEN-LED URBAN INITIATIVES - POSSIBILITIES AND CONSTRAINTS	T5.4	105
Rosinaldo Barbosa da Silva; Nelba Azevedo Penna TECHNOLOGICAL PARK OF MATO GROSSO - CHALLENGES AND OPPORTUNITIES FOR REGIONAL-GLOBAL COMPETITIVENESS	T6.1	120
Roxana Maria Triboi SPONTANEOUS LARGE SCALE PRACTICE, URBAN PASTORALISM AS AN ENVIRONMENTAL TOOL FOR RECREATING AND MAINTENANCE OF ECOLOGICAL CORRIDORS	T2.3	53
Samuel do Carmo Lima VIGILÂNCIA E PREVENÇÃO CONTRA O AEDES AEGYPTI: ARTICULAÇÃO MULTINÍVEL, INETRSETORIALIDADE E MOBILIZAÇÃO SOCIAL	L2.1	154
Sarah Coffin CULTURAL ECOSYSTEMS AS THE FOURTH LEG OF THE SUSTAINABILITY STOOL: BENEFITS FOR THE SHRINKING CITY	T4.1	83
Seunghyun Jung; Hyeonsoo Kim DEVELOPING A FRAMEWORK TO MODEL RESOURCE RECYCLING RESIDENTIAL COMPLEXES	T2.7	65
Silvio Cesar Alves Rodrigues; Marcelo Bessa de Freitas BAÍA DE SEPETIBA: UM EXEMPLO DE ANACRONISMOS NO PLANEJAMENTO	L1.1	130
Sónia Alves THE QUEST FOR SOCIAL MIX – THE COPENHAGEN EXPERIENCE	T5.6	111
Susana Silva Pereira; Teresa Valsassina Heitor; Nuno Marques da Costa FROM WALKABILITY TO HEALTH AND WELLBEING. GUIMARÃES A CASE STUDY.	T1.1	28
Suyeon Lee; Seyeon Lee IMPACT OF FLOODS AND TYPHOON ON LOW-INCOME HOUSING	T5.5	108
Suyeon Lee; Seyeon Lee THE IMPACT OF FLOODS AND TYPHOONS ON HOUSING WELFARE: CASE STUDY OF THUA THIEN HUE PROVINCE, VIETNAM	T6.2	121
Takahiro Yoshida; Yoshiki Yamagata And Daisuke Murakami VISUALIZATION AND EVALUATION OF 3D URBAN DESIGN FOR HEATWAVE RISK MANAGEMENT	T3.2	74
Takayuki Kumazawa A STUDY OF CULTURAL LANDSCAPE CONSIDERING ENVIRONMENT AND BEHAVIOR IN FOOD PRODUCTION PROCESSES	T2.3	54
Vitor Hélio Pereira de Souza A IIRSA/COSIPLAN: AS CONSEQUÊNCIAS DE UM MODELO DE INTEGRAÇÃO TERRITORIAL PREPONDERANTEMENTE RODOVIÁRIO	L1.3	138
Wallace Wagner Rodrigues Pantoja; Maria de Fátima Rodrigues Makiuchi POLÍTICAS E EQUIPAMENTOS CULTURAIS NA ÁREA METROPOLITANA DE BRASÍLIA – PENSANDO OS DESAFIOS DA ESPACIALIDADE PARTICIPANTE	L1.4	144
Wenwen Zhang; Subhrajit Guhathakurta; Catherine Ross PARKING SPACES IN THE AGE OF SHARED AUTONOMOUS VEHICLES: HOW MUCH PARKING WILL WE NEED AND WHERE?	T3.3	78
Wilza Gomes Reis Lopes; Antônia Jesuíta de Lima; Bartira Araújo da Silva Viana; Edmundo Ximenes Rodrigues Neto REFLEXÕES SOBRE O PLANO DIRETOR COMO INSTRUMENTO DE GESTÃO EM MUNICÍPIOS BRASILEIROS	L1.1	131
Yinan Zhoua; Perry Pei-Ju Yang URBAN FORM AND ENERGY PERFORMANCE BASING ON SHANGHAI DISTRICT ANALYSIS	T3.2	75
Yoshiki Yamagata; Daisuke Murakami; Takahiro Yoshida CLIMATE RESILIENT 3D URBAN DESIGN: A “WISE SHRINK” APPROACH	T3.2	75

ABSTRACTS | RESUMOS

Track 01

INCLUSION AND HEALTH: *towards livable cities*

Chair: Eduarda Marques da Costa, Universidade de Lisboa, Portugal

Scientific Committee: Donald Miller, University of Washington, Seattle, USA
Katie Williams, University of the West of England, United Kingdom
Samuel do Carmo Lima, Universidade Federal de Uberlândia, Brasil
Teresa Heitor, Universidade de Lisboa, Portugal

The improvement of life frameworks in cities and metropolis, in order to achieve well-being, requires best practices to promote inclusion as a means to creating a healthy city.

The rapid growth of the urban phenomenon witnessed since the 50s (more than 3 % per year, with over 55 % of the population today urban), gave rise to cities and metropolis marked by strong tensions, segregation and both social and territorial disparities, which are multidimensional in nature and not confined only to a sector of society (economy, education, health, culture, ...). Hence, the production of health and improvement of the social inclusion, in its many facets, is increasingly present in the agendas of politicians and technicians who intervene more directly in urban management.

The concern with the construction of healthier cities increased starting from the mid-seventies. First, in 1974, it was driven by the findings of the Lalonde Report, later, in 1978, the International Conference on Primary Health Care in Alma-Ata, where the World Health Organization launched the ambitious challenge of obtaining the "Health for all". Afterwards, in 1986, the World Health Organization formally launched the "Healthy Cities" project, recommending that a healthy city is one that, with the multi-sectorial coordination of the various public policies and of the wide set of stakeholders (government, political parties, public and private institutions, unions, associations, NGOs, families and individuals), promotes collective production of health and the improvement of the urban quality of life.

This track encourages the presentation of initiatives focused on the design of well-being frameworks in cities and metropolitan areas, including promoting social inclusion, and improving the health of residents.

Disabled people in city and livable city

Berfu Guley Goren
Department of Architecture, Istanbul Arel University, TURKEY

The aim of the study is to analyze the effects of the inability to participate urban life of marginalised groups on sustainable urban development. The relation between disabled people, who are in marginalised groups, sustainable urban development and urban design are focused in the study. In the city, physical barriers and also social barriers build inaccessible environment for disabled people to access to the public spaces, urban functions and urban life.
“Livable city” term may be described by different disciplines or different branches of the same discipline. However, the common purpose of all disciplines or different branches is to improve the cities for “all people”. Livable city is in a deep relation between disabled people and the behaviour of the society towards these groups.
Urban citizens are “all people”, regardless of their race, sex, age, socio-economic conditions, physical features, ability or disability. In the most cities, all people may not be seen in all urban spaces because of their ethnic groups, economic, social or physical features. Thus marginalised groups may be created by the society. Marginalised groups can not participate to urban life physically and socially due to culture and attitudes of society towards them. Whereas, every urban citizen has the right to participate to urban life as an active member of city by laws and regulations. Inability of the all citizens to participate to the urban life is a hidden and big danger for livable and sustainable city. Disabled people, who are in marginalised groups in society, has a big population in the total world population. Disabled people are %10 percent of total world population. Because of behaviour and perspective of society towards disability, %10 percent of world population can not participate to urban life effectively. Physical environment design and behaviours of society are in a deep interaction with the urban life.
Participating in urban life is mortal for social and physical integration of society. Every individual has the right of free mobility whatever their physical features are. When physical environment design and public awareness work together, accessible and safe spaces for “all” citizens should be created.
Mostly, urban design practices create the environment for the people who are without disability. Whereas, all citizens should be considered in all urban design practices. Everybody should be aware that everybody may have a disability in a moment of their lives. Urban design practices should be created with consciousness and awareness to solve the problems of disabled people in urban physical and social life. For a sustainable and livable city, optimum balance between behaviour of society and urban environment should be ensured. In this perspective Istanbul will be analyzed with its urban and social textures. The analysis will be grounded to interviews of disabled people in Istanbul.

----- * -----

Age-friendly Cities and Regions: Engaging older adults, producing socially sustainable communities

Richard Milgrom; Ryan Woolrych
Department of City Planning, University of Manitoba, CANADA
School of the Built Environment, Heriot Watt University, Edinburgh
richard.milgrom@umanitoba.ca

Since the World Health Organization published Age-friendly Cities: a guide in 2007, many communities and regions have developed processes and policies intended to improve the quality of life for older adults. Ageing of populations have added urgency to these endeavours, as governments fear rising health costs. But advocates for seniors will argue that improvements to communities – within both the physical and social realms – will generally benefit all age cohorts. These improvements may enhance environmental sustainability (for example, by improving walkability and access to public transit) and social sustainability (by encouraging civic engagement and social inclusion).
This paper critically examines initiatives in Canada (e.g. the Age-friendly Manitoba Initiative) and the United Kingdom that are intended to improve conditions in a range of urban and rural centres and regions, addressing the built environment, social inclusion and wellbeing of older adults. Our work draws on the literature of aging-in-place, participatory planning, and social sustainability. We are particularly interested in how older adults are included in the processes and raise questions about how their participation could be used to the encourage younger cohorts to consider the future of their neighbourhoods, towns, cities and regions. Moreover, age is not the only equality protected characteristic and existing guidelines and policy on

Age Friendly Communities assume the homogenization of old age, without understanding how experiences of ageing are affected by different intersectionalities e.g. culture, gender, and sexuality. There is a need to address shortcoming of existing environments relatively quickly; however, issues related to the development patterns of human settlements require longer-term thinking and intergenerational and intercultural discussions and learning. This paper will identify some recommendations for how Age-Friendly Cities and Communities might move forward."

----- * -----

From walkability to health and wellbeing. Guimarães a case study

Susana Pereira [(1)]; Teresa Heitor [(2)]; Nuno Costa[(3)]

[(1)] Instituto Superior Técnico, CERIS, DECivil - Departamento de Engenharia Civil, Arquitetura e Georecursos da Universidade de Lisboa, Lisboa, PORTUGAL.
susana.silva.pereira@ist.utl.pt

[(2)] Instituto Superior Técnico, ICIST, CERIS, DECivil - Departamento de Engenharia Civil, Arquitetura e Georecursos da Universidade de Lisboa, Lisboa, PORTUGAL.
teresa.heitor@tecnico.ulisboa.pt

[(3)] Centro de Estudos Geográficos, Instituto de Geografia e Ordenamento do Território da Universidade de Lisboa, Lisboa, PORTUGAL.
nunocosta@campus.ul.pt

It is now consensual that the features of the built environment (BE) have a key role in promoting healthy lifestyles. There is evidence from several clinical trials that moderate physical activity (PA) (≥30 minutes daily walking), is the basis of prevention of various contemporary chronic diseases (e.g. diabetes, obesity, or hypertension) while environmental conditions and morphological features of the BE, can be a driving force or constraints of active lifestyles, contributing to individual health and wellbeing.

This paper refers to an evidence-based research initiative supported on an integrative approach based on a specific case-study carried out in the city of Guimarães, aiming at identifying urban key features associated with PA. The purpose is to discuss the strategies used to analyse the influence that the BE has on PA and the variables used to allow comparison of different urban key features.

In studies of BE-PA relationship, there are some indicators frequently related to the capacity of built space to promote walking. These indicators are usually reflected in walkability maps produced using data entered in the Geographic Information Systems (GIS). Some of the most commonly GIS measures observed in the literature are, population density, net residential density, land use mix, intersection density, retail floor area ratio, access to recreational facilities, presence of sidewalks, number of public transit stops, traffic volume, crime statistics, number of trees, average slope, or indices composed of some of the listed variables, being one of the most used equations, walkability = [(2xz-intersection density)+(z-net residential density)+(z-land use mix)]. This information, and its translation into maps, allows to identify areas according to their degree of vulnerability, and foresee implications for the health of their inhabitants. These tools are important in such diverse areas of knowledge as human geography, public health or urban planning and transportation.

Because there was no other information available, it was decided to build an index composed of four variables: residential density; land use mix; intersection density; and slope. The first two variables were extrapolated from 2011 census data, and the last two built upon the information from streets and the topography provided by the town hall, information also inserted into the GIS program. QGIS software was used because it is open source and have features similar to the most frequently used, ArcGIS. We seek to demonstrate that the information available free for download in the Instituto Nacional de Estatística (INE) can be easily displayed in this open source software. The information was included in QGIS, relating the alphanumeric information with the geographic one in order to make the different maps.

The map of the residential density was constructed using the INE census data and it was computed dividing the number of dwellings per the area of each statistical unit. The land use mix map, and because there was no direct indicator either in the census as from the town hall, was extrapolated from the item “Exclusively Residential Buildings” in the existing census. It was assumed that inverting this value an indicator of land use mix could be obtained, so the more exclusively residential, the lower the mix of uses, and the less, the greater the mix of uses. So we calculated the percentage of buildings exclusively residential in relation to the total of buildings in the census unit. The map of the intersection density was calculated based on the information available from the survey of the streets in CAD from the municipality. Because the existing survey consists of the centre line of the streets and these are fractionated at each intersection, it was calculated the number of segments in each statistical unit and then these were divided by the area of each geographical unit, assuming that the number of segments corresponds to the number of intersections. The average slope was inserted into the final equation because it was considered that in the case of the city of

Guimarães the steep slope of some of its areas considerably affects walkability. Thus, the average slope map was executed based on the topographic survey of the municipality. That information was transferred to QGIS and built up a digital terrain model and the average slope was calculated for every statistical unit. For all the four maps z-scores were calculated. The different maps were classified into a five value scale composed by 5 different colours. Upon the execution of the thematic maps, their value ranges were ranked from 1 to 5, where 1 is the least favourable value and 5 the most favourable relatively to the end walkability map. The map was obtained by the equation, walkability = [(2xintersection density)+(2xslope)+(residential density)+(land use mix)]/6, in order to obtain a weighted average of values corresponding to the four parameters of the equation, thereby putting a greater emphasis on intersection density and slope.
The construction of the walkability map allows to distinguish which areas and respective inhabitants are the more and less vulnerable. This will enable to relate the available data with reported levels of PA and health.

----- * -----

Session T1.2 | June 1 | 14:00 – 15:30

Factoring Happiness into Urban Planning – An Innovative Contribution to Sustainable Development

Donald Miller
Department of Urban Design and Planning
University of Washington, USA
Seattle, WA 98195

This paper explores what we think that we know about happiness, and possible roles of urban planning in fostering happiness of a city's residents and visitors. Developments in positive psychology over the last two decades provide a basis for this inquiry and identify two selected sets of factors. The first are those that contribute to happiness throughout life including health, arts and culture, environment, and community (Layard, 2005; Hotha, 2008; OECD, 2009). The second are factors that affect happiness at various life stages including during childhood, youth and education, working years, and older age (Diener, 2004; Blanchflower, 2008). Thus a number of drivers of happiness and wellbeing are identified and differ in their influence depending on stage of life and life situation. These inform developing happiness domains and some appropriate measures for assessing them (GfK NOP, 2005).
A second focus of this paper is on the Seattle Area Happiness Initiative in Seattle, Washington. This recent non-governmental program, begun by Sustainable Seattle, is inspired by the earlier effort in Bhutan to replace or augment Gross Domestic Product with measurement and attention to the Gross Domestic Happiness. This case is chosen because it is widely regarded as the first such program in the US, and because the author of this paper has been a participant observer since its beginning in 2011. A description of the procedure used and a critical assessment of the results of this procedure can be of value to other initiatives that similarly seek to address this subject.
Finally this paper addresses urban planning applications of happiness research and the results of the Seattle initiative (Bacon, 2010). The categories of life domains and factors affecting happiness presented earlier provide a framework for identifying how planning interventions can support and enhance the happiness of those inhabiting cities. Accounting for this in designing planning programs and proposals can add to their effectiveness and popular support (Frey, 2011).

----- * -----

Physical activity and healthy lifestyles – evidences about urban environment influence in a Lisbon neighbourhood case study

Emanuel Pereira
Master student of IGOT- Universidade de Lisboa, PORTUGAL

The urban environment can be more important than the characteristics of individuals in the understanding of health issues and lifestyles (Jones & Duncan, 1995; Duncan et al, 1999; Barton & Tsourou; 2000; Santana, 2005; Santana, et al., 2007c in SANTANA, COSTA, SANTOS, Loureiro, 2010). Physical inactivity is referenced in several studies as a major risk factor for chronic diseases not transmissible, and regular physical activity has an important contribution to the improvement of physical health (bones, muscles and joints), social (contacts, social relations, social support and sense of community) and psychological (improving self-esteem, self-image, reduced anxiety, depression and stress, improves sleep quality) and welfare.

The main question that this study want to answer is, how the urban and social environment of the neighborhoods are determinant for physical activity and, consequently, to develop healthy daily practices? The analysis of the physical activity will be achieved by using the analysis of the determinants of physical activity in two parishes of Lisbon municipality (Alvalade and Santa Clara).
According to literature physical activity depends on many risk factors. A first group of risk factors are linked with social environment: individuals with a weak social capital have lower levels of physical activity. Other risk factors for physical activity are the perception of individuals that their neighborhood is unsafe (crime and car traffic). Individuals who have been victim of some kind of crime have distinct perceptions from those hadn`t. Also individuals who do not own dogs and those with a dog. Other factors, like age of people, education levels, income levels, marital status, ethnic status, work insertion in labour market, levels of physical and mental health (disease), influence physical activity and practicing an active mobility.
Another group of risks is related with physical environment: degraded neighborhood aesthetics (garbage, without natural elements, the presence of graffiti and high degradation of the building); low variety of destinations in a short walking distance, low connectivity between streets; car traffic and high-speed traffic, pedestrian facilities.
A third group is related with natural environment: polluted areas, rain periods, fewer hours of sunlight, very low or very high temperatures, high humidity, strong winds, and related to green space the risk factors are the lowest values of density of green spaces, small green spaces, green space without adequate and poorly maintained infrastructure, and the fact that individuals have the perception that the green space is unsafe.
The collection of information related to physical activity was performed by applying a survey that the issues are related to various fields.
The results described below are temporary results, and currently only 33 surveys are analyzed of the 200 surveys which is the goal of this study.
The goals of individuals to practice physical activity are the following: 58% report that it is to feel better, that is to improve the fitness and the health. When we asked what they did 5 years ago, 30% report that currently practice more physical activity, much in order to maintain the physical shape, and because they have more time available. Nevertheless, 24% referred lower practice. In the group, more than 50% have less time available.
Provisional results lead to conclude that physical inactivity values are quite low, and the risk factors are being male, individuals with higher age, married individuals, and active individuals. Nevertheless, much of the physical activity is performed in the neighborhood of their home, especially in outdoor and in green spaces, showing the importance of urban environment, namely availability of green and walkable spaces to physical activity.

----- * -----

A Review of Health Integration into US Metropolitan Long-Range Transportation Plans

Kelly J. Clifton and Patrick Singleton
Portland State University, USA
kclifton@pdx.edu

Background

Because transportation systems and policies have such broad impacts on personal and population-level health, many have argued that health impacts should be considered within transportation planning processes. Transportation influences health primarily and most directly through traffic safety, air quality, physical activity, and accessibility. One way for planning practice to more strongly consider impacts on health is through regional long-range transportation plans (LRTPs) that metropolitan planning organizations (MPOs) must develop every four to five years. These plans identify regional transportation investments over two decades, an appropriate temporal scale for considering health.
Two major components of LTRPs warrant consideration for health considerations: guidance statements and performance measures. Guidance statements are the high-level transportation policy language used to guide the development of a plan, prioritize transportation investments, and assess its success. Performance measures are quantitative or qualitative metrics used to assess plan performance.
This paper assesses how health impacts are considered in transportation planning by focusing on these LRTPs. We analyzed the content of current plans from twenty-five large regions, reviewing how policy guidance statements and supporting performance measures consider health. We focus our efforts on investigating health consideration within specific parts of the long-range transportation plans of large MPOs using the following key questions:
• What is the state of the practice of considering health in MPOs' LRTPs?
• How is health framed in plans' guidance statements?

• How is health represented in plans' performance measures?
• How are health-related statements connected to health-related measures?
• To what extent are physical activity statements and measures related to travel demand forecasting model capabilities for analyzing walking and bicycling?

Data and Methods

We reviewed the LRTPs from twenty-five of the forty-eight largest MPOs. Plans were adopted 2010 to 2015; plan horizon years were 2035, 2040, or 2045. We performed a content analysis using electronic searches for health-related terms. The method was a mix of directed and summative content analyses, in which specific predetermined keywords were used to identify and code passages of interest. Once the guidance statements and performance measures from a plan were identified, they were filtered by their concern for health. The health content analysis was framed around references to health in general and to four primary components of transportation-related health impacts: traffic safety, air quality, physical activity, and accessibility.

Findings

In terms of guidance statements, only fifteen MPOs had plans that specifically referenced "public health" or "human health". All plans included a safety goal or objective. More often, guidance statements emphasized the need to "provide a safe and secure transportation system" for all users or modes. Nineteen plans specifically called out air quality but often fell within a broader "environmental" goal or were framed as an impetus for congestion reduction. Twelve MPOs included policies to increase physical activity, which was more often an objective of the plan, rather than a goal. Most statements noted a need to promote "healthy lifestyles" and "active living". Accessibility was found in all plans but it was often the vaguest and only tangentially-related to health. Accessibility statements were tied up with concepts of mobility, connectivity, and economic development.

Performance measures derived from policy guidance, although measures of health and physical activity were lacking. Only five plans had a direct performance measure of population health: the regional obesity rate, average body mass index, asthma incidence, and number of premature deaths due to fine particulates exposure. MPOs with performance measures typically included safety measures such as totals and/or rates of traffic-related crashes, injuries, and/or fatalities. Twelve of the plans also contained air quality performance measures. Most air quality measures reflected the total weight of criteria pollutants emitted in the region. Only eight plans included physical activity performance measures. While some regions intended to track the obesity rate, most measured the number of active travel trips as a proxy for physical activity. Most plans included accessibility measures. More common accessibility measures fell into two categories: distance-based and time-based. Distance-based measures assessed the proportion of residents or jobs located within a certain distance of a type of transportation facility. In contrast, time-based accessibility measures assessed the proportion of population or employment located within a time threshold of people or jobs.

Implications

This review informs a stronger and more comprehensive consideration of health within the institutionalized structure of US metropolitan transportation planning. Based on our results, we can make some observations about how health is treated within MPO LRTPs. Currently, plans often reflect an incomplete view of how transportation systems influence health. Goals and objectives emphasize safety, air quality, and accessibility more than physical activity.

Planning would benefit from more attention to the development of health-related performance measures and the data and analysis tools needed to support them. Health-related performance measures, while generally tied to guidance statements, are lacking specifically for general health and physical activity. Travel model forecasting capabilities for walking and bicycling do not appear to strongly influence performance measures or guidance statements.

----- * -----

The role of Healthy Cities Project to municipal governance in favor of Sustainable Development

Nuno Marques da Costa; Ana Louro; Eduarda Marques da Costa
Instituto de Geografia e Ordenamento do Território, Universidade de Lisboa, Edifício IGOT, Av. Prof. Gama Pinto, 1649-003, Lisboa, PORTUGAL
nunocosta@campus.ul.pt; analouro@campus.ul.pt eduarda.costa@campus.ul.pt

After Brundtland Report (1987), the concept of Sustainable Development has brought to the debate a wide range of issues in the context of economic, social and environmental spheres. Governance have been added to this approach.

In parallel, the concept of health in public policy has gained new forms, changing from a perspective focused on disease and in the planning and management of health systems, to a holistic and territorialized

perspective, linked to prevention. In addition, emerges the view of environmental health and local government action linked to health determinants, such as education, working conditions, housing, sanitation or agricultural production, among others. Also in this area discussing the role of governance.
It is in this context that fits the concept of Healthy City. This new paradigm of thinking and planning the city, anchored in a holistic perspective of health, is framed by the World Health Organization (WHO), at European level by the European Healthy Cities Network and national levels by the Portuguese Network of Healthy Cities. In this sense, they promoted four criteria at the local level for effective action: promote an explicit political commitment, leadership, institutional change and cross-sectoral partnerships. WHO stresses that this new approach intended to put health on the social and political agenda of cities and strengthen public health in cities through intervention in the various determinants of health.
WHO promotes the autonomy of municipalities in dealing with the implementation and operation of the Project Healthy City. In the implementation phase, each municipality must define the organizational model that best fits the context. For WHO we can consider four models: the creation of a Healthy City Office associated with the Presidency; the integration of Healthy City Office in the health division; the association of the project to other strategic divisions of the municipal entity or other divisions (eg social work, planning, etc.); and a fourth model, in which the project is not anchored in the municipal entity but is leaded to non-governmental entities. In any cases, initiatives to promote healthy city in each municipality reflect community needs and territory, its position in the municipal organizational structure and their skills and network of partnership
In the context of the project FCT CAPES " Local Development and Health Promotion for the Building Healthy Cities ", a cooperation between the IGOT-University of Lisbon-Portugal and the IG-Federal University of Uberlândia- Brazil, the Portuguese team analyzed these topics in Portuguese municalities if the Portuguese Network of Healthy Municipalities.
This paper aims to understand the implementation of Healthy City Project in Portugal, considering its integration in the governance structure of the municipalities listed in the National Network of Healthy Cities. In this regard, three specific objectives will be developed considering the Metropolitan Area of Lisbon: 1) Identify how Healthy City Project is integrated in the organization of municipal authorities of the Lisbon Metropolitan Area; 2) Examine the main domains/sectors and their projects associated with the Project Healthy City; and 3) Understand who the network formalized partnerships for implementation of the Healthy City Project. These specific objectives reinforce the understanding of the governance structure and the projects implementation to improve quality of life of population in the municipalities of Lisbon Metropolitan Area.
This paper is organized into four parts. The first corresponds to the analysis of the guidelines from WHO and European and Portuguese networks for the implementation and operation of the Project Healthy City. In the second part aims to systematize implementation options Project Healthy City in the municipal structure of municipalities adhered to the Portuguese Network of Healthy Municipalities, identifying, first, the application of various strategies. The third part will focus in detail the strategies of five case studies of the Metropolitan Area of Lisbon - Amadora, Loures, Odivelas, Oeiras and Seixal, in dealing with project implementation option in organic municipality, work areas and networks streamlined partnerships, to improve quality of life of population. The fourth and final part is intended to end reflections.

----- * -----

Session T1.3 | June 2 | 11:00 – 12:30

Egypt Cities: Towards Fulfilling the Social Needs of People

Amro Khaled Ahmed Abdelalim and Omnia Awni
amr_5aled_35@yahoo.com

The needs of people are always changing all over hundreds of years. Studies show that people tend to settle in cities because they know that cities offer more services and diversity in satisfying different needs. Tracking people's needs to accurately define them is important so as to build successful and livable cities. This paper tracks the needs of people from the ancient ages to nowadays. Cities have to fulfill the needs to remain sustainable and offer its people a continuously happy life. Cities, as an expression, has always been an attracting one. People have always been looking to cities as the most newly developed worlds. People living in new cities are always looked tracked on how they eat, drink, and walk, how they do the daily-done activities in the their way. In the book of "Cities and Urban Life" by John J. Macionis and Vincent N. Parrillo, the authors say, " To study the city, therefore is to study ourselves" [1] . This means that cities are mostly formed and built up by the way its people act and react, in another meaning how they live and that cities turn out to be the reflection of us.

----- * -----

A theory of Spatial Justice, between society and planners

Ana Póvoas
EPFL, BELGIUM
anampovoas@gmail.com

In this paper I will argue that a portrait of how citizens conceive of urban space as just or unjust can be operationalised as a theoretical toolkit in urban planning and urbanism. In particular I will present some of my doctoral interview-based research on how space and justice are intersected in the representations and experiences of ordinary inhabitants, in Porto Metropolitan Area.

We can frame this work within the topic of spatial justice, an emergent theory that intersects the social dimensions of justice and space with the political aim of transforming space towards increments of justice. An extensive part of the current debate on Spatial Justice is polarised by the Neomarxist unconditional defence of the spatial needs and desires of the underprivileged (Harvey, [1973] 2009; Soja, 2010) and the realistic approaches informed by planning experience, hesitant between technocratic contents or democratic procedures (Fainstein S. S., 2010). With Jacques Lévy, I have explored another entry-point, anchored in five theoretical choices. 1) A pan-social theory of space where the latter is consubstantial with an economic, sociological, political, historical, and individual planes, all of which reflect the unavoidable challenges of our living together (Lévy, 1994). 2) The approach of realistic constructivism (Lussault, 2013) postulating the constructed quality of space and justice as a social facts. 3) The paradigm of actors (Lussault, 2013), establishing the discourses of citizens as points of access to the study of social facts. 4) The dialogic relationship of spatiality/space and the imbrication of individual inhabiting and collective habitat, spatial liberties and societal goods (Lévy, 2008). 5) The selection, among justice theories, of those within a liberal solidaristic perspective (Parijs, 1991) as they conciliate a high individual freedom with the capacity to improve justice through a political project.

To cover significant variation of the points of view of the city under study, the metropolitan area was defined functionally on the basis of commuting movements. The cartography of population density and real estate's cost of land identified zones with contrasting degrees of urbanity. The study of the distribution of socio-economic variables (educational capital, professional groups), identified dominant and exceptional profiles in each zone. I constructed a sample of 48 interviewees in this manner. To each interviewee I asked to identify where from he felt an inhabitant and to explore the problems and injustices of that place. The corpus thus resulted was a very heterogeneous one. In successive movements of qualitative and quantitative explorations I tried to keep an epistemic attitude of "reconstructive ethics" (Ferry, 1996). In this work I have related the discursive material of the inhabitants to elements of "théories savants" of each of the disciplines of justice and space. In particular, I have resorted to the theoretical openings of Amartya Sen (Sen, 2010). Open and pluralistic, Sen's theory removes all justice values (equality of outcome, procedural equality, well-being freedom, agency-freedom and aggregative capability) from a lexicographic order, enabling the reconstruction of a basis of reasonableness for all justice contents.

The findings of this process observe that, in the society or Metropolitan Porto, there is not a universal concept of spatial justice but four grand-groups of conceptions. The conclusions will shed light on the regularities between the attributes of space and the values of justice mobilised in the unjust denunciations of each grand-group, and on the variation of arguments for the same topic (social housing) across the corpus. The congruence of the discourse of a single interview across different topics and scales will also be noted. On these grounds, a tentative explicative model accounting for the formation of the diversity of points of views can be advanced. It relates these views to the explanation of injustice offered by the interviewees, embodying a reality model that reflects the individual relationship with space and with society. I hypothesize that the production of such model includes the circulation of ethical predispositions in society but also individual spatial experience. This model can explain why individuals in economic and spatial disadvantage are also likely to voice claims incompatible with public goods, a horizon of equality or city inclusiveness of all. I propose the concept of ethical capital to complement the interrelatedness of individual capitals (social, cultural, economic, etc.) (Bourdieu, 1980) in the accessing the legitimate production of space. This understanding points towards the inseparability of ideal and material spheres of space in urban policy towards increased justice.

Which type of theory can then be generated in response to these concerns and observations? I will argue that such theory is necessarily consequentialist, deliberative and prospective. It assembles justice values of the diversity of points of view of the society at stake; and some explanation of the systemic functioning producing the desired realisations. Inspired in Habermas (Habermas, [1996] 1998) and Sen (Sen, 2010), a deliberative and prospective stance postulates that individuals produce the rankings of legitimacy necessary

to political action, but does not imply value-relativism of the participants in public debate (including of planners, urbanists and social scientists).
We have seen that spatial justice values and their links to the pleasurable inhabiting of cities are social constructions. If we postulate their continuous evolution, we can open the debate to new forms of urbanism that can accurately sense the developments of society's self-determination. The definition of the urban political spaces bringing legitimacy to such endeavour is an unavoidable question.

Bibliography :
Bourdieu, P. (1980). Le capital social. Actes de la recherche en sciences sociales (pp. 2-3). Paris: Le Seuil .
Elias, N. ([1987] 2004). Les transformation de l'équilibre "Nous-Je". Dans N. Elias, La société des individus (pp. 207-301). Paris: Pocket.
Fainstein, S. S. (2010). The Just City. New York: Cornell University Press.
Fainstein, S., & Campbell, S. ([2002] 2012). Readings in Planning Theory. Malden (USA), Oxford (UK), West Sussex (UK): Wiley-Blackwell.
Ferry, J.-M. (1996). L'Éthique reconstructive. Paris: Les Éditions du Cerf.
Habermas, J. ([1996] 1998). "Reasonable" versus "True". Or the Morality of Worldviews. Dans J. Habermas, The inclusion of the other. Studies in Political Theory (pp. 75-104). Oxford: Blackwell Publishers.
Harvey, D. ([1973] 2009). Social Justice and the City. Athens and London: University of Georgia Press.
Lévy, J. (1994). L'Espace Légitime. Sur la dimension géographique de la fonction politique. Paris: Presses de la Fondation Nationale des Sciences Politiques.
Lévy, J. (2008). Echelles de l'habiter. Lyon: PUCA-Plan urbanisme construction architecture.
J. Lévy, & M. Lussault, Dictionnaire de la géographie et de l'espace des sociétés. Paris: Belin.
Parijs, P. v. (1991). Qu'est-ce qu'une société juste ? Introduction à la pratique de la philosophie politique. Paris: Seuil.
Sen, A. (2010). The Idea of Justice. London: Penguin Books.
Soja, E. (2010). Seeking Spatial Justice. Minneapolis, London: University of Minnesota Press.

----- * -----

Life in public spaces of neighborhoods, a case study of Misurata city, Libya

Ibrahim Abaid, Tang Yue
University of Nottingham, UNITED KINGDOM
laxia5@nottingham.ac.uk

1. Introduction/Background

Public spaces in the neighbourhoods of the city are one of the major indicators of the urban quality and the residents' satisfaction. In Libya, the government has adopted redevelopment scheme of providing new homes to the local residents, to build thousands of new housing units around the country in last 15 years. It is undeniable that houses are an insisting need for families and individuals in many developing countries (Carmona et al., 2003). For instance, in Libya, the government has set a new policy to provide housing units by building new neighbourhoods which defined in this study as a Governmental Neighbourhoods (GN). They claim that this new strategy aims to fill the shortage of houses within as short time as possible. Therefore, a phenomenon of mixed users' communities has started to emerge for the first time in the country. This situation is probably similar to many developing countries around the world which become in a concern of the involved firms in these countries (Iveson, 2011). This research investigates the value of the public space in these communities from a social perspective, through deep qualitative discussion to conclude a suitable framework that may contribute to the urban development of the city, hence, to the other cities of the country.
In this research, public space is defined as space used and shared by all the people who live in the neighbourhoods of the city regardless to their age, gender, status and cultural backgrounds. The forms of public spaces in the neighbourhoods such as parks, squares, gardens, children playgrounds and green spaces (Madanipour et al., 2014). These types of public spaces play a significant role in the urban development and quality of life (Das, 2008). This research investigates the social satisfaction of people within the public space of their community. Hence, there will be an examination of the quality and effectiveness of the public space within the neighbourhoods such as range of facilities, supportable activities, strong feeling of integration between the residents (Cattell et al., 2008). In particular, this research focuses on open public space "outdoor space" in neighbourhoods regarding the case study in Misurata city-Libya, with taking on account the advantages of climate conditions in this region as it is warm and comfortable during almost all of the year.

2. Aims/Methodology

As the main aim of this research is to examine the satisfaction of the public space's users through measuring the social value and level of interaction, the research includes a case study to draw a clear picture of the existing situation and contributes establishing a framework for future studies. Hence, it has been suggested by many scholars and professionals that the appropriate research approach in such study is the mixed approaches method which combined with quantitative and qualitative case study (Yin, 2013). The research compares the results of the questionnaires that were distributed to an adequate sample of the neighbourhoods' population, and in-depth interviews with three categories including a) residents b) decision makers c) professionals. Additionally, site observation was used to focus on the residents' activities in the public space which might be difficult to collect by the former tools. Data analysed using SPSS to find out the significant correlations of that main themes of the study, and Nvivo was also used to analyse the in-depth interviews which suggested several important findings. The case study includes two sites 1) 9th July (GN) 2) Almegawba Traditional neighbourhoods (TN) in the city of Misurata, Libya.

Survey questionnaires were distributed to the two sites, the data obtained as following: Almegawba neighbourhood 78 participants and 9th July neighbourhood 75 participants. The questionnaires include number of open-ended, closed and multi-choice questions. Sample selection was obtained using a snowball technique. Participants joined to take part of the research through an invitation from other residents and so on. The next step was the interview conduction for further in-depth information. In-depth interviews conducted to provide a further understanding of the existing situation as well as to gain clearer features about the quality of the public space of the case study. Moreover, to collect appropriate evidence that clarifies the research issue and contributes to solving the research matter and creating a coherent framework to be used in the future policies. A total of 15 interviews conducted during the field work as following: Decision makers 4, Professionals 4, Residents of Governmental Neighbourhoods (GN) 4, and Residents of Traditional Neighbourhoods (TN) 3. All the details about the time and place of interviews are stored and kept in a safe place.

3. Findings/practical implications

Findings show that almost all of the participants stated that public space plays an essential role to strengthen the relationships between the residents of the neighbourhood. The results also show that residents in traditional neighbourhoods feel more attached to their community, socially satisfied and comfortable while this perception was lower in the governmental neighbourhoods. Findings also highlighted that when public space of the neighbourhoods a well-prepared and provided with an appropriate range of physical settings that will influence positively on the social satisfaction of the residents. Research also found out that relationship between the residents of the neighbourhood plays an essential part to improve and promote the social satisfaction of the residents which lead to high-quality communities. Hence, it contributes effectively to the development of the urban quality in the entire parts of the city.

Finally, Public space should support and increase the interaction and level of social coherence in the neighbourhood, otherwise, the opposite will happen. The communities which are integrated and strong in relationships are making a good act to the public space and they are caring and developing it to be useful and active (Gehl and Svarre, 2013). Therefore, building successful neighbourhoods which support and fulfil the social needs of the people are fundamentally essential. This is probably the key to creating the following issues such as safety, sustainability, environmental community. It is new future tasks to find out how these communities can be all linked together, and to create schemes that can improve the relationship between the communities of the city as a general entire community.

References:

CARMONA, M., CARMONA, S. & GALLENT, N. 2003. Delivering new homes: Processes, planners and providers, Psychology Press.

CATTELL, V., DINES, N., GESLER, W. & CURTIS, S. 2008. Mingling, observing, and lingering: Everyday public spaces and their implications for well-being and social relations. Health & place, 14, 544-561.

DAS, D. 2008. Urban quality of life: A case study of Guwahati. Social Indicators Research, 88, 297-310.

GEHL, J. & SVARRE, B. 2013. How to study public life, Island Press.

IVESON, K. 2011. Publics and the City, John Wiley & Sons.

MADANIPOUR, A., KNIERBEIN, S. & DEGROS, A. 2014. Public space and the challenges of urban transformation in Europe / edited by Ali Madanipour, Sabine Knierbein, Aglaee Degros, Routledge.

YIN, R. K. 2013. Case study research: Design and methods, Sage publications.

----- * -----

Health Status Quantitative Analysis – The Case of LMA

Pedro Franco; Tiago Raimundo
Instituto de Geografia e Ordenamento do Território, Universidade de Lisboa, Edifício IGOT, Av. Prof. Gama Pinto, 1649-003, Lisboa, PORTUGAL
pedrofranco@campus.ul.pt
tiago.raimundo@campus.ul.pt

The health status shown by an individual is dependent on a number of factors called health determinants. The quantification of these determinants that influence the health status of populations is fundamental nowadays, it is the only way to comprehend, by their relationships and interrelationships, how these influence the health of a given population, making it possible to understand the causes to the noted health status. The Modelo de Avaliação do Estado de Saúde da População (MAESP) – adapted from O Estado de Saúde dos Portugueses - Uma Perspectiva Espacial (SANTANA, VAZ e FACHADA, 2004) –, consists in a quantitative measurement model and presents itself as an important tool when it comes to the measurement of these factors and the consequent assessment of the health status of populations, making it possible to compare the health status of the population between different periods, in this particular case between 2001 and 2011. The object of this study is the resident population of the eighteen municipalities contained in the Lisbon Metropolitan Area, nine of them located in Grande Lisboa and the other nine located in Península de Setúbal. In the period in question the values obtained in MAESP, overall, are reduced, particularly in Grande Lisboa and it is in the Península de Setúbal where the only improvements in MAESP are observed. The evaluation performed with MAESP allows to extrapolate reasons for the observed situation, namely the decision-making process and certain political options on health or even the age factor as highly relevant and preponderant reasons.

----- * -----

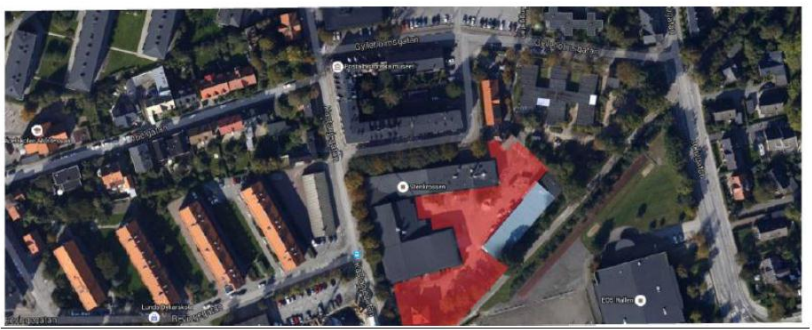
Session T1.4 | June 2 | 16:00 – 17:30

Planning for urban food production.Learnings from a case study in Lund, Sweden

Alexandru Seltea
Lund University, School of Architecture, SWEDEN
alexseltea@gmail.com

This article discusses the outcome of an urban agriculture project in which the author was involved as urban designer and architect, between february and november 2014 in Lund, Sweden. Interweaving the conclusions made on-site with increasing academic research* discussing urban planning for food production, this article will make a case for changing the cultural framework concerning food production.

Timeline of activities in pictures. February-November 2014



The site of the urban farm close to city centre. Lund, Sweden

Vi Odlar! which translates to *Let's Garden!* is an urban-agriculture project promoted by Lund municipality within the 200 square meters courtyard of Stenkrossen, a former school located close to city centre. The site is part of a large-scale redevelopment project. Since the land is state-owned, LKF state-owned real estate company is in charge of developing the project and follow its intermediary phases. Municipality and the housing developer invited the nonprofit organisation ABC, a local organisation specialized in grassroots activities, to use the space for a year-long urban garden. Vi Odlar! was registered as an event for Lunds urban festival scheduled in November 2014 and on that occassion it has been aclaimed as a success, highly beneficial for the development of the area and a success in terms of community involvement. Stenkrossen, the abandoned school, is now a culture house and the courtyard farming has been approved to continue for its third successive year. The housing plan moves on despite the acknowledgments and construction is scheduled to start in 2017, a common case of strategical urban development under crisis, in which stakeholders are forced to halt big development schemes due to financial issues and offer the space temporarily for creative activities. ABC elaborated a plan for year-long activities within a pedagogical frame centred on seasonality. Students from Lund University were initiators and core participants involved in the project. While the project did not attract spontaneous participation from the neighbourhood it was a pedagogic success offering guided tours of the garden and lectures and constituted the base for study circles on the topic of farming and healthy living.

Some observations

My interest in the project went beyond the direct participation in building wooden infrastructure for growing plants. I was mostly interested in observing the neighbourhood participation, which was limited, and evaluate the outcome of the project from a planning perspective. My interaction with the municipality was random since my involvement in the project was steered by the nonprofit organisation ABC; contrary to my belief the project was not supposed to constitute a pilot-experiment for changing food networks nor will it have any sort of outcome in terms of urban governance and it was bound to remain quintessentially a recreational activity for young and old and as such administrated by the Department of Culture and Education.

Outcome and conclusions

In these recent years Stenkrossen which was once an abandoned site awaiting demolition, developed into a collective venue bringing under the same roof several creative individuals and small groups of artists. The process was neither spontaneous nor collaborative but involves the continuous scrutinizing work of a group of municipal workers with offices located within the venue hence it is a ‘’participative’’ agency structured under a continuous top-down process. Its functions will soon move to a centrally located venue and the abandoned site follows the prospected planning scheme of becoming a high-end housing unit. It is by now a given fact that community involvement in urban design and planning is beneficial for improving
the quality of living environments and overall wellbeing of inhabitants. Municipalities strive for it, central administrations promote it but in a top-down framework such as the Swedish case is participation that state actors aim or just the public validation of already decided strategies?

Lund municipality makes a strong point in presenting itself as a pioneer when it comes to urban environmental policies but fails short in acknowledging that urban-agriculture has the potential to bring changes in food networks, trigger societal change towards food consumption.

Planning for urban food production

In October 2015 World Health Organization released the report suggesting that based on sufficient evidence it proclaims processed meat as a source causing cancer. Despite balanced choice of words such a report was bound to stir controversy and so it did. Fat or sugar? Meat or plant-based diet? Organic or not? In recent years debates over diet and health-related issues tend to stir passions and almost irreconciliable controversies. The act of eating remains a most intimate human behavior and offering diet advices is not an easy task but an undeniable fact is that our consuming choices can make a difference. Food is anthropologically a palimpsest of cultural beliefs but we rationally and literally are what we eat. Most of us tend to perpetrate a set of cultural knowledge while ignoring scientific proof, which in the case of food production relates the activity to increased environmental hazard (one statistic among all: meat production is the first source for greenhouse gas emissions) and several threats to human health. During the last decades food evolved from being an intimate social behavior connecting humans and environment to a service provided by an industry, which in most cases makes indiscriminate use of land and resources while producing your own food, the so-called agriculture of subsistence became to be considered a sign of economical scarcity in many cities of the developed world. This article will argue for the need to transition towards sustainable food systems by abandoning such a cultural belief and in doing so reconnecting urban dwellers with the environment.

*The main academic reference for this article is the concept of Continuous Productive Urban Landscapes.

1. i j en n r n r Viljoen, Katrin Bohn, and J. Howe. Continuous Productive Urban Landscapes: Designing Urban Agriculture for Sustainable Cities. Amsterdam: Elsevier/Architectural, 2005. Print.
2. hn atrin an n r i j en ec n ature r an gricu ture esigning roductive Cities. Abingdon, Oxon: Routledge, Taylor & Francis Group, 2014. Print.

----- * -----

Quality of Life Benefits of Urban Trails: Analysis of the Atlanta BeltLine

Catherine Ross [(1)]; Alex Karner [(1)]; Peter Hylton [(1)]; Elliot Sperling [(1)]; Subhrajit Guhathakurta [(2)]
[(1)] Center for Quality Growth and Regional Development, School of City and Regional Planning
Georgia Institute of Technology, Atlanta, GA 30308, USA
[(2)] Center for Geographic Information Systems, School of City and Regional Planning
Georgia Institute of Technology, Atlanta, GA 30308, USA
catherine.ross@coa.gatech.edu; alex.karner@coa.gatech.edu; peter.hylton@gatech.edu;
esperling@gatech.edu; subhro.guha@coa.gatech.edu

The Atlanta BeltLine converts a 35-kilometer of freight railway encircling the Central Business District (CBD) into a transit and trail loop, surrounded by parks, residential, and commercial development. This ambitious redevelopment, once realized, will transform Atlanta into a city connected by transit, trails, and green space with significant health consequences. The Atlanta BeltLine project is one of the largest redevelopment projects currently underway in the United States representing a new vision for the city of Atlanta and the Atlanta region.

The BeltLine connects previously distant city neighbors and encompasses the gamut of socioeconomic characteristics. It transforms previous industrial use to active public space. Many post-industrial cities have abandoned rail infrastructure. These infrastructures and spaces offer cities opportunities to improve their attractiveness and livability benefiting everyone. When we start a new development project, are we building a healthy place? How do we understand the health and quality of life impacts of development? More importantly, what benefits accrue and how do they benefit different income groups and neighborhoods? There is mounting evidence to support the assumption that poorer people have poorer health because they live in places that are unhealthy, although the relationship is complex (Baum & Palmer, 2002). The environment where one lives, works, and goes to school and the social and economic factors, policies, and services that shape the environment—affect an individual's ability to be healthy.

This paper examines the Atlanta BeltLine Eastside Trail, which provides a propitious setting to study quality of life changes among users and the equity impacts of implementation. Started in 2005, approximately 31% of the BeltLine is completed. The study examines characteristics of trail use, vulnerable populations, land-use changes, socioeconomic characteristics, travel patterns, spatial location and ethnicity, and the impact of new transport modes to measure quality of life benefits and equity associated with the conversion to active space. The objective of the research is to measure the impact of the Atlanta BeltLine Eastside Trail on the physical activity, mental health, behavior, and characteristics of the population located along and immediately adjacent to this section of the Atlanta BeltLine.

The study combines analysis of quantitative socio-economic data and survey data to compare and understand implementation and project impact. Access equity provides a frame within which to understand livability benefits observed before and after completion of the trail. This study builds on an earlier study of the health benefits of the Eastside Trail conducted in 2011. The 2011 analysis of the health benefits serves as a baseline to compare trail impacts post construction.

This is a unique opportunity to conduct a pre and post-construction evaluation. We provide a mid-course analysis of BeltLine progress and identify lessons that apply to analogous projects elsewhere. The 2011 assessment surveyed current residents, BeltLine users, and others regarding their access to urban amenities. The current research analysis will document accessibility benefits and physical activity increases among trail users and compare these with the 2011 findings. Indications suggest individuals on the trail have a higher physical activity level than the surrounding vulnerable population that is poorly informed and unaware of trail activities, programs, etc. Commuting destinations and access to services are disparate across incomes and geographies.

Now is an appropriate time to take the pulse of the BeltLine in light of its original goals. The current study raises questions about managing implementation of a project intended to benefit all and examines the extent to which it follows through on that promise.

----- * -----

Dense subdivisions between urban renewal and incompletion (case study for subdivision in Setif, Algeria)

Dhia Eddine Zakaria Lacheheb [(1)]; Amor Ballout [(2)]; Said Madani [(3)]
[(1)] PhD student in Architecture, Research group PUVIT (University of Farhat Abbas, Setif), ALGERIA.
Mail: zakaria.lacheheb@gmail.com
[(2)] PhD student in Architecture, Research group PUVIT, ALGERIA
[(3)] Doctor in architecture, Director of the Research group PUVIT, ALGERIA

1. Introduction

The sustainable urban development aims to the preservation of the planet resources as a common duty, it is commonly asserted that the control of the urban sprawl by the promotion of a more compact and dense city returns us to the rationalization of land consumption as a non renewable resource, for the ecological, economic positive effect in terms of public costs of investment, functioning and social cost.

Today, the existing urban fabrics and frameworks are opportunities to be seized, and the modes of urban development management have to evolve profoundly by anticipation and reconsideration, to make a good use of the existing urban frameworks, towards a densification favorable to the raising of the urban quality through an ideal urban density on the scale of the individual housing estate.

The subdivision as an individual housing estate was adopted as an alternative development model to the collective housing to emerge as a quality model where the density plays an important role, but the image of eternal construction site inflicted to our cities explains the renewed interest for the application of the regulatory framework and the completion of the observed limited operations without global coherence, summed up in our case to a ground cut in plots of land, sold then built independently without being finished. This observation support the relevance of the essential question of the improvement of the outside aspect bound to the appearance which can be revealed as a so important factor for a better use and a better acceptance of its housing environment.

The urban renewal is supposed to make transfer existing urban frameworks to support a new dynamism in a district in lose speed, with operations of a global coherence in an optimal organization, without forgetting the main importance of the deadlines of construction and the finalization of the works, which should generate new evolutions of economic development and development of solidarity.

We studied two residential subdivisions, the private subdivision Sellam and the subdivision El Imane with a common situation, and different land surface, density and cutting, being occupied by various social classes, with different needs and different household average size, to demonstrate the impact of the completion of urban renewal actions through the impact of the completion degree on the subdivision dwellings, roads system and urban public utilities on the density or the densification and therefore on the urban quality.

2. Methods

The approach of this work is based on the typo morphological analysis to reveal the differences in the degrees of completions of the subdivision's built environment and on the investigation, by a household's survey, to demonstrate importance of the degree of completion and to reveal the conditions of qualitative densification favorable and convenient to a better subdivision's appropriation and perceived quality.

3. Results and Discussion

…, however the higher educational level in the 1st subdivision as well as the predominance of a liberal socio professional category that cares about its social status reflection equipped with the necessary financial resources of their houses and constructions completion and consequently cares about the global image of the subdivision. (Table 1: Summary of some indicators of perceived quality)

Subdivision/ indicators	Subdivision 1 Sellam	Subdivision 2 El Imane
Seniority in the subdivision (years)	10	7
Educational level of the inhabitants	68 % universitarians	49 % universitarians
Functions	80 % Liberal	80% Public funcion
Monthly income	91% <50000	82 % <50000
Pluri familial dwelling	6%	46%
Fences	98%	6%
Non residential activities	8%	40%
External transformations	12%	18%
Vegetation	12%	6%
Lots number	111	110
(Size) Surface subdivision (m ²)	63810	23020,25

Average surface of the lot (m²)	492, 33	220,05
Density (lots/hectare)	22	48
Degree of completion%	96%	68%
Degree of conformity %	88%	82%
Intimacy %	66%	54%
Security %	72%	78%
Perceived quality %	92%	79%

4. Conclusions

The degree of completion and the aesthetic sustainability are determining factor for the quality of the building, the choice of the various apparent elements, as well outside as inside, as well as their durability, have a significant impact on the appearance of the building and the whole subdivision. However the perception of urban quality and residential satisfaction are specific to each context and groups of people, which constitutes a unit experiment that we should not in any case generalize. Just like it is impossible for us to generalize the components of urban quality. Only the identification of the priorities for a given situation would be possible.

References:

BOUTABA, H., (2001). Le lotissement légal entre la procédure officielle et la procédure parallèle, cas de la ville de Msila, thèse de magister.

CHALINE, C. (2001). "La dynamique urbaine", édition PUF, Paris, 1980."Régénération urbaine". Editions PUF Que sais-je, Paris.

DEHAN, P. (1999). "Qualités architecturales et innovation, Ministère De L'Équipement, Des Transports Et Du Logement.

FOUCHIER, V. (1998). Les densités urbaines et le développement durable ED SGVN, Paris.

Thèses:

NGUYEN LAN PHUONG, (2006). Densité et Qualité d'habitation au Vietnam, Le cas du quartier Bui Thi Xuan à Hanoi, Mémoire de maîtrise en science de l'architecture, Université LAVAL Québec, Canada.

LACHEHEB, D.Z. (2012). (Densités et qualités d'habitat individuel, entre dispositif réglementaire et aspect extérieur) mémoire de magistère.

Marc Dumont et Dominique Andrieu, « Qualité urbaine et ville durable à l'épreuve du renouvellement urbain. L'exemple du Grand Projet de Ville Malakoff Pré Gauchet à Nantes » Norois [En ligne], 198 | 2006/1, mis en ligne le 13 décembre 2008

----- * -----

Peri-urban landscapes in metropolitan areas: exploring contents of place identity

Isabel Loupa Ramos [(1)]; Fátima Bernardo [(2)]; Rosa Coelho [(3)]

[(1)] CESUR/CERIS – Instituto Superior Técnico– Universidade de Lisboa, PORTUGAL

isabel.ramos@tecnico.ulisboa.pt

[(2)] Universidade de Évora, Departamento de Psicologia; and CESUR/CERIS – Instituto Superior Técnico – Universidade de Lisboa, PORTUGAL

fatimab@uevora.pt

[(3)] Rosa Coelho <rosacoelho82@gmail.com>

Peri-urban areas encompass of the urban and rural world and they are located somewhere in-between the urban core and the rural landscape. In metropolitan areas the peri-urban space has traditionally been approached as homogenous. Nevertheless, it is believed that there is a unique character to each peri-urban area depending on context and evolution. To explore this uniqueness we draw on the concept of place identity to get insights into what physical and social characteristics ("contents") of the peri-urban areas matter to local population and thereby set the basis for their collective identity. When a person identifies with a place, this is accompanied with a self-stereotype that includes values and norms associated with this category, and the behaviour is consistent with the contents of the category (e.g., Brown, 2000). In the same way, when an observer identifies a place with a specific identity, this identity is based on the meaningful contents that are used to make the place unique, i.e., distinct from other places. The process of identifying uses elements that are perceptually salient and elements that facilitate the process of a positive distinctiveness from other places. This means that place qualities influence people's relationship through social practices and, simultaneously, those features are used as symbols of the identity of the community (Loupa-Ramos, Bernardo, Ribeiro & Eetvelde, in press).

In this sense identity to the place reveals as a determinant variable in the increase use and protection of space, as well as, the promotion of social interaction. Thus, the a strong place identity can contribute in a pivotal way to improve the quality of life of the population.
From the analysis of the literature, a questionnaire was constructed which was applied to a group of 422 subjects. This study identified eight categories of identity contents to the place, organized around four major dimensions. Besides allowing the construction of an instrument to identify the content of place identity, the data were explored according to the intensity of identity, place size, and sociodemographic variables. A second study was conducted to evaluate the instrument's ability to distinguish the contents of place identity in different places. This was applied in 2 different parishes in the metropolitan area of Lisbon, with different physical, environmental, demographic, and economic characteristics.
The results show that the way the contents were mobilized to characterize the place identity is influenced by the place characteristics (e.g., place size, architecture, presence of nature), and by socio-demographic factors (e.g., age, birthplace). The results also show the instrument's ability to distinguish the elements used in each context to characterize the identity to the place.

Loupa-Ramos, I. L.; Bernardo, F. ; Ribeiro, S.C. & Eetvelde, V.V. (in press). Landscape Identity: implications for policy making. Land Use Policy.

----- * -----

Track 02

GREEN AND SUSTAINABILITY: *towards effective cities*

Chair: José Manuel Simões, Universidade de Lisboa, Portugal

Scientific Committee: Chris Zuidema, University of Groningen, Netherlands
Cristina Castel Branco, Universidade de Lisboa, Portugal
Nicole Gurran, The University of Sidney, Australia
Peter B. Meyer, The E.P. Systems Group, USA

The sustainability paradigm has inspired the emergence of new urbanism movements and the renovation of old ones, where we can find “smart-cities”, smart growth, Eco cities, eco-neighbors, green urbanism; all integrated in a general movement of sustainable development.

These movements share some common principles, namely minimizing traffic delays generated by private auto use, promoting mixed uses and providing close-by services, recovering the neighborhood unit concepts to the present context of mobility and household’s demands. These movements are studied in systemic approaches that rationalize water and energy consumption and minimize CO2 emissions. In this context, urban policies have been gradually integrative, joining objectives to promote a compact urban form with a sustainable settlement and human occupation.

In this track we invite you to discuss these movements terms, but especially as applied, to different contexts (European, North America, South America, China and other), highlighting specific program designs in different urban and environmental policy contexts.

Urban Heat island Map Making based on Mobile Communication Network Stations

Hansaem Kim; Seunghyun Jung; Hyomin Kim
Korea Institute of Civil Engineering and Building Technology(KICT), SOUTH KOREA
tree@kict.re.kr

Due to Climate Changes, has been increased interest about the weather information and planning techniques. In South Korea, the need to make Urban Climate Map has also been increasing to cope with urban disasters occurred due to climate changes. Measurements and collection of weather information are crucial to make Urban Heat Island (UHM) and should be provided in advance.
This study proposed how to make UHM by utilizing meteorological measurement equipment based on mobile communication stations.
First, examples of development of UHM in other nations have been investigated in relation to making UHM. Technical considerations such as measurement factors, resolution, and spatio-temporal scopes that were included in climate maps utilized in making UHM were analyzed.
Next, urban heat island occurred due to urbanization and temperature increase caused by climate changes were analyzed as a case study in relation to Seoul, Korea thereby making climate maps in relation to the urban heat island. The map was named as urban heat island map which utilized information collected by installing meteorological measurement equipment at communication stations installed at many places in the city with the advancement of information and communication technology.
UHM development methodology proposed in this study can solve the problems such as gaps between measured regions and information collection period by utilizing communication stations for measurement and collection of weather information. For the future study, the present study should be advanced to be used for division of urban climate regions and planning guidelines in order to improve utilization of the climate maps produced in this study.

----- * -----

Integrating climate change risk into local government planning and decision-making: barriers and strategies

Hartmut Fünfgeld; Alianne Macarthur; Sophie Turner; Fiona Silke; Sarah Robertson
Centre for Urban Research, School of Global, Urban and Social Studies, RMIT University, AUSTRALIA
hartmut.fuenfgeld@rmit.edu.au

In many countries, climate change adaptation is entering the mainstream of local government planning and decision-making. While much experimenting is still occurring with regard to how local adaptation is best done, there is broad agreement among scholars and practitioners alike that climate change adaptation needs to become fully embedded in an organisation: for adaptation to be effective and strategic, it cannot be tackled as project-based activities carried out by environment or sustainability departments alone. Rather, climate change impacts and risks need to be interpreted within local socio-economic and institutional context ('framing'), tied to existing policy agendas and decision-making processes ('mainstreaming'), and considered across departmental boundaries and organisational hierarchies of power and responsibility ('embedding').
Many adaptation policy frameworks highlight the need for such systematic and deep integration, with some recommending high-level measures to facilitate such change. However, not many empirical studies exist that analyse the actions that organisations pursue in their effort to integrate adaptation. There also is not much empirical evidence assessing the success of specific actions. Despite key barriers to policy integration and their solutions being known, many organisations still struggle to make progress with embedding adaptation across divisions, departments or operational units.
This paper discusses the current state of knowledge on policy integration of climate change adaptation, with a focus on local government as the tier of government most directly involved in adaptation. A review of the recent academic and grey literature on the topic is juxtaposed with empirical evidence from eight local governments in south-eastern Australia – places of high exposure to climate change impacts, such as heatwaves, sea-level rise and flooding, where high institutional adaptive capacity can be assumed. The research shows that progress with integrating climate change adaptation is largely driven by organisational experiments, charismatic leadership, and the sharing of experiences among local government networks. While climate risk management is becoming a conceptual guiding framework and often acts as methodological entry point and catalyst, the reality of day-to-day adaptation planning and decision-making practice clearly is much more complex and diverse than risk management frameworks suggest. The paper both draws on and contributes to the rapidly growing body of knowledge on urban and regional climate

adaptation planning, policy development and implementation, adding to our understanding of the role of institutions in human responses to climate change."

----- * -----

Climate Change, Economic Decline and Terrorism: External Shocks to Urban Sustainability

Melissa Julie Saunders; Peter B. Meyer
The Energy and Environment Project
The E.P. Systems Group, Inc.
228 Riverwoods Drive
New Hope, PA 18938, USA
Bluebird1058@gmail.com; pbmeyer@louisville.edu

Unexpected economic disruptions from a globalized production and trade system, damage to private property and public infrastructure and threats to life and limb from unprecedented weather patterns, and terrorism intended to kill and destroy are all external shocks to urban systems. They differ in cause and immediate effects, but share disruptive impacts and threaten the viability of local environments and socioeconomic processes over time. They thus pose a problem for sustainability planning.

The current popular description of appropriate responses stresses 'resilience' – literally the ability to bounce back from a disruption. But bouncing back does not necessarily involve any change, and some change may be positive and necessary. The appropriate response to a terrorist act may be 'we will not let it change us; we will be resilient and go back to our normal lives.' But a similar response to a major storm and seaside property losses, 'we will be resilient and rebuild in place, only higher' may be maladaptive.

In fact, the resistance to real needed change in the second case, an instance of what is commonly referred to as 'adaptive resilience,' is masked by the language. Rebuilding higher, on stilts or by earth moving, is a form of change; it is an adaptive response, not simply a resilient return to a prior condition. As such, the adaptation should be examined to determine whether or not it is constructive or even adequate. That assessment – which in the case of building higher in response to sea level rise and storms is likely to find the change inadequate – may never take place because the possibility that major changes – relocating buildings – may be the needed response – is not considered. .

This paper will begin with discussion of the linguistic trap posed by the use of 'resilience' to describe all the immediate responses to shocks to urban systems. We will then distinguish resilience from adaptation to reduce the impacts of shocks and mitigation intended to reduce the likelihood of such events. Adaptation and mitigation are both forms of real change in reaction to the experience of disruption and anticipation of future shocks, not merely bouncing back.

After clarifying the language that distinguishes different responses, we will then look at actual responses to the experience of three distinct types of shocks to urban systems and discuss their real impacts on prospects for sustainability:

1. Climate change and resource depletion, including trends in sea rise and changing water supplies and temperature ranges as well as specific storm events.
2. Globalization and technological change, including the long term trend effects of the former and possible shocks at points in time from the latter.
3. Terrorism, experienced first as shocks, but affecting systems as trends in terrorist activities and threats become recognized.

Examples will be drawn from different countries and time periods, relying on media and academic descriptions. They will include weather events, business relocations, trade negotiations, and both domestic and international terrorism.

The responses will be considered in terms of the extent to which the changes (or simple resilience) constitute constructive evolutionary responses, whether they are inadequate shifts, or whether they comprise maladaptive responses, leading to further decline in the urban fabric and weakening sustainability. We will conclude with some recommendations about how urban planning for sustainability can better inform responses to recognized trends and to anticipated and unexpected shocks.

----- * -----

Session T2.2 | June 1 | 14:00 – 15:30

Solar Potential in Urban Open Space

Catarina Rodrigo [(1)], Jorge Rocha [(1)], Killian Lobato [(2)] and José António Tenedório [(3)]
[(1)] CEG, IGOT – Universidade de Lisboa, PORTUGAL

[2] Faculdade de Ciências, Universidade de Lisboa, PORTUGAL
[3] CICS.NOVA, FCSH/UNL, PORTUGAL
crodrigo@campus.ul.pt; jorge.rocha@campus.ul.pt; killian@campus.ul.pt; ja.tenedorio@fcsh.unl.pt

Energy has an essential role in our daily lives, such micro level (e.g. personal) or macro (e.g. economy countries). The last decades have been labeled with the increase in the power consumption largely due to the continuous urban growth. This increase of power consumption gives rise negative impacts on the environment, leading to a search for alternative energy solutions aimed to achieve a balance between economic viability and energy supply especially in urban areas, solar energy arises as the answer.
In order to insure the implementation of solar energy in urban environment its necessary know the characteristics and the geographical distribution of the more suitable locations for solar systems integration. In this context, the aim of this investigation is create a solar model that characterize, quantify and estimate the solar potential of intra-urban space. The integration of solar models in Geographic Information Systems (GIS), are a powerful tool in the solar modeling theme. Solar Analyst was the mathematical model chosen and the Solar Radiation Area was the method applied.
This methodology was implemented in four areas of Lisbon (Alta de Lisboa, Baixa, Madre Deus and Parque das Nações), chosen for their different urban morphologies. The outputs obtained from an optimization of parameters models sets such as resolution sky model (defined by 4000x4000 Sky Size) and 360 directions, applied to 21st December and only include direct solar radiation values. Based on the optimized set of parameters, for each area we have obtained different direct solar radiation maximum values. The highest value was for the Alta de Lisboa with 616.24 Wh/m2, second was Madre Deus with 608.65 Wh/m2, third was Baixa with 610.37 Wh/m2 and the lowest value was for Parque das Nações with 603.31 Wh/m2.
These differences are not due so much to general factors such as latitude or the proportion of radiation transmitted through the atmosphere, but to the urban context, especially the radiation angle of incidence and radiation obstruction due to street orientation, building height, and the relation between them. Comparing obstructed areas, Alta de Lisboa has the highest percentage of non-blocked sky with 70% contrasting with the 6% in Baixa; Madre Deus and Parque das Nações have values of approximately 45%. So how to explain that Baixa has the higher blocked area but still higher radiation values than the Madre Deus? The answer lies in the fact that most areas that are exposed to South receive the most amount of energy throughout the year. The higher amount of exposed areas in the South quadrant, the orientation of the streets and their orthogonal shape explains the differences. However, the classification of areas of increased shading (90% of the area available) and without shading (0%) shows that Alta de Lisboa is the area presents largest area without shading with 89% followed by the Parque das Nações with 73%, the Madre Deus with 53% and Baixa with 50%. So Alta de Lisboa is the area with the greatest potential for the installation of solar energy technology.

----- * -----

Designing for the Energy Transition; bridging Spatial and Institutional Design

Christian Zuidema; Katharina Gugerell
University of Groningen, NETHERLANDS
c.zuidema@rug.nl
k.gugerell@rug.nl

The transition towards a more sustainable energy system has vast spatial consequences. These consequences are already becoming visible in the gradual transformation of landscapes worldwide as is visible in the increased number of wind farms, solar panels, energy crops etc. Fueled by requiring much space and often being highly visible, sustainable energy generation can easily trigger societal resistance and controversies. As a result, spatial planning is now being called upon to investigate how sustainable energy solutions might be better integrated within the physical and social fabric of our urban and rural landscapes. In this paper we will argue that this call needs the interaction between spatial and institutional design and explain how these two can mutually strengthen each other.
Over the last century, planners functioned within a context of a fossil fuel based energy system where the energy is largely invisible and availability of energy is taken for granted. Consequently, spatial planners are unaccustomed to address the integration of (sustainable) energy systems within the physical and social-economic landscape. Such integration requires not only novel spatial designing. Also, it urges for institutional innovation to facilitate such a physical integration, create societal support or stimulate social entrepreneurship and engagement.
Linking spatial and institutional design, however, is less evident as it might seem. Although closely related up until the 1970s, the world of urban designers, landscape designers and architects has become increasingly

separated from the world of spatial planners. It is a point well-illustrated by Judith Innes, who suggested that 'planning is institutional design' (1995: 140). Accelerated by the communicative turn of the 1990s, planning debates have indeed become preoccupied with the process of planning and its associated institutional reality. Also in practice this seems evident, as illustrated by the Dutch context where design activities have been outsourced by the government (Rijksbouwmeester, 2006). With the Netherlands as a good example, the natural linkage between spatial and institutional design seems to have increasingly eroded.
We investigate whether innovation in spatial and institutional design might be enhanced by uniting them in a co-created setting. We draw from existing studies showing that effectiveness of spatial designs can increase when designs are the co-creations of public and private stakeholders representative of the wider community (e.g. Condon, 2008; Nassauer & Opdam, 2008; Salewski 2013, Van Dijk 2011). Furthermore, we also draw from existing studies suggesting that spatial concepts, images and scenarios also have a potential to identifying opportunities to alter and (re)create institutional formats and arrangements (e.g. De Boer & Zuidema 2015, Van Duinen, 2004, Visser & Zuidema 2007).
Our investigation addresses notions of co-creation with a focus on a sub-regional and local level. We specifically target the sharing and creation of knowledge, ideas and institutional capacity to improve the integration of sustainable energy solutions within the physical and social fabric of our urban and rural landscapes. In considering this search for integration to currently remain a pioneering activity; our main interest is in relatively basic innovation in knowledge, ideas and institutional capacity. Most notably, these are the development of an improved and shared understanding of the problem conditions and possible solutions, the institutional barriers for pursuing possible solutions and the creation of new institutional linkages and collaborations following the sessions. In doing so, we aim to test our hypothesis that working in a co-created session allows spatial design to help planners' understanding of the problem conditions and even become a tool for institutional innovation.
Our empirical work is based on two distinct cases where a process of co-creation of public and private stakeholders' representative of the wider community has taken place. The first is a workshop we co-hosted within the realm of the ISOCARP atelier in the Province of Groningen (the Netherlands), with a focus on developing a perspective for the future of the region in the face of a desire to become energy neutral in 2040. The second is a series of workshops conducted in the city of Emmen (the Netherlands), where energy needs were linked to a wider sustainability agenda. In both cases we draw from the results of the workshops, our notes made during our involvement in the sessions, a series of interviews with organizers and participants and surveys to participants. It will result not only in more clarity upon the relevance of linking spatial and institutional design for pursing a transition to a sustainable energy system. Also, it will provide some critical and constructive insights into why spatial and institutional innovations in co-created settings are not self-evident.

----- * -----

Understanding the relation between cities and energy: an approach on modelling urban form and energy performance in Lisbon, Portugal

J. Fumega [(1)]; S. Niza [(2)] and P. Ferrão [(2)]
[(1)] CEG – Centre for Geographical Studies, IGOT, University of Lisbon / IN+ Research Centre, IST, University of Lisbon, PORTUGAL
[(2)] IN+ Research Centre, Instituto Superior Técnico (IST), University of Lisbon, PORTUGAL

Summary
An urban-energy analysis is proposed to assess the impact of the urban form on the energy performance of 5 urban typologies, in the city of Lisbon (Portugal). Urban form metrics were calculated to characterize Lisbon´s urban form through four dimensions – complexity, heterogeneity, compaction, density – throughout 25 urban typologies, being 5 selected through a clustering technique. The energy analysis was applied to the 5 case studies. Two approaches were made: 1) that analyzed the solar radiation impact on urban form; and other that 2) analyzed the embodied energy in the materials used in the buildings, and also the necessary energy to run them through the operational energy metric. Preliminary results point out that if we maintain the other variables that contribute to energy performance constant, and we solely factor urban form when comparing different typologies, there is indeed a contribution of urban form for the energy performance of typologies. When comparing the 5 typologies some preliminary results are addressed: the larger the average size of buildings the lower the passive energy volume ratio; typologies which presented low values of compaction present higher values of envelope radiation and vice-versa; a high heterogeneity of the urban form contributes negatively to daylight availability, as well as cases where extreme levels of compaction are registered; and as the complexity of urban form increases so it increases the total embodied and operational energy.

Abstract
Urban areas are major contributors to the World´s energy consumption. According to OECD (2009:35) cities use over 2/3 of the world´s energy production even though they only account for around 50% of the world´s population. Ferrão and Fernandez (2013:139-140) indicate that "[…] urban form is a key element in the determination of prospects for urban sustainability", however "morphological approaches to quantify energy consumptions and GHG emissions for the building sector remain rare" (Salat, 2012:522). It is therefore the objective of this research to contribute to a greater knowledge on the links between urban form the energy that urban areas require to being built, and to function.
One very interesting approach is the one developed by Ratti et al. (2005) to Toulouse, London and Berlin, that lies on a factoring of four fundamental scales that contribute to the improvement of urban energy efficiency – urban context (form); buildings; systems and occupants (fig.1). Default values where assigned to all variables of this model, with the exception of those related to urban geometry. Results indicate that parts of buildings that are within 6m of a façade present almost 50% reductions in energy consumption compared with non-passive ones; energy consumption increases when the surface-to-volume ratio decreases and vice-versa; a 10% difference is shown between the annual (m2) energy consumption in Toulouse and Berlin only taking into account the effects of urban form (Ratti et al. 2005:772-773). Salat (2009) built on the research developed by Ratti et al. (2005). He analyzed the existing residential building stock of Paris, France, through the comparison of some metrics of the city´s urban fabric with the thermal energy consumption of buildings. Results point out that modernist parts of Paris are less energy-efficient compared with traditional urban fabric, while the CO2 emissions depend not only on the quantity of energy consumption, but on the type of energy used. The modernist large-scale apartment blocks of the 1960´s use 6x more energy for heating and emit 9x more CO2(m2/year than the contemporary courtyards.

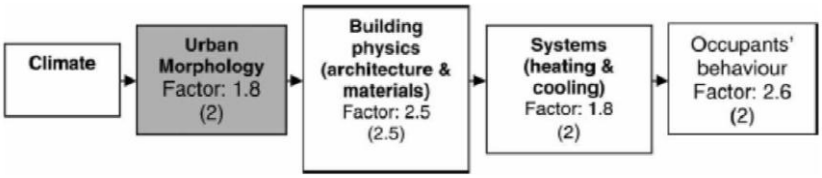


Fig.1: Individual factors affecting the energy usage of Paris as calculated by the Centre Scientifique et Technique du Batiment (CSTB). In parentheses those calculated by Ratti et al. (2005) Source: Salat (2009:599)

In what regards the LSE (2014) study 25 urban typologies from 4 different cities were analyzed regarding urban morphology and heat energy consumption. It was concluded that building density, average built height and surface-to-volume ratio were found to have a significant correlation with heat energy demand indicators (LSE, 2014:86). Also according to LSE (2014:86) "detached housing was the worst performing morphology type with regards to heat energy demand […] Conversely, the compact urban block was seen to perform best in Paris, London and Berlin".

Methodology

The urban energy analysis seeks to develop and expand the methodological approach of Ratti et al. (2004), Salat (2009), Salat (2012) and LSE (2014). It builds on an urban form metrics analysis for the city of Lisbon (Portugal) that allowed the characterization of 25 urban typologies, and correlation and cluster analysis, that identified 5 groups of typologies: complex urban areas, elongated urban areas, heterogeneous urban areas, urban block and modern urban areas. One case from each cluster was selected as a case study: Alfama, Penha de França, Olivais Sul, Anjos, and Telheiras. The urban energy analysis therefore had the objective of quantifying, while maintaining the other variables that contribute to energy performance constant, what was the impact of urban form on the energy performances of the different case studies. The urban energy analysis focuses on two approaches: 1) a solar radiation approach, that had the objective of understanding the impact of solar radiation on different urban forms but also to relate these findings with energy consumption; and 2) an embodied and operational energy approach, that had the objective of understanding how much energy was used in the materials that compose the buildings of each typology (in a 50 year cycle), and also to quantify what was the necessary energy to run the buildings operation (total energy, cooling, heating, lighting, and equipment energy) during 1 year. In what regards the solar radiation approach, ArcGIS was used to assess the passive volume ratio metric, Rhino 5 and the Urban Daylight plugin (Dogan, Reinhart and Michalatos, 2012) was used to calculate Continuous Daylight Autonomy (CDA), Daylit Area (DA) and Envelope Radiation (ER) metrics. Has for the embodied and operational energy approach, simulations were made through the Rhino 5 Urban Modelling Interface tool .

Results

In what regards passive volume ratio 4 of the 5 typologies presented very high passive volume ratios, which is translated in an increased necessity for cooling energy. This is due to the high complexity and relatively medium to small footprint areas of the buildings that were analyzed. In what regards envelope radiation, it is

strongly influenced by the compaction of the urban form. Typologies which presented low values of compaction – in buildings density, coverage ratio and average near neighbor – present higher values of envelope radiation and vice-versa. Heterogeneity also plays an important role, since it was observed that as typologies are more homogeneous between them in what regards buildings size, so the envelope radiation is lower; on the contrary, typologies which present a high heterogeneity between buildings forms, tend to present higher values of envelope radiation. In what regards daylight availability, the typologies that presented the highest values of envelope radiation, were two (Olivais Sul and Telheiras) of the three typologies who presented the lowest values of daylight availability. This factor indicates that: the highest share of the envelope radiation received is concentrated in certain buildings (the largest and tallest), and therefore is not distributed in a uniform way; in these cases the total radiation received does not contribute actively to the daylight sufficiency of the buildings due to the buildings geometry. The low daylight autonomy in the third case (Alfama), is explained not by the buildings characteristics, but by their relation with each other, since the very high compaction rate observed is contributing to a strong shading effect. On the other hand, the high values of daylight autonomy were observed in very homogenous typologies (Anjos and Penha de França), with medium levels of compaction and density of buildings.
Regarding embodied energy, it was observed in the 5 case studies, that typologies with complex urban forms tend to have a higher embodied energy and vice-versa. Nonlinear forms are therefore less efficient in what regards the necessary materials for their construction. As for the operational energy, the same tendency was registered.

References

- Dogan, Reinhart and Michalatos, 2012, Automated Conversion Of Architectural Massing Models Into Thermal 'Shoebox' Models, Proceedings of BS2013:13th Conference of International Building Performance Simulation Association, Chambéry, France, August 26-28
- Ferrão and Fernandez, 2013, Sustainable Urban Metabolism, Massachussetts Institute of Technology, Boston
- Ratti, C, Baker, N, & Steemers, K, 2005, Energy consumption and urban texture, Energy and buildings, vol. 37(7), pp. 762-776.
- Salat, S, 2009, Energy loads, CO2 emissions and building stocks: morphologies, typologies, energy systems and behaviour, Building Research & Information, vol. 37(5-6), pp. 598-609.
- LSE, 2014, Cities and Energy. Urban Morphology and Heat Energy Demand – final report, LSE Cities and EIFER, The London School of Economics and Political Science
- Salat, S, 2012, Building energy models and assessment systems at the district and city scales: a review, Building Research & Information, vol. 40, pp. 518-526
- OECD, 2009, World Energy Outlook 2009, International Energy Agency, France

----- * -----

Scaling-up of energy conservation initiatives: barriers and local strategies

Mendel Giezen; Didi van Doren; Hens Runhaar; Peter Driessen
University of Amsterdam, NETHERLANDS
m.giezen@uva.nl

Energy conservation in residential and commercial buildings is considered a key challenge and opportunity for low-carbon development. Energy conservation initiatives have been realized by pioneers, who demonstrate the social, financial, and environmental benefits that energy conservation can generate. However, in order to
accomplish international goals pertaining to climate mitigation, these initiatives need to go to scale and reach a greater and broader audience. To accelerate the scaling-up of such initiatives, an in-depth understanding of barriers hampering this process and local strategies that can be applied to address these barriers is required. While
scholars and practitioners underline the importance of local solutions to the global problem of climate change, little is known about strategies that can be applied at the local level to overcome barriers. This paper has three general findings that can make a valuable contribution to theory and practice on local climate governance. First, it sketches the context-specificity of barriers to scaling-up EIs and reflects on
similarities and differences in barriers to energy conservation in residential and commercial building stocks in two European cities: Utrecht and Valencia. Second, this paper presents several local strategies that can be applied to overcome barriers, thereby improving our understanding of the relation between barriers and solutions.

Finally, the findings of the paper suggest that while many barriers have national or international origins, the local environment appears to be a promising scale to address barriers.

----- * -----

Session T2.3 | June 1 | 14:00 – 15:30

Towards socio-ecological cities: Green public spaces by Guerrilla Gardening

Burcu Ateş
Middle East Technical University, Faculty of Architecture, Department of Architecture, TURKEY
ba.burcuates@gmail.com

The rise of industrial capitalism in 19th century brought pressures of mechanisation, privatisation and urbanisation, which triggered the fall of public life. Therefore, under such pressures, notion of public and, accordingly, perception over concept of publicness and public spaces have changed. As successive processes started with sprawl of industrial capitalism to fall of public life/space, an analogue set of processes had realised also for nature, which was again triggered by capitalist dominancy. As capitalist system achieved its success by producing spaces for its own ideology and using space as a sort of apparatus to spread its power, besides, it manipulates nature by means of transforming it in a way that it merely remains as a green background or a beautiful vista. Along with these processes over space and nature, both of them have been commodified through being reduced into a physical entity, where merely technocrats are capable of producing it. However, against technocratic and fragmented approaches on production of space and nature, alternative theories and practices spring up which adopt relational and unitary approaches towards production of public spaces. Inspired from those alternative theories and practices, the concept of 'spatial impromptu' is suggested within scope of this research. This concept is basically a manifestation towards initiating possibility of social, political, cultural and ecological production of public spaces within flow of everyday life, where inhabitants are thought to be proactive throughout the whole process. Along with this aim, the study analyses practice of guerrilla gardening as a spatial impromptu of green urbanism where green public spaces are re-produced through appropriation, re-definition and reclamation by inhabitants. As a focus on green urbanism, the practice of guerrilla gardening is tackled through referring Murray Bookchin's concept of social ecology which can inspire green placemaking within cities. Therefore, by conducting in depth analysis on guerrilla gardening, a relational approach is developed to seek multiple relations between gardeners, inhabitants, city, authorities and nature. This relational analysis provides developing final implications of the study, where guerrilla gardening is addressed for appearance of new green public spaces within cities and regeneration of issues on "right to the city" and "town - country dichotomy".

----- * -----

Analysis of Urban Agriculture for Land Use Planning in Almada, PT

Caitlin E. Pohle
CULS and ULISBOA, PORTUGAL
caitlin.pohle@yahoo.com

The aim of this study is to develop and test a methodology for identifying, mapping and evaluating the extent of agricultural land use and forms of urban agriculture (UA) within a set urban boundary. The case study set in Almada, Portugal is part of a larger comparative study which seeks to define and analyze urban and peri-urban agriculture and its impacts. It incorporates semi-automated land use identification techniques with manual techniques using visual indicators in high resolution aerial imagery with ArcGIS to identify and measure agricultural land use including residential gardens, vacant lot gardens, horticultural parks/ allotment gardens, urban/ peri-urban farms, and in some cases rooftop or other "makeshift" gardens. Qualitative interview methods are used to gain a deeper understanding of the impacts and scale of the agriculture. Site visits and personal interviews with stakeholders identify trends in UA typologies, challenges and conflicts with land use, and contribute to the assessment of impacts on the local food chain, community wellness and the local economy. The resulting land use maps can be compared to zoning maps, demographic maps, soil data maps, and other maps containing relevant environmental and social data for the evaluation of impacts on the local environment and community.
The results of the Almada case study reveal over 521 agricultural sites covering 5.2 sq km, or approximately 7.4%, of land in the Almada municipality. Based on Almada municipal zoning, only 25% of the identified agricultural land use lies on land zoned for agriculture, and approximately 50% is on land zoned for

metropolitan equipment and infrastructure. Additionally, conflicts of land tenure were revealed as none of the interviewed farmers had tenure agreements for the land they were using. The municipality confirmed that this is a common occurrence, as property remains vacant during an economic crisis. Documentation and management of this phenomenon is difficult however as there is no land cadastre system. The identification and analysis of agricultural land use; especially in areas such as Almada, is the first step to planning and managing UA for sustainability of cities. Project outputs will increase awareness of UA and provide valuable information which can be used to improve land management practices, assist in municipal planning and influence zoning decisions.

----- * -----

Incorporating New Methods for Planning More Sustainable Cities

Hilda Blanco
University of Southern California, USA
hblanco@usc.edu

Smart cities, smart growth, new urbanism, livable cities, etc. are often focused on prototypes or on achieving a set of indicators or criteria. Urban planning has been discussing and promoting these concepts for several decades now, and some of the concepts have gained traction. For example, Transit-oriented development (TODs) has been incorporated into transit projects in many progressive cities in the US, e.g., Los Angeles. But prototypes are not smart solutions, they often fail to take into account local conditions and are not necessarily grounded in evidence. Attaining sustainable cities will require more than prototypes, it will require institutionalizing processes/methods that will support good decisions. In this paper, I argue that spatial planning needs to incorporate new methods (for spatial planning) to achieve greater sustainability in cities, and illustrate the importance of three methods in planning, life-cycle analysis, vulnerability/resilience analysis, and environmental justice screening. How do we ensure that significant transportation investments are energy efficient and low in GHG emissions, or whether new development is built in such a way to minimize energy and GHG emissions in its materials, construction, operation, and demolition? Life-cycle assessment can take into account environmental and other values in the assessment of alternative urban projects, whether infrastructure or development (Carominas et al. 2013; Cabeza et al. 2015). How do we ensure that urban areas are resilient to disasters due to natural hazards or man-made ones? Vulnerability/resilience assessments of our infrastructures and built environment, and of our neighborhoods are important not merely when facing a credible threat, but at the point of planning and investing in the maintenance of urban environments. Adapting to the inevitable impacts of climate change, especially for coastal cities is a major incentive to conduct this type of analysis (Solecki et al. 2015). How do we ensure that both the built environment and city services are provided in a socially just way? In order to do so, we need data bases and budget instruments that identify areas in a city with disproportionate environmental burdens and vulnerable populations. California's Enviroscreen is an innovative environmental justice screening tool, combined with the funding provided for environmentally burdened communities from the State of California's Cap and Trade program, is an important tool that can be replicated at the urban scale. In conclusion, I argue that the incorporation of these environmental methods, which go beyond the traditional environmental review process, in planning institutional processes will strengthen the profession's standing in local government, and contribute to make urban areas more sustainable.

References:

Cabeza, Luisa F., Lídia Rincón, Virginia Vilariño, Gabriel Pérez, and Albert Castell. “Life Cycle Assessment (LCA) and Life Cycle Energy Analysis (LCEA) of Buildings and the Building Sector: A Review.” Renewable and Sustainable Energy Reviews 29 (2014): 394–416.

California Office of Environmental Health Hazard Assessment. 2014. California Communities Environmental Health Screening Tool, Version 2.0 (CalEnviroScreen 2.0) Guidance and Screening Tool. www.oehha.ca.gov/ej

Corominas, Ll, J. Foley, J. S. Guest, A. Hospido, H. F. Larsen, S. Morera, and A. Shaw. “Life Cycle Assessment Applied to Wastewater Treatment: State of the Art.” Water Research 47, no. 15 (2013): 5480–92.

Solecki, William, Michael Dorsch, and Mark Pelling. “Resistance, Resilience and Transformation in Response to Risk and Hazards in Urban Coastal Settings: A Framework for Scenario and Case Study Analysis1,” 2015. http://www.bel-truc.org/downloads/TRUC-Concept-Paper-new.pdf.

----- * -----

Spontaneous large scale practice, urban pastoralism as an environmental tool for recreating and maintenance of ecological corridors

Roxana Maria Triboi
University of Architecture and Urbanism "Ion Mincu", Bucharest, ROMANIA
roxana.triboi@gmail.com

The pastoralism represents an important cultural legacy of our geographical area, a defining feature of Romanian identity.
The importance of this practice, marginalized all over the world due to harsh conditions and constrains, is to be found in all forms of artistic expression and others like a testimony of our past.
The evolution of urbanization has actually created a favourable context for this practice in the last decade.
Factors like chaotic fragmentation of the periphery, development and urban gaps or waste land, the abandonment of agricultural exploitation of arable land, the demand for dairy and meat products, European Union subventions increased the activity of urban pastoralism (inside but especially outside cities). The phenomenon can be observed also in neighbouring countries in the Balkans.
The ecosystem, social and economical services brought by Urban pastoralism entails an ecosystem, develops social and economic services that are multiple but are not given enough recognition by residents and authorities due to the general negative perception of these practices next to the urban residential areas. There are also other factors that put pressure on this fragile phenomenon.
The proper recognition and management of this socio-economic practice could transform it into a important tool for sustainable urbanism.

Introduction

Pastoralism use to be in the ancient times the most efficient activity and represents a low-impact form of agriculture (PASTORAL 2 2001).Romania has the third largest flock in EU, estimated at 11 million breeding ewes and also 10% of the sheep in the EU (Eurostat 2012). Small-scale farmers own 70% of the sheep flock.
The practice of pastoralism is an ancient tradition well anchored in Romanian national identity. The legend of the origin of Bucharest is based on the settlement of the shepherd named Bucur. Shepherding is a common theme inartistic creation (literature, music, paintings) and today is even used as a marketing tool in publicity for a well known mobile company.

The Local context

A significant phenomenon

Currently, the most important large-scale phenomenon of urban agriculture in Romania is represented by urban pastoralism.
In the last years, due to a combination of factors, pastures developed and prospered mostly in the green pockets of urban peripheries.Currently the practice of pastoralism in and outside of the city exists in an unregulated form and the lack of organization causes the deterioration of landscapes and various other negative effects.

Data and field studies relevance on the subject

In Bucharest the funding requests from APIA (Agency for Payments and Intervention in Agriculture) shows that until 2012 the number of goats and sheep had an upward trend (almost 45 000).
A simple estimation of dairy products based on the numbers mention above leads us to a 1 million euro market of cheese in the capital only.
The economic potential of this form of agriculture near the city is obvious, especially because of the massive sales of lambs before Easter.
I base my data on participant observation and discussion with shepherds around Bucharest urban pastures.
A Google map image of Bucharest's belt driveway in the pastoral seasons allows the observation of this practice in the interstitial spaces between inarticulate residential and service areas. The study of satellite plans permits an easy identification of shelters and path of herds.
Usually, the owners have flocks of a few hundred animals, mostly around 500 heads (the studied cases) that enables them to camp temporary with minimal costs for shelters and annexes. However, this also leads to poor conditions for processing and stocking of animal products.

Negative perception of this practice

The cultural and social impact on urban and local communities is significant. Locals are for example annoyed by the smell and they fear the shepherds' dogs. This attitude is reflected also in the media where most of the articles are ironic regarding fines application, even if the perception of the pastoralism in general is highly positive.
Changing public perception of this particular form of pastoralism is therefore important if we consider the benefits to the ecosystem brought by this activity. That could be done by public events related to pastoralism activities.

Important benefits of urban pastoralism

Because in Romania the management of green public spaces is badly managed by public authorities, the introduction of urban grazing as a regulated practice may allow higher benefits from the urban areas left unused (commercial and industrial complexes on the outskirts, the roadsides, etc.).Even more, the most important possible benefits are related to this spontaneous practice in the peripheral urban areas. Some of them I have listed here:

- Supporting short supply circuits (milk, cheese, meat).
- Ensuring the social dimension of green space.
- Creating animation-related events (mowing, milking).
- Providing a pedagogical function on agriculture and food.
- Articulating unused green lots.
- Developing biodiversity in general.
- Create a mosaic of habitats and preserving a variety of backgrounds.
- Maintaining a diverse flora through restorative management and differentiated.
- Saving forever and rustic species, valuing local breeds.
- Limiting or halting the development of certain invasive species without machines or chemicals;
- Establishing biological corridors.
- Reducing the environmental footprint for management public green spaces by green waste removal, natural fertilization of soils, eliminating the noise generated by mechanical equipment, and probably the most important is the decrease of management costs, especially in difficult accessible places.
- Providing a picturesque landscape.
- Preventing reforestation.

----- * -----

A study of Cultural Landscape Considering Environment and Behavior in Food Production Processes

Takayuki Kumazawa
Ibaraki University, JAPAN
takayuki.kumazawa.1@vc.ibaraki.ac.jp

The present study investigated the natural environment, including factors such as food and landscape, as a case study for dried potato production in Hitachinaka City, Ibaraki, Japan. The specific regional production environment and production behavior involved in agriculture and food production was considered. The production environment included the subsistence history, terrain, climate, soil, and land use. Production behavior included food production processes and agricultural living conditions. In addition, a community-building method based on the natural environment was developed considering these elements to preserve the cultural landscape. To achieve this, agricultural land use was assessed, and a questionnaire was developed to interview farmers and related organizations.

Surveys revealed that the environmental factors considered for suitable production and cultivation conditions included the sea breeze from the Pacific Ocean coast, dry and sunny winter, black soil, drying space for potatoes, and subsistence of sideline and core businesses. From the survey, the important factors for production behavior included the slicing and arranging of potatoes, cultivation of Tamayutaka seeds, seedling cultivation in Satsumashiro, hanging out in sunlight, collaboration between farmers and short-term employers, and steam rising from the workplace on winter mornings. Finally, it is important to clarify the terroir of these foods and the landscape. A community-building method for effective dried potato production was developed based on survey results to include human resource development to relate food production and the landscape, to construct a collaborative platform to share images of food and scenery, to consider a regional coordinator, and to study information transmission techniques.

----- * -----

Session T2.4 | June 1 | 16:00 – 17:30

Expanding the Green/Blue Infrastructure concept: Iskandar Malaysia as a case of study

Agatino Rizzo
Lulea University of Technology, SWEDEN
agatino.rizzo@ltu.se

The study of green and blue spaces found in literature emphasizes the environmental and cultural performances of non-urbanized areas rather than their social attributes. The hypothesis is that green and blue areas are mom-urbanized, wild areas that can be useful to mitigate the impacts that cities/capitalism have/has on the climate (global warming) and people's lifestyle (unhealthy consumerism). Therefore, these areas can be deployed as "infrastructures" to provide functions that can counterbalance the problems caused by urban living.
Our hypothesis, instead, is that green and blue corridors are not uninhabited spaces, solely dominated by nature or, as the reverse, by non-urban activities. Within blue and green corridors a significant portion of semi-urbanized communities live. This is clearer when considering green and blue areas in the global South i.e. developing countries and emerging markets. In these latter, blue and green corridors are in many ways the space of exclusion of communities that have never embedded in mainstream, post-colonial society. As the result of this, rural communities live at the margin of urban societies, stripped by their basic civil rights. Today these communities are under attack by local governments' neo-liberal agendas that aim at commodifying green and blue spaces to serve the agenda of global capital accumulation.
In this paper we aim at problematizing the green and blue infrastructure concept and to bring in the social dimension. In order to do that we will analyze the biogeophysical impacts of a large megaproject in Asia, the Iskandar Malaysia master plan, in the life of an indigenous fishermen community (the Orang Laut). Our argumentations are based on the results of a research project carried out from 2010 at University Technology Malaysia in Johor Bahru. The project aimed at analyzing the impacts of both rapid urbanization and urban political agenda in the Johor-Singapore transnational region (Rizzo & Glasson, 2011 and 2012; Rizzo & Khan, 2013). We deployed the case study research design to carry out qualitative observations, interview both institutional stakeholders and inhabitants, and for document analysis. We have structured this paper as follow: in section two we introduce the regional context while in section three the case study. In section four, we will report on the analysis of our observations while in section five we will discuss their relevance for the critical, re-discussion of green and blue corridors.

----- * -----

A GIS-based analysis to estimate the benefits of urban green roofs

Maria Giannopoulou [(1)]; Konstantinos Lykostratis [(2)]; Anastasia Roukouni [(3)]
[(1)] Associate Professor, Civil Engineering Dpt., Democritus University of Thrace, GREECE, mgian@civil.duth.gr
[(2)] PhD Candidate, Civil Engineering Dpt., Democritus University of Thrace, GREECE, klykostr@civil.duth.gr
[(3)] PhD Candidate, Rural and Surveying Engineering Dpt, Aristotle University of Thessaloniki, GREECE, natrouk@yahoo.gr

Cities have become extremely popular as places for residence and work; more than half of the world's population lives in urban areas. In large urban agglomerations, buildings invade physical space, often aggressively, causing displacement, drainage, pollution and devastation. The loss of free and green spaces and their associated advantages for the urban population, is a major threat for urban sustainability. The urgent need for more urban green space and for improving the energy and environmental performance of buildings under the objective of ameliorating the local microclimate and overall quality of life of urban dwellers, has led to a new tendency worldwide; to create new space on another "higher" level. This had as a result the establishment of another city "above the city", by incorporating the natural aspect to the building itself.
The idea of planting roofs in order for them to act as natural filters within the urban tissue, meets wide acceptance recently, as it has been increasingly recognized as a technology that has the potential to diminish drastically the environmental problems of urban centers. Green roofs have significant environmental, social and economic advantages and are considered able to replace, to a large extent, parks which are missing from modern cities. The total cost involved is not prohibited and the benefits are indisputable. In many countries, special laws are introduced which provides citizens with incentives or even involve an obligation to build green roofs.
This paper is part of a wider research still in progress and refers to an in depth analysis of the potential implementation of green strategies. The research objectives are multiple: it attempts to examine best practices on this topic internationally, recognize the strengths as well as the weaknesses of existing policies and finally investigate and record the impact of the use of green roofs' technology for the development of urban policies which aim at improving the quality of urban environment in Greece, using Geographical Information Systems (GIS) technology. The developed methodological framework is then applied to a real-world case study of a medium – sized Greek city.

GIS can serve as very useful tools in illustrating the available green roofs and mapping their positive environmental impact; they should be an indisputable part of any urban management approach, as they allow combining many different parameters in a dynamic environment. GIS use an interactive environment, contributing to the effective management and visualization of spatial data. The GIS developed herein, focuses on Xanthi, a city of about 55,000 inhabitants (2011), situated in northern Greece. The research area has been built at the beginning of the 20th century as a refugees' residential neighborhood with modest – height buildings. Nevertheless, the reconstruction of the area with the process of consideration, which was the main building mechanism in combination with the failures of the General Regulation on Construction of Buildings (high densities, built – unbuilt space relationship) have led to the almost global domination of multi-storey buildings and in public space shrinkage.

The cartographic representation through the production of thematic maps using GIS technology conducts a first approach of identifying the basic characteristics of the urban environment and achieving a complete overview of it. In order to examine the suitability of buildings and identify potential restrictions, the existing legal/institutional framework was investigated. Next step is to define the suitability characteristics of buildings, excluding the ones where either for security or for structural reasons, the application of the green roof technology was unrealistic (e.g. due to large slope, limited area, architectural value etc.). This is followed by the calculation of the free roof space available for such interventions and by the estimation of the green space that corresponds to every resident, before and after the aforementioned potential green interventions.

The fruitful results of the methodological approach suggested herein are expected to facilitate decision – making and communication between the multiple actors involved in the process, as well as foster social understanding of the green roof concepts, towards the principles of sustainable and smart city development. The use of a comprehensive GIS environment not only contributes to improving the quality of research but also offers the possibility of continuous updated information and monitoring of the factors that influence development of green roof policies. Ideas for further research include the collaboration with specialized software which would facilitate the thorough examination, analysis and correlation of parameters involved, towards the principles of sustainable and smart city development.

----- * -----

Smart Green City: Searching for definition and focusing on Framework Development and Strategies of Putrajaya

Melasutra Md Dali; Yasmin Mohd Adnan; Hasniyati Hassan Md; Nasir Md Daud; Anuar Alias
Department of Urban and Regional Planning, Faculty of Built Environment, University Malaya, MALAYSIA
melasutr@um.edu.my

The world's urban population is expected to double by 2050.5 By 2030, six out of every ten people will live in a city and by 2050 this figure will run to seven out of ten.6 In real terms, the number of urban residents is growing by nearly 60 million people every year. As the planet becomes more urban, cities need to become smarter. Major urbanization requires new and innovative ways to manage the complexity of urban living; it demands new ways to target problems of overcrowding, energy consumption, resource management and environmental protection. It is in this context that Smart Cities emerge not just as an innovative modus operandi for future urban living but as a key strategy to tackle poverty and inequality, unemployment and energy management. Despite the current wave of discussion and debate on the value, function and future of Smart Cities,as a concept it resists easy definition. At its core, the idea of Smart Cities is rooted in the creation and connection of human capital, social capital and information and Communication technology (ICT) infrastructure in order to generate greater and more sustainable economic development and a better quality of life. Smart Cities have been further defined along six axes or dimensions i.e Smart Economy, Smart Mobility, Smart Environment,Smart People, Smart Living and Smart Governance. In the global profile of urban development, the Smart City is emerging as an important basis for future city expansion. Malaysia too is pursuing a Smart Cities strategy as part of its efforts to stimulate economic development and environmental challenges. The current debate over the definition of Smart City 'success' required careful analysis.

The future green, smart and connected development model for Putrajaya identifies an innovative approach to sustainable development making Putrajaya socially and economically vibrant while transforming it into a "low carbon", low resource consuming city – thus making it one of the most livable vibrant urban areas within the greater Kuala Lumpur conurbation with a planned population of 347,000 by 2025 - a step towards the goal of among the top 20 cities of the world by year 2020.

This paper is seeking discussion on the potential for Putrajaya as a smart green city. It discusses Putrajaya as a smart city status by looking at the city's effort towards becoming itself smart. Putrajaya was known as Garden City, then later change to Green City status in 2001, the connotation that create Putrajaya as one of

the different city conceptually from other Malaysian cities. Established in 1995, Putrajaya has been declared as the administrative centre for Malaysia. As a fully planned city, Putrajaya features facilities and infrastructure that are at par with other global cities. Inarguably, the city has become a showcase for the capacity and capability of local city developers. In terms of planning, Putrajaya can be considered the ultimate product of Malaysian town and country planning system. The creation of a new Federal Government Administrative and allow its local planning authority to embark on innovative planning to represent Malaysian values and multi-cultural background. Putrajaya is planned to be equipped with the latest technologies and facilities to allow improvement in the effectiveness of the government's machinery and productivity as well providing amenities that will greatly contribute towards a good quality of urban living and working environment.

Putrajaya as a plan driven city was based on two underlying concepts, the city in the garden and the intelligent city. The adoption of these concepts was applied as a guide its physical development which aimed at a balanced and sustainable development, environmentally, socially, as well as economically. Sustainability concept is clearly evident with the designation of almost 40% of its total city area of 4,931ha specifically for green and open spaces in its master plan.

This analysis was done by adopting Giffinger (2007) model as a framework in examining Putrajaya's Smart environment potentials of the dimensions and effort done by Putrajaya Corporation for its sustainable smart green city of the future. From the vision and policy statements of its current Putrajaya Structure Plan 2025, Smart City-related initiatives were extracted to serve as the benchmark - interpreted as representation of the Vision for Putrajaya as a Smart City. As most current discussion of Smart Cities is framed in terms of the six axes mentioned above, the simplest approach would be to equate success with demonstrated activity across the full range of these dimensions, specifically on the Smart Environment dimension. It is intended to see the potential enhancement and efficiency of the city management in its smart environment effort as a show case of Malaysian Smart Green City exemplary.

----- * -----

From smart cities to wise cities: Ecological wisdom as a new basis for sustainable urban development

Robert Young
University of Texas at Austin, USA
ryoung@utexas.edu

A growing urbanized majority with increasing material and political demands characterize the Age of Cities. This epochal shift is occurring within a context of ecological decline, resource limits, overburdened infrastructure, fiscal inequities, and the disruptions of climate change. As such this global reconfiguration necessitates radically new responses from the field of city and regional planning. Researchers, corporate advocates, and policy makers have proposed Smart Cities as a response to these challenges. They describe Smart Cities as an evolutionary transformation in urban infrastructure and management systems combining proliferating IT systems with the capture and analysis of the real time data they generate to inform and optimize metropolitan planning and management decision-making (Cisco Systems 2015; Hodgkinson 2011; Hitachi, 2015). The Smart Cities approach is generating significant policy and funding support and is projected to represent an infrastructure investment market exceeding $42.72 trillion by 2030 with a compound annual growth rate of 16.6 percent between 2015-2019 (Digital Journal 2015; Smart City Project 2015).

In this paper I present a critical review of Smart Cities and explore ecological wisdom as a potentially alternative path for sustainable urban development. Researchers describe ecological wisdom as a revealed property of good design requiring minimal intervention, input, and maintenance from ecological and social systems (Xiang, 2014). While Smart Cities emphasize the centrality of new, digital technology networks, ecological wisdom draws upon historical social and ecological dynamics, emphasizing place-based, life-centered systems. I this article I critically contrast these two potentially competing visions for the future of city planning.

References

Cisco Systems 2015. Smart and connected communities. Retrieved March 4th, 2015 from http://www.cisco.com/web/strategy/smart_connected_communities.html

Digital Journal, 2015. Global Smart Cities Market to Grow at a CAGR of 16.6% by 2019; Finds New Report. Retrieved March 4th, 2015 from http://www.digitaljournal.com/pr/2481679

Hitachi Corporation 2015. Smart cities case studies. Retrieved March 4th, 2015 from (http://www.hitachi.com/products/smartcity/)

Hodgkinson, S. 2011. Is your city smart enough? Digitally enabled cities and societies will enhance economic, social and environmental sustainability in the urban century. Retrieved March 4, 2015 from http://www.cisco.com/web/strategy/docs/Is_your_city_smart_enough-Ovum_Analyst_Insights.pdf
Smart City Project, 2015. Retrieved March 4th, 2015 from http://www.smartcity-planning.co.jp/en/index.html
Xaing, W. 2014. Doing real and permanent good in landscape and urban planning: Ecological wisdom for urban sustainability. Landscape and Urban Planning, 121: 65-69.

----- * -----

Session T2.5 | June 2 | 9:00 – 10:30

Multimodal accessibility and commuting to campus: the case of the University of Lisbon

David Sousa Vale [(1)], Mauro Pereira and Luis Sanchez Carvalho
CIAUD, Faculty of Architecture, University of Lisbon, PORTUGAL
(1) dvale@fa.ulisboa.pt

There is a vast literature on the relationship between built environment and travel, emphasizing the importance of the built environment as a determinant of travel. In general terms, the determinants of the built environment can be described as the 5Ds, better defined as “3Ds+A”, i.e. Density, Diversity, Design and Accessibility, the last normally identified as Destination Accessibility and Distance to transit. However, the majority of studies focuses on the characteristics of origins (the location of the home) and neglect the influence that the destination might have on travel, despite the already showed importance of destinations to explain travel. Moreover, accessibility is often measured with single mode indicators and does not reflect the real conditions of choice that individuals have to travel between origins and destinations. Therefore, results tend to be inconclusive, in part due to the deficiencies in measuring the built environment and accessibility.
In this paper, we are testing the relationship between multimodal accessibility, determined by the characteristics of the built environment and reflecting the relative conditions of access by several transportation modes, and the commuting pattern of individuals that work and/or study at the different campuses of the University of Lisbon. We have measured accessibility at the origin and at the destination of the trip, i.e. at the residential place and the campus location for each individual. Data was obtained through a travel survey of all students, professors and staff from all faculties of the University, containing around 2000 individuals. Accessibility was measured with ArcGIS network analyst, using floating catchment areas for each relevant location. Logistic regression models were developed in order to explain non-car commuting (all other modes besides the private car or motorcycle), controlling for socio-demographic data. Different models were developed for students and other academic individuals, due to the low car ownership and/or driver’s license ownership of students in comparison with professors and faculty staff.
Our results show that the different built environment characteristics and associated multimodal accessibility of the campuses of the University of Lisbon are important explanatory variables of commuting behavior. With these results, we try to emphasize the importance of measuring not only origins but also destinations as explanatory variables of the built environment, and also to highlight the importance of promoting good urban integration of the campus in the city, increasing its multimodal accessibility which in turn will allow a more sustainable urban mobility.

----- * -----

Urban Fragmentation: relation of the land used and the discontinuation of transport

Diego Fernando Mafla Sanchez
University of Lisbon- Inst. Geography and Spatial Planning, PORTUGAL

Introduction: This study shows the analysis of disorganized growing in the suburbs areas in the city that are in risk because the urban fragmentation of Quito in Ecuador. Methods: Articles review, an analysis of indicators, instruments, and components of sustainable communities in the United Kingdom (House et al 2004); and survey forms about transportation services to the people in the suburbs. Results: There are a few guidelines and land instruments in the suburbs areas which that does not exist a network of public transportation. Discussion: The mobility is considered such, as a way to access another services, even though, in Quito the land used is not connected with the network transportation that affects the development of suburban areas. Conclusions: People who live in suburban areas they take much time to go to their activities and go back to there home; this time is around 120 minutes. Generally, those people are with low economic resources and that affect directly to their life quality.

----- * -----

Smart Mobility for Urban Sustainability

Jacek Malasek
Road and Bridge Research Institute, Warsaw, POLAND
jmalasek@ibdim.edu.pl

Eco-mobility in the cities, traffic automation and coordination of transport & spatial planning polices look to be the crucial elements of the sustainable urban development and CO2 emissions decrease. The biggest challenge of sustainable transport policy in urban areas is to decrease car use in densely populated areas where the highest traffic flows are observed. At present the modal split of transport in Europe is dominated by passenger cars accounting for 73.4% of passenger traffic compared to just 1.4% for tram and metro combined. According to the World Health Organization, some 40 million people in the 115 largest cities in the EU are exposed to air exceeding WHO air quality guideline values for at least one pollutant. Achieving a smart, green and integrated transport system is a key to sustaining and developing economic and social vitality of urban Europe.

Smart Eco-travel Planner and its database can be used for implementing sustainable urban transport policy in more efficient way. The real novelty of my travel planner idea is: it will work on strictly personalized Internet portal, will cover environmental aspects (pollution counting), the participants will be awarded and the business model for cities implementing SEP makes it more economically viable. SEP will provide reliable advising for optimal travel planning, according to: actual traffic conditions, road accidents, road works, public transport problems in operation and air pollution observed - taking into account also personal circumstances. The main financial source for promotion of eco-friendly travel modes could be a transport policy rule: fuel prices can never go down – probably more effective measure than all Climate Summit 2015 results. Only during last 3 years changes in fuel price could result in Poland in gathering ca. 10bn € on the eco-fund for financing e.g. the new metro lines.

Traffic automation and ARTS (Autonomic Road Transport Support Systems as a new generation of ITS with artificial intelligence) - able to be self-healing, self-maintaining, self-adapting and self-optimizing - will allow the full automation of traffic management process, fighting congestion by the ramp-metering and better traffic distribution on the road network. SMART 2020 report found that Information and Communications Technologies (ICT) could safe 15% of global emissions in 2020. An autonomic traffic management system and automatic cars will change the street view: no need for traffic signals, traffic signs and the sign posts. Traffic automation will make vehicle platooning (vehicles densely packed while moving: bumper to bumper and side by side) possible, for better utility of a road space. Road painting will vanish. Narrower carriageway will form better traffic conditions for public transport (additional space for tram tracks or a busway), cyclists and pedestrians – also more space for greenery, coffee gardens, etc. Streets will be more livable.

Coordination of spatial & transport planning policy means: balance in the city core of three capacities: internal road network = external access roads = internal parking lots; parking zones (standards for maximum parking spaces per 1000 sq. m. of offices in the city center and minimum in the outskirts with law density) and a road charging; P+R system close to the PT terminals outside downtown area; bicycle routes network development and well facilitated pedestrian areas. Transportation policy measures should include also: promotion of the car-sharing and Uber-like systems for the more effective car use; new environmental tax on registering a car older than 10 years; decreasing the number of company cars for private use; a license on exchanging an updated smart module free - for making automatic cars more attractive for buyers and better adjusted to the changing Smart City environment. Multifunctional and Intensive Land Use should be promoted to reduce travel needs or to make travel distances smaller (acceptable for walking or cycling). MILU will help also with urban sprawl and, what's not less important, higher density means people are not car dependent.

----- * -----

Interpreting and Predicting Pedestrian Movement in Public Space through Space Syntax Analysis

Monokrousou Klio; Giannopoulou Maria,
PhD Candidate in Democritus University of Thrace, GREECE
kmonokrousou@gmail.com

Background and scope

Improving the quality and standard of living of the urban environments has always been a challenge for urban planners and designers. The modern perception of urban planning is directed towards the promotion and encouragement of pedestrian movement in the urban space.

According to several studies on a large sample of cities different in form, structure, size and culture, the space syntax theory can efficiently interpret and predict densities of pedestrian movement as spatial configuration correlates powerfully with observed movement by pedestrians. In most cases, a proportional relationship is established between space syntax parameters e.g. integration and pedestrian density (Hillier et al 1993; Gospodini, 1988; Peponis et al, 1989; Read, 2005). Thus, for understanding how pedestrian movement is generated in relation to the urban layouts and for predicting this movement in public spaces, the space syntax approach is implemented in the case of the Municipality of Athens.

In particular, this paper attempts to: (a) interpret and predict densities of pedestrian movement though the effective study of configuration characteristics and syntactic properties of urban space; (b) identify inconsistencies and limitation in the prediction of pedestrian movement; (c) propose a methodological framework to overcome these limitations.

The purpose of this analysis is to test a dynamic tool that can be used to formulate a sustainable urban strategy as well as to propose urban solutions and interventions that improve the structure and quality of the urban system.

Methodology

To interpret and predict the densities of pedestrian movement, syntactic analysis is performed as a first approach in the Municipality of Athens, Greece. For the syntactic analysis, axial analysis as well as segment analysis is performed in the open source Depthmap software.

For more accurate simulation of the pedestrian movement, other spatial factors are included in the analysis. As empirical research shows that the spatial distribution of land uses and activities influence the choices of pedestrians and determine their movement patterns, the urban system is simulated as a system of attractors, namely a system of land uses that attract pedestrian movement and neutral zones with reduced pedestrian use.

A further challenge is to quantify the impact of attractors. This can be performed through particular “weight” values according to the significance of each attractor. An explicit way to estimate these values is to obtain data of average visitors per week or per month and create an indicator of proximity to the specific land use. A more generic approach is to develop a formula that approximates, within a specific range, the indicator of proximity to a specific land use category. The first method is then used to validate the second.

Finally, a map of the proximity dimension is produced and incorporated to the integration map of space syntax in order to achieve a better prediction of pedestrian movement and eliminate inconsistencies.

Findings

With regards to interpreting the densities of pedestrian movement in the Municipality of Athens, as a first approach, the high densities characterising the streets can quite sufficiently be interpreted in syntactic terms by the very form of integration core, which strongly covers the whole central area. Nevertheless, there are particular spaces, where the correlation between integration values and pedestrian densities, which have been empirically observed, is not strong. Additional inconsistencies have been observed in the area’s periphery where the integration values are low, although certain streets exhibit very high densities of pedestrian movement. These streets host specific land uses and activities that attract pedestrians, such as major commercial streets, streets and squares hosting popular cafes, bars and restaurants, streets of historical and touristic interest and streets that host popular land uses that attract pedestrians i.e. courts, museums, universities, central bus stations, etc.

To overcome these inconsistences and perform more accurate estimations of pedestrian movement, the impact of the attractors was also included in the analysis. Incorporating the measure of attractors to the syntactic analysis showed more relevant and valid results in comparison with the empirical research.

Next steps

Further research includes field work in terms of observation of pedestrian movement in targeted sample of streets in order to verify the simulation results. Finally, testing the simulations in other areas of study is important to establish the validity of the methodological tool.

References

Hillier, B., Penn, A., Hanson, J., Grajewski, T., Xu, J. (1993). Natural movement; or, configuration and attraction in urban space use, Environment and Planning B: Planning and Design, Vol. 20, 29- 66, Pion, Brondesbury.

Gospodini A. (1988). Type and function in the urban square: a case study of London, PhD thesis, Bartlett School of Architecture and

Peponis J., Hadjinikolaou E., Livieratos C., Fatouros D.A. (1989). The Spatial core of urban culture. Ekistics, n.334-335, 43-55.

Planning, University College London

Read S. (2005). Flat City: space syntax derived urban movement network model, 5th Space Syntax Symposium, Delft

----- * -----

Session T2.6 | June 2 | 11:00 – 12:30

Soccer in Scottsdale, Arizona, Planning Implications of a Sports Facility

Carlos José Lopes Balsas
University at Albany, USA
cbalsas@albany.edu

The popularity of soccer in North America does not compare to the game's fame in the rest of the world yet. However, rapid progress is being made due to the building of sports facilities, media coverage and broadcast, the cheerful and youth appeal of the sport. And more importantly, its simultaneous sense of competition and camaraderie, felt not only among American citizens, but also among recent and newly arrived immigrants. The purpose of this paper is to examine the design, planning, cultural and sociological implications of a relatively new suburban sports facility in Scottsdale, Arizona. This award winning state-of-the art Scottsdale Sports Complex opened in 2007 in the northeast part of the jurisdiction. The location is near a series of open spaces (i.e. TPC Scottsdale and TPC Scottsdale Champions Course PGA Tour), business parks (i.e. WestWorld Pavilion), lifestyle retail developments (i.e. Kierland Commons and Scottsdale Quarter), and the city's airport with stunning mountain views in the background. The clustering of separate sports facilities in the neighborhood augments its identity and convenience for regular and exceptional use. In addition, the sunny and amenable weather patterns of the Sonoran desert make the year round practice of sports a major regional advantage. The research questions are centered on: the location; the reasons for its creation; the frequency of utilization and by whom; the roles played at city, regional and national scales; and the maintenance costs and value-added of the facility to the whole community. The research methods draw upon a panoply of quantitative and qualitative techniques ranging from ethnographic field work and policy evaluation to semi-structured interviews with architects, facility managers, tournament and championship organizers, and members of the Scottsdale Convention and Visitors Bureau and of the Arizona Sports and Entertainment Commission. The expected finding will shed light on a critically understudied area of North-American urbanism and sports culture. The planning implications should be valuable to urbanists, designers, event planners and sports organizers as well as to other scholars interested in the growing expansion of soccer in the United States.

----- * -----

Commuting flow patterns in LMA: Towards an effective contribution to Sustainable Development?

Nuno Marques da Costa; Ana Louro
IGOT – Universidade de Lisboa, PORTUGAL
nunocosta@campus.ul.pt, analouro@campus.ul.pt

In the last decades, transport and mobility are more and more in the center of sustainability discussion related to urban movements as Smart Growth, New Urbanism or Sustainable Communities.
Problems such as the increased consumption of fossil fuels and its burden for consumers, the increasing of GHG gases emissions, the increasing of road accidents, the high land consumption associated with infrastructure and transport services or the degradation of ecosystems are problems that arise when is considered the transport domain in sustainable development. However, problems caused by the lack of transport would be even greater – people and goods necessarily need to move. In this sense, the evidence of direct and indirect impacts of transport in the domains of economy, society and environment is crucial in an integrated analysis towards sustainable development.
These problems are in large part due to urban dynamics of the last decades, as suburbanization and urban sprawl supported by the expansion of transport infrastructure; the new dynamic and life styles reflected in the expansion of the catchment area for housing only possible by car; and the relocation of business and commercial activities from urban centers to periphery areas, requiring car use. These combined trends generated a more complex individual daily movement patterns. Daily movements became not only longer (due to the increasing of transport speed and maintaining the average travel time), but also increased in number (ex. home - school - employment - school - supermarket - home), and that is only be possible by car use, declining the use of non-motorized modes or the use of public transport.
Thus, the main objective of this paper is to link the evolution of commuting flow patterns in Lisbon Metropolitan Area (LMA) and the assumptions of Sustainable Cities and Sustainable Communities, assuming

that commuting should be as short and quicker as possible, bringing close together housing and employment and promoting the use of non-motorized (walking or cycling) and transit modes.
The paper will be divided in 4 parts. Firstly, will be presented a brief theoretical perspective about Sustainable Development, Smart Growth and Sustainable Communities (as urban planning and transportation theories and models), and the role of transport and mobility in these items. Secondly, we will analyze the main trends of the commuting flow patterns since 1981 until 2011 considering all the parishes of Lisbon Metropolitan Area as case studies, namely through a detailed analysis of the evolution of its modal share and travel time. Thirdly, the previous analysis will be related with two other topics as distance to Lisbon center and employment, reflecting the distinct patterns of land use and densities within the metropolitan area. The fourth part will present some final considerations.
In this sense, in the first stage, it is essential to understand the individual patterns of travel. Given the complexity of this issue, the focus will be only on the commuting travel, home - work – home, considering the last four Census from 1981 to 2011. About commuting flow patterns, it is relevant to understand the origins and destinations of individuals (creating the origin-destination matrix and representing it through flow charts), considering too the proportion of active people and students who remain in their residential area or moving to another area of the same municipality or to other municipality. An analysis of transport modes and travel times will be added.
In a second stage, the evolution of commuting flow patterns in LMA will be related with two issues: the distance to Lisbon, the core of LMA, and the location and density of employment. These two points are related with transport in the context of Sustainable Development. The role of Lisbon in the metropolitan context is clear, not only by its residential function but simultaneously by its labor function and facilities concentration.
The centrality of Lisbon is enhanced by road and rail infrastructure that supports the commuting flows between Lisbon and peripheral areas of LMA. The location and density of employment are also relevant for commuting as they represent the destination of labor travel. The relocation of economic activities, as commercial activities to new business areas or services to new technological centers, both outside urban centers, requires longer trips to work increasing distance between the origin and destination. These new spaces are automobile-orientated, benefiting of the proximity to motorway access, new highways and availability of parking space. Moreover, transit system is insipient or almost absent in those areas and answering to that new travel pattern.
Concluding, the commuting flow became more complex, reflecting the residence and employment sprawl and the evolution of road and rail routes in the last decades. Some trends turn out to be contradictory in the transport domain for sustainable development. From 1981 to 2011, average travel time decreased and the proportion of commuting until 30 minutes increased. Despite the predominance of commuting within the municipality of residence, this proportion is reducing. In other hand, there are some extremely unsustainable facts, as the number of commuting trips increased 43% between 1981 and 2011 and the modal split changed from the majority of public transport in 1981 to a supremacy of automobile, while the proportion of pedestrian trips is diminishing (source: Census 1981 - 2011). In this sense, understanding the differences within metropolitan area will contribute to a more refined reading of transport as determinant for sustainable development.

----- * -----

Modeling high-density urban form for resilient system design – A case study of Manhattan and Tokyo

Perry Yang [(1)]; Yoshiki Yamagata [(2)]
[(1)] Eco Urban Lab, College of Architecture, Georgia Institute of Technology, USA
[(2)] Center for Global Environmental Research, National Institute for Environmental Studies, JAPAN

After going through fifteen years over the turn of new century, the idea of imaging the center to represent the city remains strong through the shaping of modern urban skylines around the globe. The patterns of high-density urban development such as downtown urban forms in central cities of New York, Tokyo, Shanghai and London continues to transform, restructure and revitalize over time. The vertical urbanism has been argued to be a necessity of setting urban conditions for issues or emerging problems in the context of climate change, sustainability, aging society and connectivity (Heng, 2013, 2014). Recent natural or human-induced disasters show that the urban form structure of those central cities such as New York and Tokyo can not respond to the shocks and unpredictable changes in resilient ways, evidence include Tōhoku earthquake and tsunami that caused the Fukushima disaster in Japan in 2011 and Hurricane Sandy, which led to major flooding and power losses in New York City in 2012. Contemporary cities and their systems, however, were not originally designed with resiliency in mind. Urban form, street patterns, block structures, buildings and

infrastructural systems are often produced according to organizational principles other than resilience to climate change (Yang and Quan, in print, 2016).
The paper proposes an approach to connecting urban energy modeling and resilient urban system design that is to be defined as a three-dimensional eco urbanism, or 3D Eco-Urbanism, using the test cases of central city districts of Manhattan and Tokyo. It describes the physical form and processes that have established and characterize the vertical urban form of the two central city areas in North American and East Asian social contexts. A performance-based urban energy model is used to examine the potential for energy self-sufficiency of the existing two central city districts using fine-grain high-resolution data of the two cities. The performance based modeling is then connected to urban systems design, a transformative approach to make the city more energy resilient for responding to shocks and impacts. The approach emphasizes a community or district-level complex urban environment as the focal-scale framework for design and policy intervention, which allow coordination among community participants and stakeholders to form consensus and bring in effective action plans and system integration. The framework of urban system design accommodates finer-scale, bottom-up eco-initiatives, which enable agile responses to unpredictable events, such as climate-induced disasters and shocks to high-density urban communities.

References
Heng C K ed., 2013, We are all aging - Vertical Cities Asia: International Design Competition and Symposium. Vol 3.
Heng C K ed., 2014, Everyone Connects - Vertical Cities Asia: International Design Competition and Symposium. Vol 4.
Yang, P P J, Quan, S J, 2016, Urban form and energy resilient strategies: A cast study of the Manhattan grid, in Urban Resilience – A Transformative Approach, Yoshiki Yamagata and Hiroshi Maruyama eds., Springer. (in print)

----- * -----

Planning for High Density – A Contribution Towards Sustainable Urban Areas? Targets, Parameters, Perceptions

Robin Ganser
Spatial Planning
Urban and Rural Development
Nuertingen Geislingen University
Schelmenwasen 4-8; 72622 Nuertingen, GERMANY
t +49 176 66866733
f +49 7022 201166
robin.ganser(at)hfwu.de

The quest for a more sustainable urban form continues in planning practice and research. In this context the most efficient use of the limited resource ‘land’ is now explicitly covered by Directive 2014/52/EU which stresses the need to address the (ecologically) unsustainable increase of settlement areas over time (‘land take’) and recognizes also the economic and social significance of good land management. In doing so, the directive added ‘land’ to the list of factors to be considered in the scope of public and private projects (EIA), which should limit their impact on land. Several positive effects are attributed to high land use densities: avoidance or minimization of specific environmental impacts such as the loss of soils and habitats; high residential densities and the concentration of employment are a presupposition for the viability of high quality public transport systems; as well as for the construction and maintenance of technical respectively grid based infrastructure. In spite of the above, high densities remain a contested issue, fuelled through negative past experiences of ‘town cramming’ where high residential densities led to degradation of the living environment as well as social conflicts leading to a downward spiral of the quality of life. In several European countries higher housing density targets are under discussion with a view to increase densities and scoop the aspired positive effects whilst avoiding the above problems.
This paper explores the use of density in the planning system, focusing on an in depth analysis of the complex linkages between quantitative and qualitative issues. It builds on case study based research in Germany which analysed completed high density projects by means of objective density indicators as well as survey based analysis of subjective perceptions of the local population.
The research results indicate that there are several discrepancies between theoretical assumptions and real effects in planning practice. In this context planning theory will be challenged and new hypotheses and research questions for conceptualizing densities will be proposed.

Further to this the paper aims to highlight problems as well as success factors in order to further the academic debate but also to provide recommendations for planning practice.
Additionally an international comparative perspective is provided by tapping into English and Dutch experiences and research.
Of particular interest are the findings of the analysis which bring together objective indicators and subjective perceptions of densities. Some of these results may remind of an Escher painting – what you see initially appears to be impossible, to trick the human mind (or eye), nonetheless these results are well founded and there are some possible explanations as to why objective and subjective results match up but also contradict each other in a very specific way.

----- * -----

Session T2.7 | June 2 | 16:00 – 17:30

Drivers of Urban Sprawl in Portuguese Medium Cities between 2001 and 2011

João de Abreu e Silva; Marcos Correia
CESUR/CEris, Instituto Superior Técnico, PORTUGAL
jabreu@tecnico.ulisboa.pt

Urban sprawl is a type of urban growth pattern with relevant and complex interactions with travel patterns, since is both a result and a cause of changes in mobility. It is also commonly recognized that sprawling patterns are, in a great part, a result of both infrastructure policies and rising levels of car ownership and use. The present work aims to study sprawl and its drivers using a sample of 65 medium cities in Portugal (excluding the metropolitan areas of Lisbon and Oporto) and disentangle the role of transportation infrastructure investment and mobility patterns on its evolution. To achieve these objectives, we use data from 2 census periods, between 20011 and 2011.
Since sprawl is a multidimensional phenomenon 5 indicators were built to measure it. These where distributed into three different groups related with particular aspects of sprawl, namely: the relation between population density and spatial growth, including the sprawl index developed by Amnon and Askhenazi in 2007; the type of spatial growth to account for fragmentation and dispersion sprawling patterns, like leapfrog sprawl; and irregularity of urban form.
A preliminary analysis using data from the decade of 1991-2001, showed, as expected, that commuting patterns influenced several dimensions of sprawl. Other variables including previous urban evolution, economic growth, property structure and socioeconomic characteristics also contributed to explain sprawling patterns. Based on these previous findings, we model the evolution of these 5 sprawl indicators as a function of commuting indicators, while controlling for socioeconomic and demographic characteristics of the population, geographical and climatic aspects, economic growth and dynamics, municipal policies, accessibility and transport infrastructure provision levels.
The obtained results are discussed, as well as its implications in terms of land use policies

----- * -----

Urban Revitalization: Changing Atlanta's Land Use Intensities

Peter Hylton; Catherine Ross; Elliot Sperling; Alex Karner
Center for Quality Growth and Regional Development
School of City and Regional Planning
Georgia Institute of Technology, Atlanta, GA 30308, USA
peter.hylton@gatech.edu; catherine.ross@coa.gatech.edu; esperling@gatech.edu;
alex.karner@coa.gatech.edu

Throughout the world, changing economies and urban migration trends are resulting in the growing desire of cities to rebuild their economic centers and improve infrastructure systems. Whether it is converting abandoned railroad corridors into multi-use trails or light rail transit systems, or burying interstates and replacing them with public parks, there is an increasing number of urban redevelopment projects breaking ground in cities across the globe (State of the World Cities Report, 2010). The High Line in New York City, the Bethlehem Steel site in Bethlehem, Pennsylvania and the M-30 Orbital Motorway in Madrid are all examples of such reconstruction efforts.
The Atlanta BeltLine is a $2.8 billion redevelopment project currently underway in central Atlanta. It is "the most comprehensive economic development effort ever undertaken in the city and one of the largest, most wide-ranging urban redevelopment projects currently underway in the United States" (Atlanta BeltLine,

2011).The creation of a Tax Allocation District (TAD) allows the BeltLine to finance the redevelopment through the issuance of tax allocation bonds. Begun in 2005, it is approximately 31% complete and is the city's framework for sustainable growth based on an integrated approach to land use, transportation, and greenspace.

The project converts a 22-mile loop of historic railroad corridors encircling the core of the city into a network of public parks, multi-use trails and public transit over the course of the next 20 years. It connects 45 of Atlanta's in-town neighborhoods and 17 of its Neighborhood Planning Units (NPUs) creating approximately 1,300 acres of new green space, improving 700 acres of existing parks, and adding 33 miles of much needed walking and bicycling trails. It is expected to create 30,000 new jobs and attract 50,000 new residents in the central city, including 5,600 workforce housing units (Atlanta Development Authority, 2011).

The wide ranging scope and the city's ambitious objectives have set it apart; there are few other projects that combine transit, trails, parks, economic development, affordable workforce housing, workforce development, community benefits, brownfield redevelopment, public art, and historic preservation in a single plan (Atlanta BeltLine, 2011). As a result, the beltline is changing patterns of land use intensity in the region, leading to higher levels of growth inside the City of Atlanta. This is particularly true of those sections along the constructed parts of the beltline. The urban trail is contributing to a population surge in Atlanta neighborhoods. The rebirth of many areas of the city with new population gains instead of losses is occurring with the development of the Atlanta Beltline, leading to larger than average population growth in these areas compared to the rest of the city. A primary concern is the increase in property values surrounding the beltline and the increase in property taxes affecting many low income residents. The Atlanta Journal Constitution began reporting on increases in property values proximate to the beltline (Immergluck, 2009). Master plans for all subareas of the Beltline were created in 2009 and developed for the year 2035. There is an overlay district with different development requirements than those for the rest of the city. In 2007, master planning began by looking at the half mile around the corridor to create a suitable framework to support future population growth and transit ridership. In 10 distinct subareas, Atlanta BeltLine, Inc., and the City of Atlanta Department of Planning and Community Development developed master plans that address land use, transportation and parks. Neighborhood residents informed and shaped the plans by providing detailed feedback at public meetings and in writing. Subarea by subarea, planners worked with the community until all 10 areas were completed. The Study Group process, where the initial planning happened, was followed by meetings with the affected Neighborhood Planning Units (NPUs) in each subarea, and ultimately City Council approval.

Plans were developed for the year 2035 based on a variety of data, including projections of population and employment growth, economic conditions, travel patterns and behaviors, and existing physical constraints and opportunities. One objective of this research is to compare sustainable economic development in communities within the overlay district with those communities outside of the district. This study combines analysis of quantitative housing, employment data, land use data, travel patterns, retail activity and socio-demographic data to document the Beltline's impact on development in Atlanta. This study will examine accessibility improvements along the corridor as well as the rise in mixed use development projects compared to traditional development patterns in the Atlanta city and region. Comparing before and after growth in the Beltline area to the conventional development will demonstrate how the changes in growth patterns emanating from the Beltline are affecting carbon emission rates, economic activity, construction, bus ridership, cycling, biking, physical activity, housing choice and health impacts (Ross et al., 2012).

We will use data at the census tract level to analyze commuting modal choice through use of the American Community Survey (ACS) for the 5-year survey updates as well as data from the Atlanta Regional Commission (ARC) the Metropolitan Planning Organization for the Atlanta region. Development activity and project data and information is available from the Beltline organization and from Invest Atlanta.

----- * -----

Developing a Framework to Model Resource Recycling Residential Complexes

Seunghyun Jung; Hyeonsoo Kim
Korea Institute of Civil Engineering and Building Technology, SOUTH KOREA
shjung@kict.re.kr

Over recent years much attention has been paid to waste disposal within cities due to a total ban on ocean dumping of waste. As an alternative, much effort has been made to recycle resources from waste in various sectors. Organic waste or food waste generated in cities are constantly discharged from daily life and considered to act as a factor that degrades the comfort of residential environment due to problems of discomfort, bad odor, and poor hygiene during the collection, transport and processing of food waste. In this

regard, South Korea has developed a national research and development project as a policy related to the technology that processes and recycles food waste within cities or residential complexes.
The objective of this study is to propose a framework to develop a model of resource recycling residential complex. The resource recycling residential complex model involves a guideline for the entire process of planning, construction, and operation of residential complex that processes its own waste within the complex without discharging to the outside and utilizes it as a resource. In this study, we conducted the following research to construct a framework for the model.
First, we established the concepts of resource recycling city and residential complex. Although many previous studies have actively addressed the discussion of resource recycling itself, few studies have been conducted to apply this to cities and residential complexes. In this study, the concepts were established on the basis of energy inflow from the outside and waste outflow.
Second, we analyzed a number of case studies of activating resource recycling communities using food waste by focusing on three resource recycling residential complexes designated as the target areas of the demonstration project which is part of the national research and development project. The target residential complexes made compost from food waste generated in the complexes and utilized the compost for their urban agriculture to derive implications for the policies and technologies of resource recycling residential complexes in terms of the activation of residential communities.
Finally, we conducted an analysis of policy measures to implement resource recycling residential complexes and proposed a direction to policy establishment for the reason that resource recycling should be supported by laws and systems in various fields related to waste industry, environmental issues, residential communities and construction standards.
The analysis of the resource recycling residential complexes in this study was limited to urban agriculture and food waste. For the future study, all types of waste generated in cities are to be set as resource recycling targets expanding its applications to energy source utilization other than urban agriculture to ultimately develop a model for implementing a resource recycling city.

----- * -----

Session T2.8 | June 3 | 9:00 – 10:30

Urban quality threw Thermal Comfort Conditions in an Urban Space.“The Square of Independence, Sétif, Algeria”

Ballout Amor [(1)]; Pr. Yasmina Bouchahm [(2)]; Dhia eddine Zakaria Lacheheb [(3)]
[(1)] Work group PUVIT, University Sétif 1, ALGERIA. bamor79@yahoo.fr
[(2)] Work group ABE, University Mentouri 3, Constantine, ALGERIA.
[(3)] Work group PUVIT, University Sétif 1, ALGERIA.

Traditionally outdoor spaces are as important as the interior ones, as they are used extensively throughout the year, these outdoor spaces are used by men, women, children and adults.
But the current urban planning in Algeria tends to ignore these facts and the importance of these spaces seems to disappear gradually leading to the destruction of the sense of belonging to the community, while it should primarily aim to improve the quality of these spaces to improve the environment which is the life support of these people.
This urban planning inhibits any significant relationship of the residents with urban spaces, making the living environment and the way of life of inhabitants introverted, summarizing the role of these outdoor spaces to a simple space of transition and circulation.
There is a strong public interest in the quality of open urban spaces and it is recognized that they may contribute to the quality of life in cities and to lower the isolation and social exclusion. This is directly related with the physical aspects of urban space (involving thermal comfort, visual and acoustic comfort, urban morphology, etc.), but also with social environment.
The treatment of outdoor spaces in urban areas can improve the urban quality by mitigating the roughness of climatic constraints around buildings and in public spaces to make them more comfortable as long as possible.
To reach this comfort, the use of certain urban amenities is essential. Among the most effective arrangements and more prevalent we note the use of vegetation and water ponds, especially when they are associated. Both elements play an important role in creating a physical and social microclimate more favorable in the urban areas and can on their own solve many problems in outdoor spaces.
In order to demonstrate the important role of the presence of water and vegetation in the creation of a favorable microclimate a study will be carried out on the Independence Square (square of Ain El Fouara), urban space located in the city of Sétif and characterized by the presence of a water fountain and

surrounded by a large mass of vegetation. In this study we conducted an investigation including a series of measurements and a questionnaire, both of them related to factors affecting thermal comfort in urban areas. Unlike the in-situ measurements that give us a quantifiable preview of comfort, the questionnaire touches the qualitative dimension of comfort (notion of ambiance) and which is in direct relationship with users and reports to us their opinion on the matter.
We will try by this method which consists of a series of questions presented in a predefined order to the users of the square not only to quantify the parameters relating to thermal comfort of people in urban areas, but also to detect the qualitative aspect of this comfort. This will allow the evaluation of different parameters related to comfort and thermal sensation, the preferences of the subjects and the various aspects of physical and psychological adaptation.

----- * -----

Rusundito: An Innovative Public Housing Urban Development Project in Jakarta

Dita Trisnawan
Department of Architecture Faculty of Engineering Universitas, INDONESIA
ditadesign1@gmail.com

This paper proposes the urban spatial intensification of the Urban Toll Roads, specifically the arterial underpass ones within the city. These urban intensifications are expected to increase the future connections, flowing mobility, and the urban communities' quality of living. The precedents of New York Tri-State Area and specific German's Urban Housing models are used to find solutions of Jakarta's urban development housing needs. It is an attempt to re-connect the city, to intensify the capacity by maintaining the effective urban spatial density. Retrofitting and rationalism theories of urban design are used to analyze the existing situations, while research by design method is applied to find the new design ideas to further help solving the urban housing and transportation issues.

----- * -----

Evaluating Meteorological Observation Network to Analyze Urban Thermal Environments considering climate change

Hyomin Kim; Seunghyun Jung; Hansaem Kim
Korea institute of civil engineering and building technology, SOUTH KOREA
hyominkim@kict.re.kr

Frequent urban heat islands have occurred around the cities in the world due to high population density and indiscriminate development. Because of climate changes in recent years, the rainy season has become shorter and torrential rain has occurred more often. This phenomenon has been deepening as hot and humid cloud days have increased. Since the urban heat islands have adversely affected daily living and health of citizens, it is necessary to improve a meteorological observation network (MON) for precise observation on urban thermal environment and rapid and accurate heat island forecasting system and it is needed to evaluate the suitability of the current distribution.
Seoul City as study site, accounts for only 0.6% (605.25㎢) of South Korea but it is a mega city that approximately 21% of the total population is concentrated thereby creating a variety of urban problems due to the heat island. In particular, in order to understand small or mid-size climate environment such as urban heat island, differentiated density of MON is needed according to urban form types and installation criteria of observation networks shall be stricter for densely populated mega cities where heat island is concentrated. In addition, when heat island deepens, a range of MON can be different from the current one.
Thus, this study classified an urban form type in Seoul City that affected urban heat island and evaluated suitability of the distribution of MON through urban form type, and then proposing an appropriate range of the observation network. Moreover, this study proposed an improvement measure of the current observation network from long-term viewpoints by predicting future thermal environment changes by means of applying the climate change scenarios.
To do this, the temperature data from meteorological observation stations in Seoul was collected and target observation network was set up through outlier tests. The temperature data were divided considering monthly, wind, cloud, and precipitation characteristics after analyzing the characteristics of the MON. After modeling temperature data, spatial correlation function of temperature was induced and correlation distance was estimated. In addition, a correlation distance using entropy was analyzed and compared with results of spatial correlation function thereby estimating a correlation distance through urban form type and calculating an affected area of the observation network. In order to predict thermal environments due to climate change

in the future, RCP 4.5 and 8.5 scenarios were utilized. Accordingly, effective distance of the observation network were calculated thereby evaluating and discussing the suitability of the current observation network from long-term viewpoints.
Through the study, spatial characteristics and suitability of the MON in Seoul were identified and excessive and deficient regions of observation stations according to urban form characteristics were identified. Ultimately, this study contributed to providing appropriate affected area of the meteorological observation stations through urban form type.

----- * -----

Roughness Length Characterization for Urban Climate Maps in the City of São Paulo – SP, Brazil

Rafael Gonçalves Santos; Ezequiel Correia; Alessandra Shimomura [(1)]; António Lopes
Universidade de Lisboa, IGOT - Instituto de Geografia e Ordenamento do Território
Centro de Estudos Geográficos – CEG. Rua Branca Edmée Marques, 1600-276, Lisboa, PORTUGAL.
[(1)] Universidade de São Paulo (USP) - Faculdade de Arquitetura e Urbanismo (FAU). Departamento de Tecnologia da Arquitetura (AUT). Rua do Lago, 876, 05508-080 São Paulo – SP, BRASIL.
rafaelgoncalves@campus.ul.pt or faelgeo89@hotmail.com; ezequielc@campus.ul.pt;
arprata.shimo@gmail.com; antonio.lopes@campus.ul.pt

The cities currently represent the living environments of over half of the world's population, being the densely compacted megacities, the spaces in which the thermal component and the air circulation are constantly changed, resulting in higher air and urban areas temperature compared with the natural original surfaces (Urban heat island and surface). The wind velocity in urban areas decreases as a consequence of the roughness caused by the presence of built elements, vegetation and the concentration of air particles. The progressive increase of roughness length in the cities has resulted in the reduction of wind velocity in order of 20 to 30% and an increase of 50 to 100% of the turbulences, with elevations due to the characteristics of urban geometry and the topography of the land. The analysis of the roughness length in urban environments, it allows to infer about the changes in the velocity and flow of the winds, aiming to identifying potential ventilation paths, which act in the pollutants dispersion, not only improving air quality with the potential to cool and hamper the formation of UHI as the conditions of thermal comfort to the population. The study area comprises the megacity of São Paulo which currently concentrates 11.890.000 inhabitants. Located approximate at a latitude of 23° 21' and longitude 46° 44' near to the Tropic of Capricorn, presenting humid subtropical climate (Cfa) inserted in a context of highlands (between 720 to 850 meters) with diversified topographies. The aim of this study is the application of a roughness length mapping method for climate purposes, tested in the Portuguese cities of Lisbon and Cascais, which allowed to analysis the roughness length of São Paulo metropolis. The methodology developed in GIS, considers the analysis of the friction caused by the surface roughness and the effects on ventilation reduction, calculated by the greater length of the windward frontal area exposed and average heights of buildings. The buildings that compose the urban mesh were grouped into classes by height and subsequently generalized and transformed into building blocks to finally be corrected to regular blocks. The next stage corresponds to the creation of a grid with the measures of the urban area, with cell dimensions of 100 x 100m, intersected by lines of 20 x 20m to identify the largest length of the windward frontal area exposed to prevailing wind direction SE – NW. These data were divided into cells, together with the height of the buildings, footprint area and volume. The analysis of the friction caused by the surface roughness and the effects on the reduction of ventilation were calculated according to the Roughness Length equation (z0) = 0.5hxs / S. Preliminary results indicate a high roughness length, concentrated in the central area of the city, with verticalized and mixed areas with significant variations in the height of the buildings. The results of this study enables to contribute to the urban planning in the megacity of São Paulo, promoting the maintenance and management of potential ventilation paths in the study area, using the urban roughness parameters calculated, which should mainly be kept low to the city center, with low roughness vegetation to filter the pollution.

----- * -----

Track 03

INNOVATION AND INTELLIGENCE: *towards competitive cities*

Chair: Paulo Morgado, Universidade de Lisboa, Portugal

Scientific Committee: Adrienne Keane, Macquarie University, Australia
Arnaud Banos, Universite de Paris, France
Manuel Laranja, Universidade de Lisboa, Portugal
Perry Pei-Ju Yang, Georgia Institute of Technology, USA
Robin Ganser, Nuertingen-Geislingen University, Germany

Intelligence represents, from a territorial approach, a new planning paradigm, based on knowledge-based economies and in a globalized innovation. Cities can better address the challenges of an increased competition for knowledge and innovation depending on how much/well they can bridge local resources, innovation institutions and broadband networks (Komninos, 2009).

Besides all the technological apparatus of this new intelligent cities approach, social scientists have also incorporated such a paradigm into urban planning through focusing on knowledge, creativity and social capital.

Cities strive for improved development, for recognition, for more residents and tourists, for quality of life and the means they use to compete for it are increasingly based on new and differentiated assets, such as innovation and intelligence.

Working with Urban Megatrends

Bogna Anna Gebalska, DENMARK

Background

Today cities undergo a revolution. The urbanisation process, accelerated by constant population growth and enhanced movement, pushes cities to become global hubs that are gathering generated flows of people, energies and also consequent risks. Today, the shape of our environment, governance, economy is an effect of global movements, global decisions and global changes.

Can we address and work with those global forces locally? Cities, both people and structures are challenged. Concerning the dynamic of society and urban activities, influenced by innovative technologies, our habitat is facing a rapid transition, apparent in every location. City can use the opportunities of momentum, planning and acting responsively to the events or it can miss the chance in the global competition, losing prosperity. There is a considerable interest in finding what triggers city attractiveness and development. International institutions emphasise the significance of global dynamics and the importance of creating strategies to face Megatrends. Acknowledging global forces, it is essential to understand that "urban regions throughout Europe will be affected by challenges resulting from megatrends in diverse ways depending on the urban characteristics" (JPI Urban Europe, 2014). This statement indicates that there is no one universal solution and that the needs for action are different across the world, what is taken under examination in the following study.

Methodology

The study is conducted following the build-up 8 step framework, which merges theoretical part with case study. The steps are as follows:

1. Recognize Megatrends (basing on theory)
2. Recognize the specific conditions of each case study (multi-criteria analysis)
3. Identify the results of Megatrends for selected cities (basing on analysis of its context)
4. Describe the responses towards consequences of Megatrends (review of local policies, investments, plans)
5. Describe the current situation (based on the comparison of local and global indicators)
6. Find the interrelation between responses and current situation
7. Formulate success factors based on last 6 points
8. Draw conclusions and build a frame for decision support tool

Identifying the aspects that affect today's and future city's prosperity, we quickly realize that the global forces have the power to accelerate or hamper city's potential. To direct policy efforts towards an inclusive and successful city transition, we need to identify essential elements to work with on local level. Therefore, after providing an overview of trends and processes that influence the city conditions, the study examines the mechanism of transition basing on case study. Three following European cities are investigated: Lodz (PL), Copenhagen (DK) and Milan (IT). The purpose of the case study is to indicate the dynamic between local context and global processes. The success factor in the city transition is examined by evaluating the local strategies and by comparing how effective they are in responding to global forces. Here, also the city-specific limitations and difficulties are recognized. Because the city and development process are characterized by the complexity of spatial-socio-economic dynamics, the goal is to make a framework for a holistic and inclusive approach. The value that comes from studying three geographically and scale-wise different cities, is that we are able to observe their specific and formulate scalable learnings. We lead a comparative study in various different levels. Firstly, analysing condition-building factors in every city, such as governance, location, history, economy or demography, we build a base for understanding local conditions and finally we can cross-analyse observed states of case cities, evaluate the validity of their steps and strategies. The data used in case study is a compilation of international databases, national statistics, city databases and local policy documents.

Findings

The study clearly illustrates the differences and similarities of challenges and opportunities that result from Global Trends. Result indicates that the condition of the city is a resultant of numerous forces and depends equally on global processes and local responses towards them. The success of transition is highly dependent on local responses to powerful and influential global forces. Graphical model is provided to illustrate the interrelations of city global-local dynamics.

The conclusion points out that sustainable development, smart and environmentally- friendly solutions as a common objectives need to be discussed and approached location-wise. Solutions and methods to achieve those universal goals are context dependant. Context, from politics, natural resources, historic background

and financial condition, to the culture, people's habits and beliefs, changes the trajectories of understanding or the capacity of policy response, therefore generates implications for the suitable actions.
Working with Megatrends is a condition for the positive transformation. To facilitate the process and use global forces as opportunities for local improvement, a set of checklist questions is offered at the end of the study, which is intended to help in deducing connection between global trends and local effects, and therefore help to navigate actions in appropriate and relevant way. The study concludes by indicating important issues to be considered, if we aim to make the transformation of cities a common success.

----- * -----

A statistical analysis of urban Big-Data towards real-time and street level heatwave risk management

Murakami, D.[(1)]; Yamagata, Y.[(1)]; Yoshida, T.[(1)(2)]
[(1)] Center for Global Environmental Research, National Institute for Environmental Studies, JAPAN
[(2)] Social Systems and Management, University of Tsukuba, JAPAN

As global warming advances, urban heatwave risk is getting more and more serious throughout the world. Actually, tenth of thousands of people were sacrifices by the major European heatwave in 2003, the Russian heatwave in 2010, and so on.
Unfortunately, adaptation to heatwave risk is not necessarily straightforward. This is partly because temperatures and other variables characterizing heat (e.g., change in temperature; humidity) change rapidly over time. This is also caused of the significant temperature differences across space. For instance, crowded streets might be far hotter than paths with many alongside trees and shades. Temperatures also change depending on materials of ambient buildings and roads, real-time population density, and so on. Accordingly, real-time and street level temperature monitoring is needed to cope with heatwave risks. However, such a monitoring is usually quite difficult to implement in terms of both cost and human resources.
The objective of study is developing a model to estimate real-time and district level temperatures, and examining its estimation accuracy. The target area is the center of Tokyo. Based on the discussion above, we consider materials of buildings and other infrastructures. They are estimated from a 3D urban model, which is established based on the Light Detection and Ranging (LiDAR) observation. Actual placement of trees is also estimated from the 3 urban model, and utilized in our analysis. To consider influences from human activities, we utilize trajectory data that records behavior of about 50 thousand people in Tokyo per 30 minutes in a day. This data is acquired based on mobile sensor observations. Besides, a remotely sensed ground temperature data, which was acquired from Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) is also used as an input. Note that because the spatial resolution of the ASTER data is 90 m, the spatial resolution is not enough to reveal street level temperatures. Besides, it is not possible to acquire real-time temperature data from ASTER (it provides data in regular time intervals).
We estimate spatially fine (e.g., street-level) temperatures by downscaling an ASTER temperature data while considering other aforementioned data as auxiliary information. A spatial statistical approach is applied for the downscaling. This model describes latent spatial and temporal process of temperatures considering above-discussed Big-Data. Fortunately, both downscaling and data fusion (i.e., use of various types of data as auxiliary variables) are hot topics in spatial statistics and a number of sophisticated approaches have been proposed. Also, computationally efficient approaches that is likely to be applicable for our analysis have been discussed in spatial statistics too. This study attempts to develop a spatial statistical downscaling approach by combining these approaches, and use it for a spatiotemporal temperature estimation.
The accuracy of the temperature estimation (downscaling) is evaluated using a ground temperature data whose spatial resolution is 0.5m. This temperature data is acquired by an airborne observation in in August 19, 2015. In other words, as a first step of a heatwave risk monitoring, we conduct a real-time temperature estimation in that day. The estimated model is also applied to quantify influences of allocation of trees and buildings and their materials, mass travel behavior, and so on, on local temperatures.
In the future, we plan to use the established model for a spatially-explicit real-time energy balance estimation. Besides, we want to integrate our spatial statistics-based data fusion with meteorological models.

----- * -----

Real-time GIS of Gender mobility. A TeleGeomonitoring system approach

Paulo Morgado; Margarida Queirós; Mário Vale; Nuno Marques Costa; Nelson Mileu; Fábio Rodrigues; Júlia Maltez Ribeiro
Universidade de Lisboa, IGOT-CEG, PORTUGAL
paulo@campus.ul.pt

We are witnessing an urban revolution. The cities of concrete and steel gave way to city regions supported by pervasive ICT systems, of devices and gears, computers and software, all linked up via internet and communicate among themselves; these are the Smart-cities. Telecommunications and Geotechnologies (GIS, GPS, RS) are the backbone of those urban structures supporting the daily lives of millions all over the world, as every year more and more people migrate from rural to urban areas. Despite the recognised role of those technologies and devices scant attention has been rendered to social and gender impacts of those tech-urban systems.
Mobility is one of the challenges citizens are facing, and there are comparatively few research studies related to gender space-time imbalance. Not only unequal gendered mobility's patterns, as well as consequences on environment (greenhouse emissions and fossil fuels dependency), economy (productivity levels related to time spent on commuting), social (time spent with family, leisure and education time) challenges city planning.
This research lies on the use of a TeleGeomonitoring methodology – mobile devices, such as Smartphone Apps and/or tracking devices with GPS incorporated, as sensors acquiring real time data and producing a GIS gender database – to outline gender patterns' mobility, linked to a real-time mapping device and giving out animated cartography. Due to urban planning evolution, to telecommunications and bottom-up methods, real-time sensors and BIG-Data, urban planners have now access to a new understanding of these tech-urban systems through real-time urban dynamics monitoring.
This methodology is instrumental as it generates accurate information to support the reconciliation policies for professional activity, family and personal life, with the detail of the everyday/local spaces. The paper presents some preliminary results of the GenMob project (Gender mobility: time-space inequality), PT07 (2ndopen call) under the European Economic Area Financial Mechanism, that also helps to deepen knowledge and influence more inclusive social policies (targeted to private and public organizations) and mobility policies.

----- * -----

Session T3.2 June 1 | 16:00 – 17:30

Lisbon as a Smart City: Mapping Strategic Sectors

Pedro Dias[(1)]; José António Tenedório[(2)]; Jorge Rocha[(3)]
[(1)] CICS.NOVA-FCSH, Universidade Nova de Lisboa. pedrodias.geo@gmail.com,
[(2)] CICS.NOVA-FCSH, Universidade Nova de Lisboa. ja.tenedorio@fcsh.unl.pt
[(3)] CEG-IGOT, Universidade de Lisboa. jorge.rocha@campus.ul.pt Corresponding Author.

Currently, Smart Cities are one of the big issues concerning urban strategies of most Governments around the world, especially in more developed countries, which in recent years had faced a rapid urban growth (Dameri and Rosenthal-Sabroux, 2014).
According to Cocchia (2014) the emergence of the concept of intelligent city is strictly linked to the idea of digital city, due to the similarity of the two designations. Conceptually, smart cities represent a model of urban development, whose main function is based on the effort to capitalize on the new information and communication technologies (ICT). The tendentious use of this statement makes one to believe that any instrumental and technological innovation transforms a city into smart: this is clearly a mistake. The Smart City definition is more complex than looks at first sight (Angelidou, 2014).
The use of collective human and intellectual capital from a strategic point of view is another of the key elements that should not be overlooked in the context of technological innovations. The purpose of the smart cities passes through ensure prosperity, competitiveness, efficiency and sustainability in various socio-economic levels.
From a scientific point of view, it is considered that the Smart Cities main driving force is essentially intellectual capital. This means that the intellectual capital should be interpreted in a broader sense, like having in mind citizens culture, level of education and intellectual capacity. Also one should not neglect the entrepreneurial culture, trademarks, patents, know-how, the reputation of the markets and the city culture in particular. From a business standpoint, the main element in the creation of Smart Cities is the technological component, in particular ICT. This last vision is well accepted by large companies like IBM and Cisco, among others.
Investments in culture are an asset for life and animation of the cities, but governments must be aware and ensure that cities development embraces a sustainable economic growth and environmental quality. Thus, Smart Cities are therefore designed as a function of this immaterial vision (Dameri and Rosenthal-Sabroux,

2014). It is important to note, that as larger the cultural and intellectual capital present in a city, more efficient are the decisions taken, which of course will lead to a greater and better development in the city itself.
In the city of Lisbon, the strategic sectors are defined by the City Council (LCC) and comprises the developing of activities in the areas of research, knowledge and innovation and its connection to the private sector. The strategic sectors in Lisbon, are the creative economy, the sea economy, health, commerce, tourism and ICT. In a close connection to strategic sectors, it is important to establish a Map of Knowledge and Innovation (MKI), which identifies the institutional actors related to knowledge, research, innovation and creativity.
We create a portrait of each of the strategic sectors in order to enhance the establishment of new agents. The spatial behaviour of strategic sectors is inconsistent as an all. Some sectors present high density values throughout the city and others had more specific density spots, allowing the characterization of each of them. One example of first point is the commercial sector, where the density values are generally high all over the city. For the second point, there is the case of the economy, with high density values mainly along the Tagus River bank.
Commerce, unlike other sectors, does not have a well-defined trend, because it is a sector that is heavily deployed in the city. In contrast, the MKI sublevels present well defined guidelines and hot spots in different areas of the city. Regarding the actors' concentration, health as the highlighted behaviour, showing a continuous trend of low concentration both in terms of the distance and neighbourhood order.
Interestingly, the MKI behaviour as a group features a significant concentration in the first orders neighbourhoods, but progressively loses intensity until it reaches values that indicate randomness and dispersion. Though, when we reviewed the MKI sublevels, they have many different behaviours, with irregular trends and diffusion values.
It should be noted that the technological, cultural and environmental aspects are the base elements of a Smart City, but their role is not the same from city to city. The main aspect of a Smart City, and one that plays the leading role, is how these components interact with all the stakeholders involved in the City strategies, because at this stage the real actors are the citizens. If we intend to explicitly define a Smart City vision for Lisbon, this is the first step to be taken to successfully implement a Smart Cities program.

References

Angelidou, M. (2014). Smart city policies: A spatial approach. Cities, 41, S3–S11.http://dx.doi.org/10.1016/j.cities.2014.06.007.
Cocchia, A. (2014), "Smart and digital city: a systematic literature review", in Dameri, R.P. and Rosenthal-Sabroux, C. (Eds), Smart City: How to Create Public and Economic Value with High Technolog in Urban Space, Springer, Heidelberg, pp. 13-43.
Dameri, R.P. and Rosenthal-Sabroux, C. (2014), Smart City: How to Create Public and Economic Value with High Technology in Urban Space, Springer, Heildelberg, p. 238.

----- * -----

Visualization and evaluation of 3D urban design for heatwave risk management

Yoshida, T.[(1)(2)]; Yamagata, Y.[(1)]; Murakami, D.[(1)]
[(1)] Center for Global Environmental Research, National Institute for Environmental Studies, JAPAN
[(2)] Graduate School of Systems and Information Engineering, University of Tsukuba, JAPAN

The heatwave risk in Tokyo is rapidly increasing in association with the progress of the global warming. Unfortunately, because of the aging demographic trend, more and more people would be vulnerable to heatwaves in Japan in the future. Besides, in 2020 Tokyo Olympic Game, it is expected that an unusual amount of domestic and international people gather in the center of Tokyo whose urban heat island is substantial. It is an urgent task to enhance resilience to heatwave risks in Tokyo.
Based on the background, this study reveals how the urban design of the central Tokyo area should be, in terms of the heat-island risk reduction. To achieve it, we first present possible urban design scenarios (e.g., compact-type; greening-type), that are compatible with Shared Socioeconomic Pathways (SSP) and Representative Concentration Pathways (RCP), which are storylines for assessing the impact of climate change. These urban design scenarios are based on micro-geographic information such as people flows, location of green spots, and building height. Subsequently, we visualize each of these scenarios with a three-dimensional (3D) modeling technique, and, based on the result, it is clarified which urban designs are desired for the center of Tokyo in terms of resilience.
To construct aforementioned scenarios, it is necessary to collect the building data, trees data, and people flow data. We estimate attributes of buildings and other infrastructures using a 3D urban model, which is established based on the Light Detection and Ranging (LiDAR) observation. Actual placement of trees is

also estimated from the 3D model. Data of people flow are collected based on mobile sensor observations. The resulting data records behavior of about 50 thousand people in Tokyo in a day.
To compare the desirability of each scenario, we evaluate real-time and spatially fine (e.g., a street level) heatwave risks under each urban scenario while paying attention to influences from building allocations and their materials, traffic flows and so on. These influences are estimated using a spatial statistical model, which we have developed in another study. We visualize the above estimation results in the dynamic, 3D mapping.

----- * -----

Urban Form and Energy Performance Basing on Shanghai District Analysis

Yinan Zhoua [(1)]; Perry Pei-Ju Yangab [(1)(2)]
[(1)] Sino-U.S. Eco Urban Lab, College of Architecture and Urban Planning, Tongji University, Shanghai, CHINA
[(2)] Eco Urban Lab, College of Architecture, Georgia Institute of Technology, Atlanta, USA
perry.yang@coa.gatech.edu

Conventionally, urban form designed by urban planner doesn't care about energy performance as much as building shape designed by architect. A new trend is the integration of these two systems, which means that we should address the question "what urban forms have the best energy performance." with respect to sustainable development. In this article,we will first briefly review literature related to this topic from architecture to urban district level in both two fields. Then basing on the research of some basic building layouts, nine Shanghai typical districts will be analyzed and compared to explore the important factors of urban form in energy-efficient terms using computer simulation techniques. Finally the characteristics of new urban form will be proposed in the context of the renewable energy and distributed energy grid. This article concludes that energy cell has potential to become the driving force of urban form innovation.

----- * -----

Climate Resilient 3D Urban Design: A “Wise Shrink” Approach

Yamagata, Y. [(1)]; Murakami, D. [(1)]; Yoshida, T. [(1) (2)]
[(1)] Center for Global Environmental Research, National Institute for Environmental Studies, JAPAN
[(2)] Social Systems and Management, University of Tsukuba, JAPAN

The Paris Agreement stipulates: 1) Holding the increase in the global average temperature to well below 2 °C, 2) Increasing the ability to adapt to the climate change. It demand urban planners to foster climate resilience and low greenhouse gas emissions development, namely to design Climate Resilient city. We need to explore the way to achieve both goals in urban planning settings in the situation where there are some trade-offs and synergies between the two goals, mitigation and adaptation to the climate change.
At global level, IPCC has been trying to create scenarios for the future low carbon society by combining two approaches. Newly proposed conceptual framework called Shared Socioeconomic Pathways (SSP) is a reference pathways describing plausible alternative trends of society over a century timescale in the absence of climate policies. While, Representative Concentration Pathways (RCP) is describing possible future with climate policies including below 2 °C target. These scenarios are used mainly developed and applied at global or at least national level. In order to support for improved urban planning in terms of climate change adaptation and mitigation policies, we need to first interpret what these scenarios mean at city level. It is also required to downscale even to the district level, if we assume that planning should be co-designed with the local stakeholders.
In this paper, we propose a city level new land use scenario that can be downscaled to district level. We try to combine some elements from SSP and RCP scenarios. We aim to depict possible climate resilient cities. Actually, there has been very few research that actually associate urban planning with land use scenarios. So, it is our challenge to clarify what climate resilient city means on the ground. In that sense, it is almost first attempt in the world that we try to devise a new approach for creating micro-district (almost 1km grid) level land use scenarios for mega-city like Tokyo by using high resolution data-set.
Tokyo is the world largest mega-city in the world. There had been a massive suburbanization since 1970s. Even after the bubble economy crushed, this trend has been continuing until recently. However, national level population decrease had started since 2014 and we are at a turning point where we urgently need to re-design the city urban form to ensure the sustainability of the city in the future. As a possible way for this transformation, we are proposing a new urban design concept called “Wise Shrink”. This scenario aim to achieve both resilient and compact urban land use at the same time. This “Wise Shrink” scenario consider optimal land use at the micro-district level by eliminating the trade-offs and highlighting the synergies

between climate change mitigation and adaptation policies as well as disaster risks management in the process of shrinking the urban extent (residential land use) in a sustainable manner.
In order to test “Wise Shrink” land use scenarios in the Tokyo metropolitan area, this study developed a spatially-explicit urban land-use model (SULM). Using the model, we have created scenarios that can achieve both city compaction and disasters risk reduction, that would contribute to both climate change mitigation and adaptation. Then, the wise compaction scenario is compared with the usual city compaction scenario without disasters risk reduction and the business as usual scenario.
The results show that: 1) Compact city are less car dependent and can reduce carbon emission. 2) Green areas could be increased under the Compact city scenario due to the re-vegetation of the created open space. This will improve the well-being of residential people in terms of health and agricultural self-sufficiency can be improved. It also reduce the surface temperature and can contribute to mitigate the urban heat island effect and more adaptive to global warming risks such as heat wave. 3) However, flooding risks may even increase, if the compact city is generated in a low land area where current population density is already high. 4) It also associated with the societal problem, as high flood risk area with high density population is often linked with poverty issues. It is also important to avoid seashore area that area susceptible to the high tide or even to the sea level rise in the future. 5) If we can create a compact city at climate risk free area with economic agglomeration policies, it may also effectively improve the societal resilience in general. 6) Finally, by subsidizing the movement of residential people from high flood risk area to new economic agglomeration area, local government expenditure could be rewarded by the reduction of the expected loss of the future flooding damage as well as the increasing revenue form the new economic development.

----- * -----

Session T3.3 | June 3 | 9:00 – 10:30

Monitoring and evaluation of policies – the role of support tools for spatial decision support system applied to Portuguese case

Eduarda Marques da Costa[(1)]; Patrícia Abrantes[(2)]; Ana Louro[(3)]; Nuno Marques da Costa[(4)]; Paulo Morgado[(5)]; Jorge Rocha[(6)]
[(1)] Associate Professor (CEG-UL), PORTUGAL eduarda.costa@campus.ul.pt
[(2)] PhD Researcher, PORTUGAL patricia.abrantes@campus.ul.pt
[(3)] Research fellow (CEG-UL), PORTUGAL analouro@campus.ul.pt
[(4)] Assistant Professor (CEG-UL), PORTUGAL nunocosta@campus.ul.pt
[(5)] Assistant Professor (CEG-UL), PORTUGAL paulo@campus.ul.pt
[(6)] Assistant Professor (CEG-UL), PORTUGAL jorge.rocha@campus.ul.pt

The relevance of an optimal coherence among the planning instruments at several scales reveals to be a task as important as difficult in the context of planning, especially when the framework of spatial policies is more and more complex. Considering the Portuguese case, CEG-UL team in the context of SPOTIA Project (Sustainable Spatial Policy Orientations and Territorial Impact Assessment – Contribution to Portuguese context) (PTDC/CS-GEO/105452/2008), essayed a methodology to create a Spatial Decision Support System (SDSS), useful to support a better decision-making by policy-users helping to solve spatial problems for the next planning cycle. This essay is presented in this paper.
To formulate an efficient SDSS, SPOTIA Project explored a set of methods to assess the coherence and relevance of the Portuguese territorial and sectorial frameworks (policy programs and plans), that resulted in three sets of tools: a) Advanced query platforms based on two databases: one with the major national and regional Policy documents and other with statistical information consultation; b) a WEBGIS, as a transversal platform for visual and geographical representation of data and modeling; c) Geographic modeling methods, visualized in exercises used as examples to support decision-making, using for instance spatial simulation techniques.
In research process, is possible to identify some limitations or difficulties to develop an operational and useful SDSS. For example, the variety of structures of each instrument difficult a cross-reading between them, and the difficulty of having a complex national tree of policies which interdependencies are not very clear compels need of homogenizing data. Related to the policies revisions, the operational and evaluating cycles don`t have a purposeful logic, existing some instruments that don`t have this obligation regularly and in common with similar policies, affecting the coherence and efficiency of planning strategy. Moreover, the actual situation of national financing control don`t allow the operationalization of plans and programs as these were thought originally, having revisions that change the planned goals, thus breaking the coherence proposed initially.

----- * -----

Components of an augmented reality app effective in understanding flood disaster prevention

Mieko Saito[(1)]; Yasuhiro Tajima[(2)]; Genichiro Kikui[(3)]
[(1)] Associate Professor, Faculty of Design, Okayama Prefectural University, JAPAN
cytoo@dgn.oka-pu.ac.jp
[(2)] Associate Professor, Faculty of Computer Science and Systems Engineering, Okayama Prefectural University, JAPAN
[(3)] Professor, Faculty of Computer Science and Systems Engineering, Okayama Prefectural University, JAPAN

Introduction

Flooding occurs frequently in Japan, and in 2015, heavy downpours occurred in the Kanto and Tohoku regions that caused 5 large rivers maintained by the national government, and 80 small- to medium-sized rivers maintained by the prefectures, to collapse, overflow, or sustain damage to their embankments.

In such an environment, many smart phone apps for disaster prevention have been developed and released for free in order to improve the self awareness and disaster-prevention awareness of each Japanese citizen. Particularly in recent years, disaster-prevention apps have begun to be developed that make use of augmented reality (AR) technology, aiming to take advantage of the easy-to-understand intuitiveness that is a strong point of AR.

Currently, close to 300 iPhone apps related to disaster prevention have been released in Japan, and there are many thousands of iPhone apps with “AR” in their names. However, there are fewer than 30 that combine disaster prevention and AR. From this, while the motivation and expectation of using AR technology in a disaster-prevention app can be clearly seen, it can be inferred that its role and effect has not yet been clarified.

Further, since most of the currently available AR disaster-prevention apps have been released free of charge (depending on the administrator), issues related to the cost can also be speculated on.

Research aim and method

This research focuses particularly on the natural disaster of flooding, and clarifies the necessary AR components used to understand flood prevention.

We examined the current AR flood-prevention apps available in Japan and extracted the issues we identified. From this investigation, we found that many of them implement previously published printed information and website services as an AR app, so it can be said that they do not exhibit the full functionality and effectiveness of an AR app.

In addition, flood-disaster-prevention software for everyday use should require training to be an important part of its construction. We also expect that navigation would be an important functionality of an AR flood-disaster-prevention app for use at the time of a disaster.

As a result, we formed a hypothesis about the components necessary to an AR app that is effective for flood disaster prevention, and developed 3 types (Type A, Type B, and Type C) of experimental apps that contain these components. We then checked the effectiveness of each app using 78 test subjects in an experiment. The subjects were split into 3 groups, and shown each type of app, from A to C. Afterward, they filled out a questionnaire regarding their experiences with and feelings about the contents, and the results were compared.

Conclusion

We were able to discover the effectiveness of each of the many components that we considered necessary to an AR flood-prevention app. One basic component is that information that must be understood and remembered is more effective when it is expressed in a calm manner, with as much reality removed from the situation as possible. Another important component is that information for the purpose of describing a disaster, and for getting mentally prepared or aware, is more effective when it expresses the reality of the situation to a certain degree. Further, we also found that the test subjects’ motivation for disaster preparation before using the experimental apps had changed greatly after usage of it.

AR apps were said to be very effective at increasing interest in disaster preparedness, but we also found that they help when imagining disasters such as flooding, and are very effective for understanding a basic alternative plan before a disaster occurs.

References

Hiromasa Hayashi, Kentaro Ishii, Kazuo Hiraki Conditions of Illustration that Facilitate Understanding of Disaster Prevention Manual Japanese Cognitive Science Sosiety, p.443-446, 2014.

----- * -----

Parking spaces in the age of shared autonomous vehicles: How much parking will we need nd where?

Wenwen Zhang; Subhrajit Guhathakurta; Catherine Ross
Georgia Institute of Technology
Atlanta, GA 30308, USA
Subhro.guha@coa.gatech.edu

We are at the cusp of a new era in mobility given that the enabling technologies for autonomous vehicles (AVs) are almost ready for deployment and testing. Recently, the U.S. Department of Transportation unveiled new policy guidance that reflects the reality that widespread deployment of AVs is now feasible (DOT 02-16 Press Release). While the technological frontiers for deploying AVs are being crossed, we know far less about the potential impact of such technologies on urban form and land use patterns. In this study we specifically examine the role of shared autonomous vehicles (SAVs), a taxi system without drivers, in influencing urban parking demand.

One Previous study, based on the simulation of SAV operations in a hypothetical grid-based city, reveals that the SAV may eliminate a significant amount of parking demand for participating households (Zhang, Guhathakurta, Fang, & Zhang, 2015). The models of SAV operations tested in earlier studies are constrained by several assumptions, including highly developed grid-based transportation network, same link level travel speed all over the network, and homogeneous households over the city. This paper attempts to address these issues by simulating the operation of SAVs in the City of Atlanta, USA, using the real transportation network with calibrated link-level travel speeds, travel demand origin-destination matrix, and synthesized household profiles. This real world data-driven agent-based SAV model will be used to determine the spatial distribution of parking demand under different scenarios, including different parking policies, vehicle sharing and navigation strategies.

References

U.S. Department of Transportation. 2016. Secretary Foxx unveils President Obama's FY17 budget proposal of nearly $4 billion for automated vehicles and announces DOT initiatives to accelerate vehicle safety innovations. Press Release DOT 02-16. http://www.nhtsa.gov/About+NHTSA/Press+Releases/dot-initiatives-accelerating-vehicle-safety-innovations-01142016

Zhang, W., Guhathakurta, S., Fang, J., & Zhang, G. (2015). Exploring the impact of shared autonomous vehicles on urban parking demand: An agent-based simulation approach. Sustainable Cities and Society, 19, 34-45.

----- * -----

Track 04

LEISURE AND TOURISM: *towards attractive cities*

Chair: Carlos Cardoso Ferreira, Universidade de Lisboa, Portugal

Scientific Committee: Armando Montanari, University La Sapienza, Roma, Italy
Elisabeth Hamin, University of Massachusetts, USA
Caroline Scarles, University of Surrey, United Kingdom
Robert Maitland, University of Westminster, United Kingdom

The recreational and tourism dimension has been an important strategy of affirmation and development of cities; the dynamics that recreational and tourist activities imprint to urban fabric represents a potential gain of attractiveness and increased competitive conditions.

But tourism and leisure in an urban context also challenges its multiple players - politicians, technicians, entrepreneurs, residents and visitors - about the sustainability of this dynamic, prefiguring many challenges:

- which tourism is taking shape and which one the city wants?
- how to reconcile the lived city with the visited city?
- will innovation and creativity be compatible with the authenticity of the places?
- how to generate co-creation of touristic value of/for different players?

These issues will be discussed in this track, as well as others that may be relevant to a broad and current discussion on leisure and tourism in the city.

Cities and events – city of Novi sad and exit festival (Serbia)

Demirović D.[(1)], Radosavac A.[(2)], Njegovan Z.[(3)], Pejanović, R. [(4)]
[(1)] MSc, PhD student, Faculty of Sciences, Department of Geography, Tourism and Hotel Management, University of Novi Sad, Trg Dositeja Obradovica 3, Novi Sad, SERBIA. Phone: +381642686290, demirovic.dunja2@gmail.com
[(2)] PhD, University „Business Academy in Novi Sad, Faculty of Economics and Management, Cvećarska 2, 21000 Novi Sad, SERBIA, phone. +38163271089, adrianaradosavac@gmail.com
[(3)] Njegovan Zoran, PhD, Full Professor, Faculty of Agriculture, Department of Agricultural Economics and Rural Sociology, University of Novi Sad, Trg Dositeja Obradovica 8, Novi Sad, SERBIA. Phone: +381214853 393, njegovan@polj.uns.ac.rs
[(4)] Pejanović Radovan, PhD, Full Professor, Faculty of Agriculture, Department of Agricultural Economics and Rural Sociology, University of Novi Sad, Trg Dositeja Obradovica 8, Novi Sad, SERBIA. Phone: +38163600217, pejanovic@polj.uns.ac.rs

For cities, events represent a significant social event or activity which bring together people and are based on one idea. Events contribute to the economic and tourist development of micro destination, sometimes to the whole country. For many cities, events represent the brand and trademark of a destination. The local community should be consulted and involved in the planning, setting-up and realization of the event. It is important that the positive effects of the events go beyond the short-term negative effects for the local community. The local population is a very important player in the development of tourism destinations. The interest of local communities for the development of tourism, in the area where they live, starts from the awareness of the local community that excessive exploitation of resources and poor management decisions can lead to the destruction of existing values in their environment. EXIT festival is held in Novi Sad, on Petrovaradin's fortress since 2000 and is one of the biggest cultural and social projects in Serbia in the XXI century. In this paper, authors have carried out survey among 230 residents of Novi Sad with the aim to investigate the perceptions of the social impact of the festival, whether social impact exists due to the festival in their community. Also, the survey was conducted in order to determine what effects the local population expects as a result of the festival, and which of these effects are important.

----- * -----

Urban Identity and tourism: different people, different looks, one single place

Joana Almeida; Fátima Bernardo; Catarina Faria
Instituto Superior Técnico - Lisbon University, PORTUGAL
joana.c.almeida@tecnico.ulisboa.pt

The concept of urban identity is present in the discourse of politicians, practitioners, and researchers from different disciplines, with a wide variety of conceptualizations and definitions. But, despite the increasing use of this concept, and the recognition of its importance for urban planning (Palmer et al., 2013) current scholarship has not proposed any conceptual framework or tools to make the identity operational (Loupa-Ramos, Bernardo, Ribeiro & Eetvelde, in press). The different meanings presented in literature may cause confusion and weaken its importance.
Considering the interdependence between tourism and urban identity: firstly, the main aspects that tourists value most in urban tourism is the place's authenticity and uniqueness (Turismo de Lisboa, 2013), i.e., its identity: secondly, the relation between tourism growth and identity preservation and enhancement is evident and there is significant research in literature on the impacts of tourism on local communities and heritage; and, finally, the relation between identity as perceived by tourists (out-group or external observer) and the identity of the residents rooted in the relationship with the place (in-group) is key to addressing the identity of historic urban areas.
Considering this approaches to urban identity that emphasises the importance of including different perspectives, the main objective is, through the use of a case study, to understand the impact of tourism development on the urban identity of a place by answering the following questions: 1) What are the contents that shape peoples' place identity as well as the identity of the place? 2) How do these multiple identities converge and diverge in terms of place identity contents? and 3) What are the main conflicts between tourism development and urban identity preservation? These questions are addressed in the context of the growing attractiveness of Lisbon, Portugal, using as case study a historic neighbourhood of this city – the Alfama neighbourhood.

The findings, which are based on a set of interviews with different groups of users, showed the convergent and divergent perspectives between the different groups' views of the neighbourhood identity.
This actor-oriented approach has the aim of providing the understanding that allows more and better informed action.

----- * -----

The Nature and the city: inclusion of natural elements in urban leisure

Maria Luísa Rodrigues
Centro de Estudos Geográficos (CEG), Núcleo de Modelação, Ordenamento e Planeamento Territorial (MOPT), Instituto de Geografia e Ordenamento do Território da Universidade de Lisboa (IGOT-ULisboa), PORTUGAL
rodrigues.mluisa@gmail.com

The inclusion of natural elements in urban environments is normally linked with the green spaces within the cities structure. The relation of nature and city it's viewed as the contact and contemplation of floristic spaces, with the exception of zoos and of the animal species introduction in gardens. So, for some, nature is equivalent to biological elements (biodiversity) and they simply forgot the Earth abiotic elements that sustain the life in our planet.
We will try to show that those abiotic elements (geodiversity) are at least the other half of nature and that we should profit of the valuable ones (geoheritage) not only to preserve them for the future generations but also to promote geotourism. This means that everybody including the tourists can use conserved urban geoheritage elements (geosites) and landscapes to enjoyment and leisure.
The research about geotourism it's quite recent, it starts to develop in the 1990's (see Hose, 2008), but nowadays there are already some publications about the theoretical concepts, not always with the same understanding (Rodrigues, 2012), and its practical implications. Within the geotourism theory and implementation, the urban geotourism it's perhaps the branch less developed when compared with mountain or rural geotourism (Rodrigues, 2013). However it's perfectly possible to develop the urban geotourism according to our definition of geoheritage and geotourism (Rodrigues, 2009 and 2012).
The concept of Geotourism, as we see it, can be considered in a strict or broad sense. Strictly, geotourism is the form of tourism that focuses on the sustainable usufruct and enjoyment of the geoheritage (the Earth abiotic elements that must be preserved due to its high heritage value).This sustained usufruct includes both geotourists and local communities. The first ones enjoy the beauty of the geosites, acquiring knowledge that contributes for its conservation and enhancement. The latter ones enjoy the profit obtained from geotourism, promoting and exploring it in a sustainable manner, valuing the geoheritage that constitutes a natural and local resource. In a broad sense geotourism, as in strict sense, concentrates on the sustainable usufruct and enjoyment of the geoheritage, but includes also the cultural heritage (material and immaterial) of the regions. In this case, geoheritage works as the triggering motivation for geotourism itineraries, but they include also the cultural heritage, functioning as an integrative and a global promotion's model for areas that preserve a particularly rich and diversified heritage. This broad sense of geotourism applies perfectly to urban geotourism. In the cities we can establish geotourism routes were geoheritage can be linked with cultural heritage.
Indeed, the great majority of the urban centers, including some metropolis, were built in areas providing the inhabitants with natural benefits: rivers or littoral environments (rich in natural resources or transportation routes), good agricultural soils (as volcanic ones), hilly landforms (were castles or fortifications stand), natural springs to fulfill the water needs (as karst springs) and other geomorphologic, geologic, hydrologic or soil features. We know that urban centers have increased in size over the time (occupying the rural surroundings), however many of the previous geodiversity still remains perceptible in the urban landscape.
To make it possible it's necessary that researchers (based on historical information and field surveys) and management agents produce and use the available information about urban geoheritage putting it accessible to tourists. This can be done establishing urban geotourism routes (half a day, one or two day itineraries) that can be used by tourists during its city visit.
To illustrate the potentialities of urban geotourism as a complement for urban leisure (including natural and cultural heritage) we will present examples in the city of Lisbon and in the wider Metropolitan Area of Lisbon (AML).

----- * -----

Cultural ecosystems as the fourth leg of the sustainability stool: Benefits for the shrinking city

Sarah Coffin; Emily Piro
Saint Louis University, USA
coffinsl@slu.edu

The common notion of sustainability identifies economy, ecology, and equity as three legs of a stool. Each is an essential component to foster a sustainable place. In this paper we argue that the stool, in fact, has four legs. Culture stands out as a separate but equally essential element of a sustainable place. In particular, artists and creative activity as drivers of cultural identity serve as important contributors to community economic development. A thriving, creative community engenders a 'stickiness of place' that commonly anchors community and economic development efforts. This stickiness is especially critical for shrinking cities as they commonly struggle to remain a viable place for sustainable community and economic activity. Typically included as one of several qualities that define equity, culture is often misconstrued as simply a contribution to the quality of life of a place. In this paper we will show how culture contributes in a distinct and separate way to the sustainability of a place. Additionally, we will demonstrate how culture can serve as an anchor for shrinking cities, supporting that sense of heritage often found in shrinking cities. In fact, we argue that culture serves as an essential foundation for place. Communities which both incorporate the cultural leg of the stool and host a diversity of scale and types of service (e.g. schools, public safety/emergency services, access to housing and transportation) demonstrate a rich ecosystem which may play a key role in sustainability of place. The interplay among the varying services fosters a rich environment from which a more dynamic experience of place emerges. We will show this by profiling the experience of place in three neighborhoods within a typical shrinking city, St. Louis, Missouri. These neighborhoods, according to the literature, represent 'arts-forward' districts, places defined as 'neo-bohemian.' We differentiate among them according to the level of civic involvement in creating the district. One neighborhood represents an experience of place that is civically constructed and hierarchical. A second neighborhood represents a grass-roots experience of place. Our third neighborhood represents components of each, arriving at a middle ground. Ultimately, we will construct a framework that allows us to examine how policy does or does not promote a strong cultural ecosystem and how that supports revitalization in the shrinking city.

----- * -----

Session T4.2 | June 2 | 11:00 – 12:30

Religious objects and events as resources for tourism development in cities – case study: municipality of Bečej (Serbia)

Demirović, D.[(1)]; Radosavac, A.[(2)]; Njegovan, Z.[(3)]; Pejanović, R. [(4)]
[(1)] MSc, PhD student, Faculty of Sciences, Department of Geography, Tourism and Hotel Management, University of Novi Sad, Trg Dositeja Obradovica 3, Novi Sad, SERBIA. Phone: +381642686290, demirovic.dunja2@gmail.com
[(2)] PhD, University „Business Academy in Novi Sad, Faculty of Economics and Management, Cvećarska 2, 21000 Novi Sad, SERBIA, phone. +38163271089, adrianaradosavac@gmail.com
[(3)] Njegovan Zoran, PhD, Full Professor, Faculty of Agriculture, Department of Agricultural Economics and Rural Sociology, University of Novi Sad, Trg Dositeja Obradovica 8, Novi Sad, SERBIA. Phone: +381214853 393, njegovan@polj.uns.ac.rs
[(4)] Pejanović Radovan, PhD, Full Professor, Faculty of Agriculture, Department of Agricultural Economics and Rural Sociology, University of Novi Sad, Trg Dositeja Obradovica 8, Novi Sad, SERBIA. Phone: +38163600217, pejanovic@polj.uns.ac.rs

A large number of tourists are traveling motivated by the desire to learn about the historical and cultural heritage of cities, which represent achievements in various fields of art. Many of the religious sites are among the most visited tourism destinations in the world and in some areas a large number of pilgrimage shrines are simultaneously significant cultural sites. Furthermore, the presence of tourists in a particular area has resulted in a rapid development in terms of accommodation, infrastructure and service. This paper analyzes the potential of religious tourism development in the municipality of Novi Bečej (Serbia). The intend of the discussion is to highlight the importance of religion as an alternative to mass tourism and a tool for attracting visitors all year round. The study is based upon the previous analysis related to religious tourism development in many different areas, where religious shrines and objects are the main economic generator for the local community. Semi-structured interviews were the main data collection tools, and key informants

of this study included 100 tourists who visited the municipality. Based on the survey results, a SWOT analysis was made in order to provide direction for the further development of tourism in the municipality of Novi Bečej. Also, based on the evaluation of all the elements (tourist and geographical position, artistic value, ambiance, attractiveness, construction and fitting of tourism sites) and performed valuation, it was found that the municipality has a very good quality of cultural sites which distinguish the broader regional importance.

----- * -----

Analysis of landscape architecture - and urban design impact on hotel competitiveness

Katalin Juhász-Dóra
Corvinus University of Budapest, HUNGARY
katalin.juhaszdora@gmail.com

Competitiveness is becoming a very common research topic in business administration and also in the sector of hospitality. Conrad Nicholson Hilton, the founder of Hilton company highlighted one of the most dominant factor of the hotel competitiveness in the beginning of the XIXth century with the statement,"Location, location, location is everything!". The hotel professionalist focused on the importance of the destinations, because the aim of the guest travels is usually visiting a destination.
Budapest, the Hungarian capital is home to a number of hotels that combine fascinating architecture with great history. Currently Budapest boats with 16 hotel buildings which belong to the five star hotel luxury category. Several of these buildings are more than hundred years old, have been destroyed, reconstructed and rebuilt based on the infrastructural, landscape changes and functional needs to satisfy the changing needs of the consumers/guests.
The aim of this analysis is to investigate the functional and structural changes of the hotels in Budapest to demonstrate their alteration in service provision and changing role in the community life of the city. The main research question is how landscape architecture and urban design contribute to the competitiveness of each hotel.
The relationship of the hotels to the urban space and landscape is also investigated. The buildings have exterior and interior places, so the study also aims to focus on the community spaces of the hotels, buildings possessing larger size of the community places the influence in the city-life. In this study the relationship of the five-star hotels in Budapest are investigated from three aspects: environmental, economic and social because hotels contribute to the community's economic, social and cultural development.

----- * -----

Geotagged photos from social networks and Urban Tourism: New sources, new challenges

Luis Encalada Abarca; Carlos Cardoso Ferreira; Jorge Rocha
IGOT-ULisboa, PORTUGAL
luisencalada@campus.ul.pt
carlosferreira@campus.ul.pt
jorge.rocha@campus.ul.pt

Understanding how tourists use space in urban environments has practical applications in destination management and planning. It reveals key issues for organizing facilities and essential services, creating new products, impact management, and other purposes related to urban tourism.
Alongside the development of new information and communication technologies, less traditional data sources have been considered in the analysis of urban tourism, particularly for assessing the spatial behavior of tourists. Photo-sharing and instant messaging services, consumer review websites and other Web 2.0 platforms are examples of these new sources, characterized by the prominent participation of users, the volume of user-generated content and its open access.
Several studies have been conducted by extracting data from social media platforms, as these services provide open and well-defined interfaces to interact with. They allow clients to extract the increasingly user-generated content, often with high spatiotemporal resolution, enriched with a set of other attributes such as geolocation, timestamps, individual profiles, etc.
Such crowdsourced data provides new insights and could be used to complement authoritative data. Considering the constraints about collecting data for urban tourism studies, some authors concluded that this information can be used as proxy to measure the attractiveness of places as well as the spatial distribution of tourists in the city.

In this paper, we identify the spatial distribution of tourists in Lisbon based on geotagged photos from two social networks, Panoramio and Flickr. First, the data was retrieved using the respective services APIs and store in a relational database. Then, the geotagged photo collection was filtered in order to classify the photos taken by tourists. Tourist's geotagged photos were mapped and time-space statistics were applied to find the tourists hot spots. We present the conclusions for one of the most touristic areas in the city, discussing pros and cons of this emerging data sources, and also some highlights and challenges of big data/social media on urban tourism management and planning.

----- * -----

Tourism in the paradigm of Smart Cities

Maria da Graça Moreira
GEU, CIAUD, Faculdade de Arquitetura, Universidade de Lisboa, PORTUGAL
gmoreira@fa.ulisboa.pt

According with the organizers of this conference, can be considered that Intelligence represents, from a territorial approach, a new planning paradigm, based on knowledge-based economies and in a globalized innovation.
But till now, this new planning paradigm, in general related with smart cities, has not been researched in all facets, in special the negative ones or at least not completely positive results for urban quality of life.
One of the function that has been profiting from the new technological changes with the use of internet, in a radical new way, is tourism.
The evolution of ICT (Information and Communication Technologies) from static information till relational one, and the possibility of secure transactions has a very fast and interesting development.
From the national level till the local or neighbourhood levels the technology is changing the way information arrives to local and foreign population. But urban planning is far from the capacity of control or preview this new ways of appropriation of urban space.
The easy way of spread touristic information by public services, like municipalities, allowing that each territory can publicise what they consider more interesting or where they want invest, or yet the place is more innovative, without any intermediation is very important.
The ""anarchic"" way how in touristic, or not so much, areas private owners of local housing put in the international market their apartments, in undifferentiated buildings and without consent of the neighbours is another kind of new situation that can create in some neighbourhoods a lot of problems.
In the first moment of the use of ITC it seems very helpful for everybody but more and more problems are emerging at local level and reported in newspapers.
This presentation intends to analyse some of these new challenges in the touristic activity at urban and local level and reflect on new solutions for these new sort of problems.

----- * -----

Session T4.3 | June 2 | 16:00 – 17:30

Holiday apartments and displacement of communities. New challenges for public policy

Agustín Cócola Gant
Post-Doctoral Researcher
Centre of Geographical Studies University of Lisbon, PORTUGAL
agustincocolagant@campus.ul.pt

Background
The phenomenon of holiday apartments and short term rentals are changing patterns of consumption of housing in several cities. Communities across Europe stress the fact that the transformation of housing into accommodation for visitors excludes residents as this activity takes a large number of units out of the housing stock, especially after the spread of portals such as Airbnb. Importantly, this phenomenon opens a new theme in tourism research and policy as it shows how this new form of tourism accommodation intertwines with issues concerned with housing rights and regulation. In fact, there is a complete gap in academic research regarding the way in which this phenomenon affects local communities. In relation to this, short term rentals are accelerating processes of gentrification-induced displacement. Consequently, the expansion of the phenomenon can increase urban inequalities and so it should be addressed by policy.
The paper will examine the case of the Gòtic neighbourhood in the historic centre of Barcelona. Barcelona is the most visited city in Spain and is receiving more visitors than all Portugal. At the same time, in Europe it is

ranked third in Airbnb number of apartments listed, only behind London and Paris. The growth of tourism was actually seen as the success of the Barcelona model of urban regeneration and, moreover, further tourism was part of the 'fast' policy solution after the 2008 crash and consequent crisis. However, this growth has led to community demands and concerns about sustainability and the way in which residents are displaced by visitors. In fact, the lack of regulation in tourism policies was the main debate during the past local elections in May 2015, and not surprisingly, the new elected government promised that the control of holiday apartments would be a central element of their urban policy.

The paper is part of my post-doctoral project "Struggling with the leisure class. Tourism and gentrification". The project is funded by the Portuguese National Funding Agency for Science, Research and Technology (FCT).

Methodology and sources

The research question that the paper address is to identify the impacts of short term rentals in the historic centre of Barcelona. The research used a mixed method approach with the intention of gaining complementary data and so with the aim of examining the research problem from different ways. On the one hand, I gather quantitative data from the portal Airbnb. This data shows the number of houses listed and their location. Using GIS I have completed the map of holiday apartments in the historic centre of Barcelona. At the same time, I have implemented a survey with 220 respondents. The survey shows similar quantitative results but, importantly, it also provides with an understanding of why this phenomenon is regarded as a displacement threat. Quantitative data are also supplemented by other secondary sources such as the Census of Households and Buildings of the Barcelona City Council. On the other hand, the qualitative research adopted an ethnographic approach, especially by the implementation of semi-structured interviews and participant observation. I have implemented 56 in-depth interviews with long term residents (41) and key informants (15) such as landlords, letting agencies and policy makers. Interviews emphasise how residents experience the phenomenon of holiday apartments on a daily basis, especially the way in which displacement and the difficulties in accessing to housing occur. I have also been a participant observer in community meetings aimed at addressing the impacts of the phenomenon.

Indicative findings of the paper

In examining the impacts of short term rentals in the historic centre of Barcelona, the paper will stress two main findings. First, it will show that in some areas 19% of housing has been converted into tourist residences. Especially important is the fact that these areas overlap with the location of hotels and so the overload of tourism accommodation is the cause that residents and community organisations blame tourism for the progressive increase of rent prices, gentrification and daily disruptions. Second, and as a result, the paper will emphasise the way in which this phenomenon has been the cause of extensive displacement of residents. On the one hand, the conversion of housing into tourist residences has been the cause of evictions and processes of direct displacement. On the other hand, as 19% of housing stock has been taken out, the phenomenon causes other indirect displacement pressures such as exclusionary effects and affordability problems.

Theoretical and practical implications

Consequently, the paper will emphasise the extent in which this form of tourism accommodation can accelerate gentrification. In this sense, the paper will contribute to fill the gap in the literature as there is a lack of research that addresses this issue. Importantly, the paper will stress the need of a better regulation as this phenomenon poses new questions for public policy. On the one hand, the spread of holiday apartments has anticipated policy and so there is the need to regulate it. On the other hand, the example of short term rentals shows that the need of regulation of tourism accommodation should work hand in hand with other areas, especially housing. The intention of the paper is, consequently, to inform policy on the way to build a more sustainable future for European tourist cities and so to move towards a reconciliation between the lived space of residents and the spaces visited by tourists.

----- * -----

Democracy, protest, and public space: Building spaces of resistance

Jeremy Németh
Associate Professor, Department of Planning and Design, University of Colorado, Denver, USA
(2015-16 Visiting Professor at the Universitat Autònoma de Barcelona and Fulbright Scholar at the Università degli Studi Roma Tre)
jernem@gmail.com | jeremynemeth.com

Recent events illustrate the importance of physical public space for political action, protest, and other expressions of dissent. From Zuccotti Park to Taksim Square, public spaces play a pivotal role in modern democratic discourse, but little is known as to the role the physical space itself, as well as its surrounding

area, in fostering this discourse. The question guiding this research is why certain spaces tend to foster and facilitate political education and engagement, I analyze the sites of several recent major political demonstrations across the U.S. to determine what makes a space ripe for protest and other forms of dissent. I find several common features across almost all spaces. On the site level, nearly all spaces are publicly owned, have few behavioral or access restrictions, and are located very close to houses of government. On the neighborhood level, nearly all of the protest spaces are located in very dense, walkable/bikeable, transit-heavy districts with a disproportionately high percentage of social movement organizations. Unexpectedly, surrounding neighborhoods were no more racially, ethnically or economically diverse than the rest of the city and only one was located near the city's population center of the city. Although neither causal nor statistically significant, the findings suggest several important patterns worth further exploration.

----- * -----

An approach to improve effectiveness of urban projects implementation with multiple landowners

Joana Almeida; José Antunes Ferreira; Ana Morais de Sá; Beatriz Condessa
Instituto Superior Técnico - Lisbon University, PORTUGAL
joana.c.almeida@tecnico.ulisboa.pt

This paper focus on the efficiency of the execution of urban projects with several landowners, namely on the bank financing and management process issue. Several authors characterize the different land development models involving several landowners, and define the main financial systems (Mittal, 2014, Van der Krabben and Jacobs, 2013, and Turk, 2008), but bank financing for land development projects involving several landowners is very rarely mentioned in the literature.

In Portugal, urban projects involving several landowners have relatively low rates of execution, and those have been partially or totally executed are based on public funding or depend on one principal landowner/developer driving the project and organising finance (more economically solid and with easier access to bank funds) (Costa, 2014; Condessa et al, 2013; Carvalho, 2012). International practice shows there are ways to obtain bank loans, particularly when landowners seize the initiative and form an association (Valadier 2001).

Having identified the main reasons for the low level of execution of urban development projects involving several landowners, making them unattractive to banks, recent research (Almeida et al 2014) verified that banks will only consider funding projects with one borrower (which means the owners must come together and form an association), that are in prime locations and which can prove to be economically and financially viable. These (new) requirements also mean local authorities, property developers and banks are adopting a new approach, which is (clearly) visible in the improvement of the technical documents drawn such as business plans. Those research findings present the challenge to develop more research in analysing funding and management models in order to improve the level of execution for multiple owner urban projects in Portugal, based on the assumptions of the project's economic and financial viability and the existence of a properly certified managing body.

In this context, this paper presents a proposal of a management process based on the idea of a closed real estate investment fund, hereinafter referred to as Closed Fund (CF). The idea is to use the CF to constitute a cooperative urban project implementation solution that integrates both public (local government and other public institutions and administration companies) and private (property owners, investors, tenants, among others) interests.

This management model, which is less common in spatial planning processes, consists of property owners who become holders of fund investment units in proportion to the value of their properties. In certain cases there may also be monetary shares. The shareholders (property owners, public investors, construction company and financial institution) acquire participant units, receiving a return on investment at the end, after the fund's termination, in either money or material assets. They can intervene, during general meetings, in changes to the investment policy and the dividend policy. As the project proceeds, the holders may, having notified the management company, sell their shares to third parties. At the end of the project, reimbursement may be made financially, in material assets or in a combination of the two. Whenever the return involves material assets, there must be a property valuation, a written agreement and acceptance by all fund participants.

After analysing some practices of CF in Portugal and simulating a CF in some detailed plans partially or non executed, one can conclude that this kind of CF mechanism makes possible to achieve higher execution rates for urban projects with several landowners. Within this context, the CF seems adequate because it facilitates the management of the execution of an urban project with multiple owners that are being bank financed. The paper clarifies the requirements and procedures, the organizational structure and the

stakeholders involved, and the main advantages and disadvantages of this model are highlighted. For example, on one hand the increased effectiveness and efficiency, greater integration, higher credibility and trust reduction on risk, responsibility and liquidity problems by the property owners and municipalities and, on the other hand, the heavy financial burden associated with the organizational structure which supports the closed fund, is one of the main disadvantages.

----- * -----

Track 05

GOVERNANCE AND POLICIES: *towards learning cities*

Chair: Fernando Nunes da Silva, Universidade de Lisboa, Portugal

Scientific Committee: Eran Razin, The Hebrew University of Jerusalem, Israel
Maria Prezioso, University of Rome Tor Vergata, Italy
Rocky Piro, Denver Department of Community Planning and Development, USA
Sarah Coffin, Saint Louis University, USA

Being nowadays a concept widely used by economic and political institutions, governance is a set of mechanisms, processes, relationships and institutions through which citizens exercise their interests, rights and obligations (UNDP, 1997). The application of this concept to the territorial dimension is transposed by Davoudi (2008) to the concept of territorial governance: a complex set of values and resources, a political and economic fact or a social construction deriving from the collective action of groups, interests and institutions.

It is within this framework that learning strategies for regions and cities are drawn - involving communities and institutions - thus having a key role to play if decisions are made in a participatory way (UNESCO, 2013). Making use of their social capital, all stakeholders converge to an explicit commitment to placing innovation and learning at the core of development.

This track will address these cities strategies/policies, the models of cooperation and partnerships between players and their participation in the construction of development (governance).

Comparing Public Housing Revitalization in the US and Portugal

David P. Varady; Fatima Matos
University of Cincinnati, USA
david.varady@gmail.com

Public housing has a bad reputation in North America and in Europe. Most people believe that public housing is ugly, poorly managed, crime ridden and mostly occupied by ethnic minorities (Bloom, Umbach, & Vale, 2015). To change this image cities across the US and across Northern Europe have carried out public housing restructuring projects, sometimes emphasizing rehabilitation but more often demolition and replacement. Policymakers and academics have devoted increased attention to similarities and differences between public housing restructuring projects in the US and those in Northern Europe (see for example, Dekker & Varady, 2011). Little has been written about public housing revitalization in Portugal from a comparative perspective. Our paper tries to close this gap.

Perhaps the absence of research on Portuguese public housing revitalization is not surprising. Scholars have classified Portugal as well as Spain and Italy as Mediterranean countries with housing policies different from Northern Europe. A key difference is the lower incidence of social housing (Matos, 2012, Matos et al. 2015).Although the North-South dichotomy has some validity it overlooks the fact that Portugal is implementing a large scale and significant public housing restructuring effort in its two main urban centers, Lisbon and Porto.

Our United States-Portuguese comparison will be carried out at two levels. At the national level we will use desk research to compare America's HOPE VI program and Portugal's public housing revitalization strategy (Estratégia Nacional para a Habitação 2015, National Strategy for Housing) with respect to: design quality, public-private financing, income and tenure mixing, displacement, commercial revitalization, citizen participation, and efforts to promote self-sufficiency. At the individual city-level, we will compare CityWest (Cincinnati, Ohio's HOPE VI site) and Alta de Lisboa (one of Lisbon's public housing revitalization developments) relying on site visits, published materials and semi-structured interviews. We expect to find more similarities than differences between the two countries' revitalization programs e.g. that both countries are embracing public-private partnerships as an implementation mechanism.

References

Bloom, N. D., Umbach, F., & Vale, L. J. E. (2015). Public Housing Myths: Perception, Reality and Social Policy. Ithaca, NY: Cornell University Press.

Dekker, K., & Varady, D. P. (2011). A comparison of Dutch and US public housing revitalization policies: The similarity grows? Urban Research and Practice, 3(1), 123-152.

Estratégia Nacional para a Habitação 2015, National Strategy for Housing, Resolução do Conselho de Ministros, Diário da República 1ª série, nº 196, de 15 de Julho de 2015

Matos, F.L. (2012). Recent dynamics in the Portuguese Housing market as compared with The European Union. Bulletin of Geography Socio-economic series, 18, 69-84

Matos, F.L., Carballada, A.M, Marques, T.S., & Ribeiro, D. (2015), Housing in a time of crisis: Portugal and Spain an overview, in European Network for Housing Research , Proceeding of the Annual Conference ENHR 2015 Housing and Cities in a time of change: are we focusing on People?

----- * -----

(How) Can Institutional Design of Urban Governance Promote Learning Cities?

E. R. Alexander
University of Wisconsin-Milwaukee, USA/APD, Tel Aviv, ISRAEL
eralexander96@gmail.com

This track's theme: cities' "models of cooperation and partnerships" implies the institutional design (ID) of urban and regional governance. Cities must cope with complex problems and provide critical services. These are some of the challenges facing ID of urban and regional governance. Another challenge: framing cities' governance to generate policies that reflect their "commitment to innovation and learning". This paper addresses the questions: how should ID frame cities' governance to enable them to act effectively toward achieving their goals, and can ID do this? First I define and describe ID; then I discuss cities' problems and issues of urban and regional governance that suggest some criteria for ID. Next I review some cases of ID of urban and regional governance, to finally develop their implications for answering the original questions.

Institutions are "the rules of the game in society": ID means designing institutions. ID involves devising and realizing rules, procedures and organizational structures that will enable and/or constrain behavior and action

to accord with held values. Who does ID, where and how? What knowledge is there, based on theory and experience, which can be applied in ID? ID can be divided between three levels. The macro-level is so-called "constitution-writing"; the meso-level relates to policies, programs and organizations, and the micro-level addresses intra-organizational structures and procedures. Knowledge for ID is limited, but there are some useful concepts and models. Among these are governance, from political science and public policy, games theory and transaction cost theory models from institutional economics, and agency theory, analyzing interactions in principal-agent terms. But perhaps the main source of knowledge for ID is experience, based on intuitive ID practice throughout human societies.

Learning from experience demands systematic case study and analysis. What are the relevant issues for ID of urban and regional governance? Cities' problems vary widely, and include social polarization/ segregation, environmental degradation, crime, poverty and functional breakdowns in services: traffic congestion, open sewers, slums and homelessness, and illiteracy. These challenges to urban and regional governance may be related to ID issues such as the distribution of functions between levels/scales of governance: national to neighborhood, and the relations/interactions between the public, private and "third" sectors: civil society, stakeholders, and interests. Possible criteria for models of urban and regional governance (e.g. effectiveness, authority, and accountability) are reviewed and their ID implications are discussed.

Five cases of ID of urban and regional governance are reviewed: Amsterdam, Netherlands, metropolitan-regional governance; regional growth management in New York, USA and S.E.Queensland, Australia; city-regional governance in Chicago, IL, USA, and Shanghai, China. Review of ID experience and detailed analysis of these cases enables us to draw some practical lessons for ID, and to offer partial answers to the original questions: whether ID can frame urban and regional governance to make cities more effective in general, and to promote "learning cities" in particular.

----- * -----

Planning practice and academic research – views from the parallel worlds

Robin Goodman; Paul Burton; Robert Freestone
RMIT University, AUSTRALIA
robin.goodman@rmit.edu.au

Academic planners and urban theorists frequently premise their work on the notion that they are contributing knowledge which will improve real world practice. Likewise, city managers and urban planners endeavour to base decision within their complex work on current thinking representing best practice. Yet these aspirations rarely directly connect. Academic research is frequently driven by intellectual concerns at one remove from practice but even when the focus is explicitly applied there are barriers for practitioners in utilising academic research. Academics write in language which is often dense and difficult to comprehend, publish their findings in specialist journals behind pay walls, address problems which to practitioners may not seem relevant, and lack the urgency in producing results so often required to address real world problems (Taylor and Hurley 2015). The bridge between practitioners and academics can sometimes seem very far apart.

This failure of one group to effectively communicate with the other comes at considerable mutual cost. The return on the time and resources which have gone into producing academic research falls short on expectations while policy-making can still proceed ignoring evidence of best practice and likely consequences. As both university research and public policy making are funded publicly, the two activities ought to be better integrated.

This paper reports on a survey conducted in 2015-16 of both academic and practitioner urban planners in Australia and New Zealand, which amongst other matters asked respondents to consider the state of the theory/practice divide. The survey was prompted in part by a recent survey of European planning academics and practitioners (Kunzmann and Koll 2015) which produced a fascinating snapshot of views on the current state of planning. Our antipodean version of the survey asked respondents to comment on their work and its relationship to theory and/or practice. Academics were asked how they sought to influence planning practice and policy and how effective they felt they were at this. Practitioners were asked to comment on how much they utilised academic research and whether they found it relevant. With approximately 160 respondents the survey provides a rich compendium of views and insights into the vexed issue of the theory/practice divide. The results will resonate with planners from many other jurisdictions on this widespread problematic issue.

References

Elizabeth Jean Taylor & Joe Hurley (2015): “Not a Lot of People Read the Stuff”: Australian Urban Research in Planning Practice, Urban Policy and Research, DOI: 10.1080/08111146.2014.994741

Klaus R. Kunzmann & Martina Koll-Schretzenmayr (2015) A Planning Journey Across Europe in the Year 2015, disP - The Planning Review, 51:1, 86-90, DOI: 10.1080/02513625.2015.1038081

----- * -----

Session T5.2 | June 1 | 14:00 – 15:30

Citizen Engagement in Indian Urban Planning: A journey from city development plan to smart city plan

Aditi Chaturvedi
Researcher (Masters of Urban and Regional Planning)
Center of Environment Planning and Technology, Ahmedabad, INDIA
Email: aditi.chaturvedi.mplan14@cept.ac.in

India's population is 1.21 billion, of this 30% lives in urban areas or cities and the rate of urbanization increases at 2.4% every year [1].In the coming 20 years, India will have 68 cities with a population over one million up from today [2]. This population is comprised of people of all kinds, types and sizes who are extremely different in their social statuses, jobs, cultures, religions, beliefs, food, clothing, temperaments, etc. This massive urbanization has in turn produced a huge strain on the availability of resources and infrastructure in urban centres. To accommodate this massive urbanization, India needs to find smarter ways to manage complexities, reduce expenses, increase efficiency and improve the quality of life depending upon citizen's need.

However effective urban planning intervention can result in sustainable future. That can be achieved by considering the citizens voice and decision making. For having accountability and transparency, engaging citizens in making of city development plan is very important. Civil liberties provide people to have their opinion on the government action plan. In an increasingly complex world, citizen's input is a critical resource for policy-making. The past trends of citizen engagement in urban planning for Indian cities like legislation before 1900, town planning acts and changes in citizen participation from 1900-1950 and 1950 to 1992 demonstrates various strategies used by government to increase public satisfaction. The main consent for citizen participation introduced with 74th constitutional amendment act in cities of west Bengal, Kolkata, Chennai etc.

Meanwhile for betterment in living conditions of urban areas various city concepts are being introduced like intelligent city, sustainable city, digital city, global city and now smart city. So in order to have a city equipped with basic infrastructure to give a decent quality of life, a clean and sustainable environment through application of some smart solutions government of India identified 98 cities to be converted as smart city for which Special Purpose Vehicle is created for each city to implement Smart City action plan. Smart City Mission is probably the first urban intervention which has adopted 'Bottom Up' approach in reality. Citizens, Commissioners, Mayor are intensely involved in citizen engagement programme. Different types of 'Online' and 'Offline' techniques were adopted to engage the citizens.

In Indian context the smart city implies to city planning based on economic, social, environmental and culturally sensitive policies that allow everyone to improve economically as the physical area improves. But in between the growth and development to achieve smartness; the question of inclusiveness arises i.e. how the citizens are engaged in policy making, development plan and proposed projects. The growth trends of Indian cities shows that time to time as the new concept of modifying cities came up, increased poverty and inequality and ultimately results in unsatisfied citizens. Cities need planning which recognizes that every individual has the right to full and equal participation in the built environment and they can shape their own environment to meet their own needs. In order to fulfil citizens need, their participation plays very important role. So smart city mission is engaging public to give their opinion on each and every project and the study is to analyze citizen engagement in smart city planning and implementation.

The paper is the study of past to present trends of citizen engagement in Indian urban planning process in order to analyse the dramatic change in citizen involvement from CDPs and MPs to SCPs. The methods adopted are both Qualitative and Quantitative to analyse the total number of citizen participation through all mediums. So out of the 100 smart cities mission 20 cities are selected to be converted as smart city in the first phase. The ranking given by central government on 'mygov.in' for the selected 20 cities Indore is selected as good facilitator for citizen engagement. So the study will focus on citizen participation in Indore smart city development plan to review the performance of tier II city for public engagement.

Sources:
1. Source: India Demographics Profile, 2013
2. The report on 'India's Urban Awakening' by McKinsey Global Institute

----- * -----

Citizens' engagement in drawing strategies/priorities towards improving urban quality of live

Lurdes Barrico; Helena Freitas; Paula Castro*
Centre for Functional Ecology, Department of Life Sciences, University of Coimbra, PORTUGAL
lbarrico@iol.pt; hfreitas@ci.uc.pt; pcastro@ci.uc.pt
*contact person

Local authorities play a crucial role in providing public goods and services to the municipalities, and the citizen satisfaction surveys are essential to understand the individuals' evaluation regarding the urban development. The 21st century has witnessed an increase in surveys conducted in cities to obtain the peoples' opinions on their quality of life. These surveys allow capturing the perception of the citizens about the various components of the quality of life, and thus obtaining an additional element to support decision-making relating to public action fields, strategies, and priorities.

Europe is characterized by a high degree of urbanization, where about 73% of the European population lives in cities. Therefore, is very important at European, national, regional or local level, to understand what is happening economically and socially in Europe's cities. The quality of life is increasingly considered as an essential element for the development of cities, since a good it is crucial for attracting and retaining a skilled labor force, businesses, students, tourists and, most of all, residents.

The municipality of Coimbra, located in the Central Region of Portugal, a centre of Portuguese education and culture through the centuries, owns a unique monumental, artistic and literary heritage. In 2013 the University of Coimbra – Alta and Sofia were included in the UNESCO World Heritage List. This municipality has a set of collective facilities of excellence, placing it in a privileged position in the network of urban centres in the country. The municipality has about 320 km², 143,396 inhabitants and its city is one of the country's main urban centres.

The financial crisis has forced governments to reduce spending on public services in order to curb public debt and benefits. Municipal authorities deal with limited resources which need to be targeted to activities that most benefit their citizens. Understanding citizens' levels of satisfaction on the quality of services provided and how they feel about urban development are important assessment mechanisms for understanding the level of performance of governmental agencies, particularly at local level. Therefore, this study analysed the citizens' perception about the development of the municipality of Coimbra, particularly, to evaluate the services provided by the local authorities, contributing to the overall quality of life perceived by each one. With respect to the methodological approach, this assessment was based on a questionnaire sent by e-mail and answered by citizens exclusively residing in the municipality.

A total of 382 questionnaires were validated. Most of the respondents reported that they were satisfied with the quality of life provided by the municipality and agreed that Coimbra was a good place to live. Overall, the respondents expressed a high level of satisfaction regarding the economic and socio-cultural conditions offered. In new economies, attracting human capital means attracting firms and investment and thus, economic development for cities. For this reason, the key priority for the local authorities is ensuring that a good basic standard of services is available locally. The identification of the cities with better conditions to attract investment and human is a useful tool to policy-makers, and in an European perspective, an important asset to justify the allocation of funds in order to assist sustainable economic development.

Health services and education were selected by respondents as the two issues with better conditions. They were considered the most important determinants of life satisfaction. Education not only improves the qualifications and competences of a person but also their subjective well-being. They also increase access to paid work and economic resources that increase the sense of control over life. Health services are fundamental to well-being and form the largest sector of employment and expenditure among the services of general interest.

Nevertheless, the respondents have chosen several areas to be particularly important to the municipality and should be prioritized by authorities. Preferences were focused on the economic and social strategies, such as the "support for industry, trade and establishment of companies", the "accessibility for people with disabilities", and the "support for the elderly". Cities should encourage job creation and be places of advanced social progress. They should also foster high quality of life and well-being through the existence of strong social services, where the elderly can live their lifes with dignity and autonomy and where people with disabilities may be more independent. Most cities will face the challenge of adapting to the needs, demands, and requirements of an ageing population, since a large share of the elderly population will need some form of daily care.

The socio-demographic profile of respondents showed to influence their opinion, being the age group that influenced the most. Those who were between 18 and 25 years old expressed significantly higher levels of satisfaction with the majority of the issues examined in this survey.

The future success of the urban development model is of extreme importance for the economic, social, and territorial cohesion of the European Union. It is, therefore, of the utmost importance that cities are allowed to

develop in a balanced and socially inclusive way, strengthening their competitiveness and attractiveness. The respondent's opinion may be very useful in order to achieve a deeper understanding of the local conditions. This type of assessment is fundamental in defining urban policies and should be considered by municipal authorities when drawing up strategies for the improvement of urban planning strategies and improvement of the overall quality of life of residents.

----- * -----

Indicative of the Good Governance: assessment of the degree of participation of the inhabitants in the large urban projects. Case: modernization project of the metropolis of Constantine and master plan of Brisbane

Nedjima Mouhoubi [(1)]; Souad Sassi Boudemagh [(2)]
[(1)] PhD Student: dept. projects management. University Constantine 3. Constantine, ALGERIA.
Address: Semaoune, Béjaia 06020. Algeria
[(2)] Professor: dept. projects management University Constantine 3. Constantine, ALGERIA
Address: 06 rue Bouali Said Constantine 25000. Algeria
mouhoubi_n@outlook.com; souad44@hotmail.com

The social movements that have started in the 1950s in the United States and to the years 60 in Europe, and which are currently continuing, are a sort of protest against the methods followed by the power and questioning of the legitimacy of the public authorities and their ability to manage the life of the community. These movements focused on social issues and the day-to-day concerns of the citizens are not limited to the problem of poverty and the social question, they are also hitched to the development and the urban in general.

Thus, reforms both administrative, policies that urban areas have been introduced in several countries; the search for a form of governance called "good" has become inevitable then.

At the end of the 1980s, the notion of governance is made to science policy and then the urban, in an attempt to definition, which encompasses the different meanings and uses of the term "governance". the journal Human Sciences The defines as "a mode of government organized on the basis of a cooperation, a partnership or a contract between a plurality of actors as well as public private"(Human Sciences. 2004).

The governance in the urban is a system of local government, which binds between public institutions, social actors and private organizations in the development of collective choices to make effective the public action (Ascher F. 2001)

Good urban governance cannot be dissociated from the participation of and partnership, it refers to an approach that brings together and involves all the urban actors in decision-making in empowering them in a process of consultation, partnership and negotiation.

The governance in the urban being outcome of the bursting of the power and the multiplication of actors, it is the organization of these actors, the negotiation between them, the cooperation in the framework of the project and the coordination of their actions.

Then comes the instrument of good governance which has for ultimate goal of the reality and to support participatory democracy to know "the participation", the operation Bologna in Italy " … was an opening toward a more democratic approach of planning in leaving to express the opinions and wishes of the users of the city" (INGALLINA P. 2001. P85) as well as the operation of the Halles de Baltard in Paris in 1968, which is also an experience without precedent in the area of participation of the Capita (more than 1 000 people) in the definition of their framework of life, through associations and circles intellectuals; these are examples of the successful participation of citizens in urban issues.

This new knowledge baptized "collective project-shared" is distributed very rapidly in the world; however, it should be noted that the participatory approach was (is) not only matter of great dissemination, but also topic of research and development through the innovation of the methods and tools for its realization. Currently, there are several forms and ways of implementing the Participation, passing through a display for simple information to sites and web page toward public workshops of urban planning for a co-development and even go to a delegation of power.

In this article, it is a question, not only to analyze this new approach through two examples by comparing them but also to present the new urban planning, which develops in relationship with this approach to know the URBAN project.

As well, the light will be placing on the urban project and the participation of the inhabitants when it comes to major urban project and this based on two examples of large urban projects.

The first is the master plan of Brisbane in Australia who was able through participation tools involve the inhabitants of the city in a complex process of urban transformation of the city; and the second is the Project

on the modernization of the metropolis of Constantine in Algeria, which on the contrary has not found an echo in this dimension.
The objective is then to assess the degree of participation of the population in the urban issues on a large scale for the realization of the participatory democracy and good governance, in examining the laws and regulations of the two countries that relate to the question of participation and based on the two urban projects cited below.

----- * -----

Building a prospective participatory approach for a long-term agricultural sustainability in the Lezíria do Tejo region (Portugal)

Patrícia Abrantes[(1)]; Margarida Queirós[(1)]; Guilhem Mousselin[(2)]; Claire Ruault[(3)]; Étienne Anginot[(4)]
[(1)] CEG, IGOT, Universidade de Lisboa, Rua Branca Edmée Marques, 1600-276 Lisboa, PORTUGAL
[(2)] UMR 5139 PASSAGES, Université Bordeaux Montaigne, 12 Esplanade des Antilles, 33607 Pessac, FRANCE
[(3)] GERDAL, La Houdinais, 35160 Le Verger, FRANCE
[(4)] LEADER France, 14 avenue Pierre Leroux, 23000 Guéret, FRANCE
patricia.abrantes@campus.ul.pt; margaridav@campus.ul.pt; g.mousselin@gmail.com; c.ruault.gerdal@wanadoo.fr; eapro@wanadoo.fr

Agriculture in metropolitan regions plays a fundamental role to ensure local food supply, urban-rural linkages, and in recent years particular attention is being payed to its role as an ecosystem service provider. However agriculture in periurban contexts suffers from several treats such as pressures from urban encroachment and farmland abandonment, intensive farming pollution, and more generally climate change. These drivers may undermine its sustainability over time.
Several authors consider that preserving and boosting sustainable agriculture at a city-region scale is an enormous treat for territorial development and spatial planning that must involve new interactions between local stakeholders and new multilevel governance mechanisms (Leck and Simon, 2013; Mercier et al., 2014; Vandermeulen et al., 2006). Besides, linking researchers and practitioners can also foster engagements in supporting agriculture sustainability in particular complex territories. Hence, participatory processes such as participatory action research to support diagnosis assessment, prospective analysis and scenario building are well documented approaches to guide decision-making. Engaging people in processes and decisions that affect their lives and breaking gaps between civil society and policy-makers contribute to better achieve sustainable outcomes (Kindon, 2010).
The following research is conducted in the context of the international DAUME project that aimed to build participative prospective territorial scenarios toward sustainable agro-urban systems (Valette et al., 2012), and to explore a participatory prospective process relating stakeholders, policy-makers and researchers in the periurban agricultural region of Lezíria do Tejo (Portugal) to foster agriculture long term durability.
Thus, departing from two particular questions – how to engage so many different stakeholders in a vast region and how to link research findings towards building a stakeholders' common solutions – we propose a three-step methodology exploring geographic information and prospective participation, aiming at assess how local stakeholders (farmers, local policy-makers and technicians, farmers and rural development associations) of the Lezíria do Tejo region perceive agricultural problems and challenges so to recommend alternative solutions for its long-term sustainability. We also aim to strengthen scientific research and action bonds, by working together with stakeholders in the construction of the visions for the future.
The research methodology departs from GIS analysis to define the case studies where interviews to stakeholders were made. Then, a set of 34 interviews enabled to diagnose problems and challenges and build questions to be threatened in two workshops, while they also contributed to establish trust with stakeholders by understanding their needs and aspirations, interests and actions. Finally two local workshops were prepared and accomplished in the region with the participation of a sample of the interviewees and also open to the community with the aim to debate how they perspective the future for agriculture in the region and the solutions they present. The prospective analysis with stakeholders started on the basis of three major questions: what can we do in the future for agriculture main issues and how? With whom? What proposals and work tracks? The results were fruitful some solutions were presented by stakeholders, relating questions for the future and possible solutions (as figure 1).

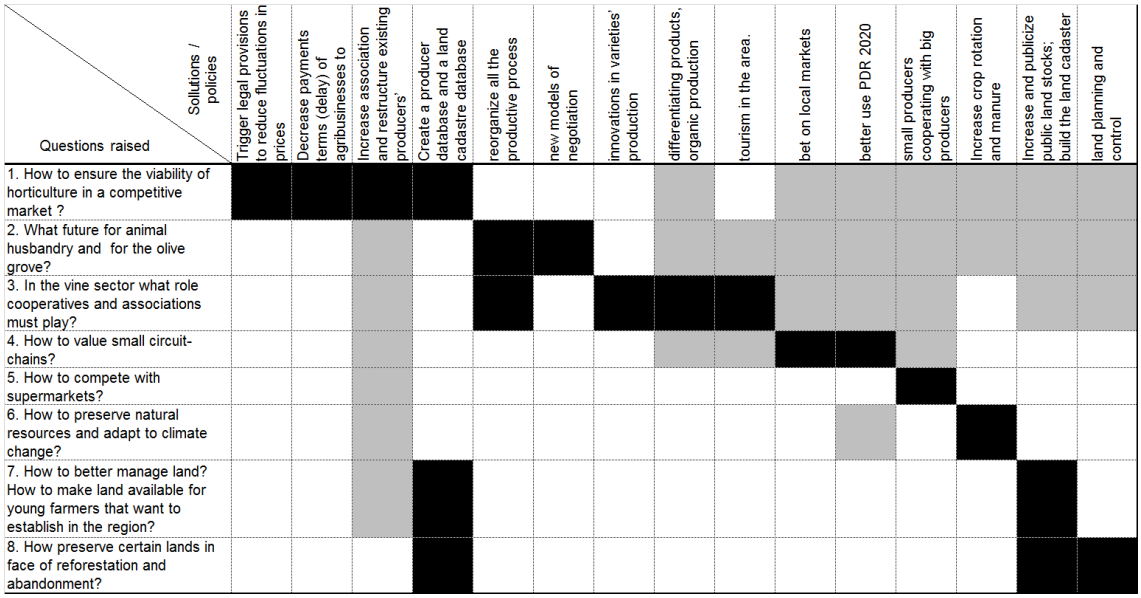


Figure 1 – Matrix of questions and solutions achieved from stakeholders and researchers interaction
Source: DAUME, 2014

In general all converged that the lack of organization, the individualistic attitude of farmers as well as the lack of trust among them are transversal issues. Also diversifying the activity (through small supply chains, tourism, and niche products) is needed to boost competitiveness while supporting small farmers. Finally they also agree that a better land use planning and database supporting the demand of land by farmers could contribute to increase several agricultural productions and reorganise this territory apparently lacking land.
From a research perspective this participatory approach relating researcher and practitioners contributed to bridge the gap between both sides, farmers and policy-makers, and practitioners and academia. For instance, the researchers interactions with participants result in some exchanges as the director and producer of the wine cooperative and representative of the regional office of agriculture, showed willingness to collaborate in further team initiatives. Therefore prospective land use scenarios are being built with stakeholders and simulated with GIS tools. These land use scenarios will be presented and discussed in the future seminar and visual results will allow to identify territories vulnerable and at risk so to better build participative spatial planning and rural development policies for the future..

Bibliography

LECK, Hayley and SIMON, David (2013) Fostering multiscalar collaboration and co-operation for effective governance of climate change adaptation. Urban Studies, 50 (6) : 1221-1238.
KINDON, Sara (2010) Participation. In Susan Smith et al. (eds) The SAGE Handbook of Social Geographies. London (SAGE : 517–545).
MERCIER, Guy et al. (2014) L'urbanisation diffuse : un difficile mais inévitable défi d'aménagement. Cahiers de géographie du Québec, 58 (165) : 323-327.
VALETTE, Elodie et al. (2012) Sustainable cities vs sustainable agricultures. A scientific project on agro-urban systems, North and South of the Mediterranean. Wageningen University, The Netherlands, International Conference on Multifunctional Agriculture and Urban-Rural Relations "Agriculture in an urbanizing society", 1-4 April.
VANDERMEULEN, Valerie et al. (2006) The importance of the institutional environment on multifunctional farming systems in the peri-urban area of Brussels. Land Use Policy, 23 (4) : 486-501.

----- * -----

Session T5.3 | June 1 | 16:00 – 17:30

Clarifying the scope of Urban and Peri-Urban Agriculture to improve its competitiveness

Cecília Delgado
Laboratório Nacional de Engenharia Civil – Núcleo de Estudos Territoriais e Urbanos e CICS-NOVA, Universidade Nova de Lisboa, PORTUGAL
cdelgado@lnec.pt

This paper intends to be a first stage approach to the APU state of Art in Portugal having as focus its territorial scope. We argue that Portuguese urban and Peri-Urban Agriculture, being a relatively new practice, is still focused in food production, without taking into account food as part of the urban system.
To sustain our argument several APU international definitions are presented and analysed through a temporal and conceptual perspective. Other two instruments were used: (1) interviews to relevant key actors; (2) Web search based on key words. The present research is part of a more broad project research on the Portuguese APU state of art, which additionally includes: literature review; field visits; knowledge networking; events participation; categorization of best-practices experiences identified by a set of relevant actors.
At this stage twelve Portuguese key actors were interviewed in order to understand their perceptions on what is APU in the Portuguese context. To outline the interviews was used the RUAF document "Urban agriculture: what and why?" (RUAF, 2006) in addition to the international definitions early on examined. Topics as: who are the actors involved; where APU is located; Kind of products grown; Practices under the urban food chain; kind of production scale; and APU political edge were considered.
The interviews were made from October to December 2015. At this moment twelve key actors were interviewed, namely:
1 - PORTAU – REDE de Agricultura Urbana e Peri-Urbana
2 - APAP – Associação Portuguesa de Arquitetos Paisagistas
3 - AGROBIO – Associação Portuguesa de Agricultura Biológica
4 - APH – Associação Portuguesa de Horticultura
5 – PROVE – Direção nacional
6 – Universidade Nova - Department of Environmental Sciences and Engineering
7 – AVAAL – Associação para a Valorização Ambiental da Alta de Lisboa
8 – Câmara Municipal de Lisboa
9 – Horta do Mundo
10 – Câmara Municipal de Sesimbra
11 – Direção Regional de Agricultura e Pescas de Lisboa e Vale do Tejo
12 – Fundação EDP – Inovação Social

Furthermore was done a Web research based on several key-words. The aim was to balance actors perception's with open source information available on the Internet. The key words considered all the urban food chain. Here was count the number of inputs for each key words and later checked its pertinence under the APU internationals definitions, for the 10 first inputs.
The results from the relevant actors interviewed are showing that APU mental definition is strictly connected with urban community gardens initiatives, mainly leaded by local power. The idea behind those initiatives is self-consumption and social aid. Land is mainly public. Production is limited to vegetables and small fruits. No trees or livestock are allowed.
On the other hand web is showing a wide range of initiatives and practices covering all the food chain from production, processing, marketing, distribution and consumption showing a gap between perception and practices. Back to our assumption, from one side is true that UPA Portuguese understanding, from actors perspective, is rather focused on production, on the other hand is true that Portugal APU practices are much more broad than that. This means that there is a reasonable gap between APU mental perception from the relevant key actors set, which can be as well the belief of other stakeholders, and the APU practices in Portugal.
This gap can explain why it is so difficult to generate a collective and multidisciplinary space to put together a holistic strategy that considers food as part of the urban system. Here, Urban Planners can have a key role as process mediators. Food has been for long time forgotten in city planning (American Planning Association, 2007) although food can be the key to generate social and territorial cohesion.
In conclusion there is a need to clarify concepts and to open the debate towards an emergent sector that needs place and space in cities in order to create jobs and local competitiveness. Political power, civil society and planners, among others sector representatives, should be involved in this collaborative planning process.

Post PhD grant: SFRH/BPD/94286/2013

References:
AMERICAN PLANNING ASSOCIATION 2007. Policy Guide on Community and Regional Food Planning. American Planning Association: American Planning Association.
RUAF. 2006. Urban agriculture: what and why? [Online]. RUAF Foundation Web Page. [Accessed 3 February 2015 2015].

----- * -----

Territorial Cohesion; from the European to the Regional agenda: conceptual transposition or conceptual redefinition?

Gonçalo Santinha; Teresa Sá Marques; Miguel Saraiva; Paula Guerra; Tânia Moreira
University of Aveiro, Department of Political, Social and Territorial Sciences & GOVCOPP, PORTUGAL
g.santinha@ua.pt

For the last 30 years, the influence of the European Union (EU) policy guidelines in public policies and in the processes of national and regional planning of its member states has been steadily increasing. This influence, described in the literature as the 'Europe Effect', or Europeanization (Ladrech, 1994, 2010, Börzel and Risse, 2000, Cowles and Caporaso, 2001, Featherstone and Radaelli, 2003, Vink, 2003, Radaelli, 2004, Dühr et al., 2007) has had a profound impact upon the public policy functions of each state, in terms of concepts, principles and guidelines used. This impact has not been, however, entirely uniform (Bulmer and Radaelli, 2004). Sectorial policies, such as environmental, transport or rural development policies, as well as regional policies, have shown more signs of Europeanization than other types of policies (Ravesteijn and Evers, 2004, Dühr et al., 2007). Actually, the European Commission (CE) does not possess, formally, the proper instruments to regulate territorial planning at the respective national levels (Evers, 2008), therefore Europeanization is achieved through, as Ferrão (2011) states, the dissemination and transformation of processes and practices, the development of integrated discourses with common vocabulary and frameworks, and the design of transnational cooperations, characterized by common spatial visions, mutual learning processes and joint promotion of best practices.

In this context, the inclusion of the term 'territorial cohesion' in the policy discourses of the European Union, even though the official adoption of the term dates back to the 1990s, became more pertinent in the new millennium. For Faludi (2007) and Evers (2008) this meant that the EU was gradually moving towards instituting spatial planning as an intrinsic part of its agenda. Their assessment proved correct as the term 'territorial cohesion' became shortly after associated to a new paradigm of development in the European space, gaining institutional relevance with the publication of the Green Paper on Territorial Cohesion (2008) and the signing of the Treaty of Lisbon (2009), and repeatedly appearing in several official EU documents and strategic guidelines since (e.g. Böhme et al., 2011), shaping in particular the European Spatial Observation Network Program (ESPON). According to Santinha and Marques (2012) the concept of territorial cohesion is described in this context as a means to achieve the harmonious development of member states, value diversity and complementarities between them, and potentiate the promotion of endogenous resources. As Davoudi (2007) notes, the concept of territorial cohesion has "re-conceptualized European spatial policy by adding to it a spatial justice dimension".

Even so, understandably, the concept of territorial cohesion, still in its infancy, is purposely wide and unprecise, as discussed by a large array of authors (e.g. Faludi, 2005, Davoudi, 2007, Evers, 2008). Faludi aptly wrote: "Like beauty, territorial cohesion is in the eye of the beholder" (Faludi, 2005). Ten years later, this euphemism may still be true. It may be argued that such ambiguity may facilitate the consensus between member states, thus avoiding tensions in the tough negotiation processes that lead to the distribution of European funds. However, in effect, territorial cohesion may become, as Drevet (2007) and later Van Well (2012) describe it, a "moving target", hard to hit and hard to grasp, thus hindering the way the concept is interpreted, transposed and implemented from the European political agenda to the domestic agendas. Rather than discuss the concept of territorial cohesion in itself, as many authors have done in the past decade, this paper is more concerned with the spatial implications of the concept's ambiguity. Using as a starting point the context of the growing Europeanization of territorial-based public policies and the adoption of 'territorial cohesion' as a cornerstone of European policy, this paper wishes to determine if the definition of this principle is shifting from the macro (European) to the local (country) scale. Has the concept been subjected to a conceptual transposition, faithful to the original intentions of the European documents and leading to a somewhat common definition around European countries, or rather has it suffered a conceptual redefinition, subject to the political and planning backgrounds of each member state? In either case, how much importance has it been granted in territorial-based instruments and regional policy documents? And, finally, what implications can this have in the common European agenda?

Using the Portuguese case as a test-bed, this paper tries to produce a first set of answers to these three major questions. It is organized in five different sections. In Section 2 the concepts of Europeanization and Territorial Cohesion are discussed, emphasizing the importance of the 'Europe Effect' in the adoption and development of concepts and policies in the domains of urban and territorial planning. In Section 3 the methodological approach for the study is presented. Applying a Qualitative Content Analysis to the most relevant policy documents, using NVivo software, the European discourses around the term 'territorial cohesion' have been compared with those of domestic regional agendas. Section 4 presents the results of

the analysis for the European context, whereas Section 5 presents the same analysis for the national context, where a comparative component is added to understand whether local agents are properly interpreting and reproducing European guidelines on their regional planning agendas. This comparative analysis is discussed in the final Section 6, where similarities and dissimilarities between the national and European discourses are debated, leading to the paper's conclusions and recommendations.

----- * -----

The Atlanta Beltline Decision Support Tool: Integrating Stakeholder Involvement and Technical Design

Michael Elliott
Georgia Institute of Technology. College of Architecture
City and Regional Planning Program, Atlanta, USA
michael.elliott@coa.gatech.edu

This paper examines the potential for decision support tools for promoting more effective participation in complex, multi-attribute decision making in planning. The paper examines the five-year effort to design, construct, and implement a Decision Support Tool for the Atlanta Beltline, one of the largest and most sustainability-oriented urban regeneration projects currently underway in the United States. The paper focuses on the technical and stakeholder process challenges faced in developing the tool, the impact of the tool on stakeholder-professional interaction, and lessons learned on the design and impact of this effort.

A Decision Support Tool is a consistent and reproducible process for guiding decisions by providing a detailed picture of impacts related to the implementation of a plan or policy. DSTs provide a structure for investigating potential benefits of alternative scenarios, comparing between scenarios and with baseline conditions, and identifying trade-offs amongst stated goals. Despite these benefits, DSTs have not been broadly applied to long-term planning projects. The analytic rigor of DSTs too often lead to processes that are overly complex and that subordinate political values to technical considerations. Recent efforts, however, indicate that properly designed DSTs can enhance participation while also clarifying tradeoffs amongst alternatives.

This paper examines the process for designing and implementing a Decision Support Tool for the Atlanta Beltline. The Atlanta Beltline comprises the redevelopment of the historic railroad corridor that encircles Atlanta's downtown and in-town neighborhoods. Cutting through 45 neighborhoods that vary considerably in income, wealth and race, the redevelopment district includes 7 percent of the city (approximately 7 square miles). The Beltline project will construct 22 miles of transit, 33 miles of multi-use trails, 1,300 acres of parks and greenspace, and 5,000 affordable housing units, remediate 1,100 acres of brownfields, and generate an expected $20 billion in new private residential, commercial, and industrial redevelopment. Almost half of the city lies within one mile of the proposed transit and trails. The Atlanta Beltline consequently poses significant challenges to both systematic decision making and stakeholder involvement over its 30-year time horizon.

Central to this ambition is the capacity of the Atlanta BeltLine Inc. (planning/implementing agency) to work effectively with a wide range of partners, especially the legislated citizen advisory committee, the nonprofit Beltline Partnership, residents and businesses from the 45 neighborhoods, and a wide range of city and other governmental agencies. The complexity of both the project and its array of stakeholders requires a systematic approach to decision making, one that encourages effective dialogue around its goals, objectives, and choices, while providing a shared analytic structure to help rationalize the decision process. The DST provides a process for working through priorities and decisions, and a GIS-based multi-attribute analytic system for comparing alternatives across a wide array of desired outcomes, integrating a common set of indicators with variable weights that can be altered to accommodate varying priorities. The implications of changes in these priorities can be examined on the fly, by stakeholders as well as agency officials.

The paper, authored by the project lead for the team that designed the DST, builds on research conducted to identify stakeholder and organizational needs, the communication process amongst stakeholders and the planning agency, the dynamics of stakeholder interaction during the design process, and the specific technical challenges associated with building the tool. The paper uses this data to firstly examine the role of technical analysis in the deliberation process, exploring approaches to maximize its potential to empower stakeholders to engage issues more critically without increasing their dependence on a technical tool. Secondly, the paper presents the structure of the DST, examining the choices made and their rationale. Finally, the paper assesses the initial implementation of the DST and its impact. The paper therefore provides a framework for understanding the potential uses of multi-attribute analysis in complex planning processes and for designing such tools so as to strengthen stakeholder involvement processes.

Participants will develop a basic understanding of:

1. the elements needed to construct a decision support tool,

2. the technical challenges associated with the design of a DST,
3. the process challenges associated with linking DST parameters to community values, and the role of public participation in identifying those goals, and
4. the potential uses of a DST to facilitate more strategic dialogue between civic leaders, community members, and planning experts, with greater transparency and more explicit linkage between values, data and analysis to support decisions, and the resultant decisions.

Relevant references include:

Geneletti, D., Bagli, S., Napolitano, P., and Pistocchi, A. (2007). "Spatial Decision Support for Strategic Environmental Assessment of Land Use Plans. A Case Study in Southern Italy." Environmental Impact Assessment Review 27, 408-423.
Holz, L., Kuczera, G. and Kalma, J. (2006). "Multiple Criteria Decision Making: Facilitating a Learning Environment." Journal of Environmental Planning and Management. 49:3, 455 – 470.
Scott, J., Williams, G., & Davis, P. (2008). "Building Consensus through the Application of a Decision Support Tool for Land Managers." Australasian Journal of Environmental Management. 15, 180-188.
Srdjevic, B. (2007). "Linking Analytic Hierarchy Process and Social Choice Methods to Support Group Decision-Making in Water Management." Decision Support Systems 42, 2261-2273.

----- * -----

Public Participation and Co-design in a process of environmental impact assessment

Rik Houthaeve
Strategic Development and Assessment Consultant, Sweco-Belgium, Visiting Professor Department of Architecture - KU Leuven, BELGIUM
rik.houthaeve@gmail.com

In the historic Belgian city of Bruges, a canal located alongside the ancient ramparts will be modified to improve the connection between the Seaport of Bruges and the inland waterways of Belgium and Northern France. The aim of this is to support more sustainable transport.
Because this canal lies between the historic heart of the city and its suburbs, this large scale project will not only have major consequences for urban mobility, it will also reshape the city and its landscape. Lying alongside the historic inner city, between UNESCO-Heritage historical monuments, both the inhabitants and the stakeholders had serious concerns and took a critical view of the project. To deal with this, an interactive and collaborative approach was used that made use of tools for creating greater public involvement at an early stage of the process as well as methods for framing problems, opportunities and alternatives. In this comprehensive project, we organized co-design workshops with the public. We used this approach in order to develop alternatives and to look for sustainable benefits for the city.
The workshop provided an opportunity for an open exchange of ideas in which stakeholders were able to talk to decision-makers and the consultants could listen carefully to the concerns of the public. In the process, the project was enriched with new perspectives on landscaping, urban development and urban mobility initiatives. All this led to increased support for the project and furthered its acceptance. This mutual deliberative process provided the experts with the building blocks of a sustainable criteria and a framework for assessment and decision-making that would be more responsive to the specific public interests and which exploited mutual learning.
This approach was not only successful, it also broadened the scope of the project: thanks to this more inclusive way of decision making, what had begun as a traditional infrastructural intervention became a comprehensive project for sustainable urban development.

----- * -----

Session T5.4 | June 2 | 9:00 – 10:30

Integrated urban operations in Portugal: how to improve equity and efficiency?

Beatriz Condessa; José Antunes Ferreira; Joana Almeida; Ana Morais de Sá
Universidade de Lisboa, Instituto Superior Técnico, CERIS-CESUR, PORTUGAL
beatriz.condessa@tecnico.ulisboa.pt

In Portugal the properties are mostly privately owned and multiple land ownership can affect the feasibility of urban development, whenever old division of land does not match with new property units or when the owners themselves may not be in a position to cooperate with the redevelopment, or are unwilling to do so (Alterman, 2007; Louw, 2008).

In this paper we will discuss the application of the principle of equity in land use planning and how to overcome the lack of effectiveness of the instruments provided in the Portuguese legislation for achieving it, namely the land readjustment (LR) instruments. It summarizes some of the results of a comprehensive research project (PERCOM - 'Equity and efficiency in the urbanization process: a land readjustment execution model') carried out in CESUR, focusing on the proposal of a "new" instrument for supporting integrated urban operations.

Despite the introduction, in late 1990s, of a legal framework that makes the definition of land readjustment mechanisms in detailed plans (DP) mandatory, the evidence shows that their application is still very much in the early stages, while it is also true that the low execution rate of plans is mainly due to the DPs intrinsic characteristics. Faced with these findings we are able to conclude that the DP has been an inadequate instrument for urban development, since its goals and the scale of the intervention areas focused on supply rather than demand, which has proved to be scarce or non-existent. Also, its rigidity and long formulation times are factors that condition its execution, mainly due to loss of opportunity for property developers, the misfit with the interest and motivations of the landowners and changing market dynamics that cause the urban solution to become inadequate. The ineffectiveness of DPs is also connected to the existence of alternative models, such as the licensing of land subdivision operations or isolated buildings, which has proven to be common practice in many Portuguese municipalities.

One of the current challenges, therefore, is precisely to render joint and programmed interventions with a redistribution of benefits and costs as the general practice in municipal management models. The absence of a predisposition to promote joint action among the various stakeholders in urban development and the inability to motivate landowners towards an integrated action are some of the obstacles that hinder this practice (Condessa et al, 2015) and which were mentioned by the municipal planning technicians, among others, as pitfalls in the land readjustment practice.

With the publication, in 2014, of the new Basic Law on Land, Spatial Planning and Urbanism Policy and, in 2015, of the new Legal Framework of Spatial Planning Instruments we would expect that a part of these problems are taken into account. However, there have been no significant changes on these matters, although there has been a growing concern about the execution and programming of urban operations through the need to justify the plan's economic and financial feasibility, the obligation to register the plan's programming with the municipal activity plans and budget and the inclusion of new possible execution instruments (e.g. compulsory sale).

Detailed Plans, such as they exist, presupposes a level of execution detail at their conception that it is natural for it to emerge as a coherent and integrating answer at the urban intervention level, for detecting problems, needs or necessities, or even as a solution for an identified opportunity. However, the plan's formulation time is not compatible with that assumption. It is from this perspective that PERCOM proposes the creation of the Urban Intervention Project (Projeto de Intervenção Urbana – PIU), a "new" instrument directed towards short-term interventions. This will have an adequate territorial scale and an appropriate level of detail that encompasses the studies and programmes for its implementation.

In order to provide some main concepts that will be used throughout this paper, the first section gives an overview of the Portuguese legal framework of LR and municipal land use plans. After summarizing some of the outcomes of PERCOM project, we will discuss the recent amendments to the Portuguese legal framework to conclude with a description of the contents and management model of the 'Urban Intervention Project' as a more suitable approach to integrated urban operations in Portugal.

Bibliography:

Alterman, R., 2007. More than land assembly: land readjustment for supply of urban public services'. In: Hong, Y and Needham, B. (eds), Analyzing Land Readjustment: Economics, Law and Collective Action. Boston: Lincoln Institute of Land Policy, pp. 57–88.

Condessa, B., Morais de Sá, A., Cambra, P. and Antunes Ferreira, J., 2015. Land readjustment in Portugal: the case of Sines. Town Planning Review, 86 (4), pp. 381-410.

Louw, E., 2008. Land assembly for urban transformation—The case of 's-Hertogenbosch in The Netherlands. Land Use Policy, 25, pp. 69–80.

----- * -----

Making Effective Use Of Land By Means of Planning Powers And Fiscal Powers

Robin Ganser; Julia Mattei
Nuertingen Geislingen University
Schelmenwasen 4-8. 72622 Nuertingen, GERMANY
t +49 176 66866733/f +49 7022 201166
robin.ganser@hfwu.de

The paper will set out key challenges for German spatial planning in the 21st century but also provide an international (Trans-Atlantic) comparative analysis of challenges. These include: parallel patterns of shrinkage and growth with ongoing change of economic structures, demographic changes with direct impacts on necessary infrastructure and public services, environmental challenges such as climate change and a push for major infrastructure projects in the context of renewable energies. A central theme of the paper will be the quest for making the most effective and efficient use of land while meeting the above challenges in order to ensure sustainable urban and rural development.
In this context it will explore the potential steer of development which appears to be possible through planning powers and instruments on the one hand and fiscal powers - particularly land taxation - on the other hand.
One of the strong points of the German planning and fiscal system is its Federal structure – including directly elected regional parliaments - at the level of the 16 individual states ('Bundesländer') which make up the Federal Republic of Germany. The paper will discuss the potential for innovation, which builds on different planning approaches in the states. In this context the competition between more top down versus stronger bottom up emphasis in regional planning in the different states will be investigated.
The strengths and weaknesses of statutory planning instruments, such as regional and sub-regional planning documents, will be analyzed and discussed. In this context particular focus will be placed on the ability of planning documents to provide an effective steer for spatial development while addressing the core planning challenges set out above.
This discussion will be complemented by an analysis of informal or non-statutory planning instruments and processes which aim to remedy some of the apparent weaknesses in the context of statutory planning.
Different regional planning concepts and strategies – from growth management to sub-regional enablement - will be explored and linked to the core spatial planning challenges set out above.
The paper will explore the particularly powerful role of local authorities as agencies of planning set out in the German basic law (constitution) which defines the main powers, responsibilities and relationships of government agencies. Based on the principle of subsidiarity the central authority has a subsidiary (that is, a supporting, rather than a subordinate) function, performing only those tasks which cannot be performed effectively at a more immediate or local level. In this context local authorities in Germany are granted planning sovereignty covering the entire local authority area. Local planning documents therefore have the format of local legislation, which comprises two tiers: area wide preparatory land use plan (Flächennutzungsplan) and binding land use plan (Bebauungsplan). Both come in different formats in order to accommodate diverse spatial situations, whereby the strategic choice of planning instruments is of great interest.
The balance of power between regional strategic development principles and the freedom of local authorities - frequently trying to push the boundaries of those principles – reflects the combined bottom up as well as top down coordination.
Local statutory planning documents and procedures provide a high degree of certainty in terms of what kind of development will be granted planning permission, which, of course, is welcomed by developers and private individuals interested in building a home alike. The downside is a lack of flexibility which the planning system strives to address through informal planning instruments and processes. Particularly public participation and cooperation between local authorities are fields in which statutory as well as informal planning instruments are regularly applied.
With regards to material local planning challenges - concepts and strategies often have to address parallel patterns of shrinkage and growth. In doing so there is a statutory duty to follow sustainable urban and rural development.
Fiscal instruments as land taxes can also contribute to an effective steer for spatial development. However this power is (so far) not available to local authorities in Germany.
Aiming to overcome this potential hindrance to improved development steer, this paper will assess the German municipal and state possibilities to enhance its land tax ('Grundsteuer') by means of analyzing the Brazilian municipal land tax (IPTU) example and the potential for adaptation. With a similar federal system, Brazil and Germany differ especially on the municipalities' power to levy local taxes. In Brazil, Art. 4 IV G10.257 (Federal Law covering local government) explicitly names land tax (IPTU) as an instrument for spatial planning. Ample practical experiences as well as research into problems and success factors of this Brazilian model exist, albeit not in the international discourse.
This paper therefore aims to discuss the possibilities of comparing and potentially adapting and combining these different approaches. In doing so the paper will have to discuss the underlying constitutional opportunities and hindrances as land taxation ('Hebesatzrecht der Grundsteuer' Art. 106 VI Satz 2 GG iVm § 25 GrStG) and local autonomy in spatial planning (8 Art. 28 II GG – 'Gemeindehoheit') are both vested in the German constitution.

The strengths and weaknesses of spatial planning instruments and economic instruments as well as the responsibilities and relationships of relevant stakeholders will be discussed. It will therefore contribute to the theoretical discourse of planning law. Further to this it will have relevance for planning practice and provide a basis for discussion of politicians and planning practitioners.

----- * -----

Conversion Challenge - Making the Most of Integrated Urban and Rural Locations

Robin Ganser; Marten Runge
Nuertingen Geislingen University
Schelmenwasen 4-8. 72622 Nuertingen, GERMANY
t +49 176 66866733/f +49 7022 201166
robin.ganser@hfwu.de

The end of the cold war as well as new asymmetrical threats by groups organised outside classic state or political systems are decisive factors for the development and disposal of the defence estate. The conversion of redundant sites generally involves complex statutory and informal planning procedures, social, environmental, economic and political considerations. So far few studies have looked explicitly at the planning challenges associated with military site conversion in different regions characterized by growth and decline in Germany. This paper explores planning problems and potential solutions - with a view to help planning practice and to inform the further development of the planning system. The German army (‘Bundeswehr’) is being comprehensively restructured. This led to several ‘waves’ of military sites becoming available for reuse over the past 25 years. These changes overlap with a continuous withdrawal of allied forces leading to yet more sites becoming available for redevlopment.

The paper will set out the key challenges facing the German local authorities which follow the processes above, interdependencies between specifics of an authority as well as their possible strategies to solve the challenges. The research is based on a quantitative analysis of affected local authorities which will be completed in spring 2016.

The local authorities in Germany are autonomous in spatial planning issues. So they are key stakeholders in the conversion process. To use their special right of first refusal is probably the quickest way for local authorities to gain control over former military sites and to secure their strategic spatial planning objectives. Especially authorities in strong economical environments and real estate markets have a good opportunity to influence how the site will be developed and which land uses will be permitted.

Right out purchase of site is much more difficult and risk laden for local authorities in economically weaker regions. These communities depend much more on private investors and public private partnerships. The potential impact of this dependency on private partners is not clear yet. However, it appears safe to assume that there may be potential consequences for planning authorities, statutory planning documents and their implementation as well as sustainable spatial development. This paper will strive to provide some answers in this context.

Resent case study based research suggests, that the authorities which are affected by military conversion face challenges in the scope of strategic planning – no matter what their spatial and economic situation may be.

Armed forces in rural areas have often important functions for local economies as employers and customers. Especially in shrinking regions there is a fear that withdrawal leads to (further) decline. Usually the impact is not limited to authority’s political boundary. Taking into account the regional scope, it is necessary to avoid negative impacts through negative competition between neighbouring authorities and instead to combine powers in order to bring sites back to sustainable long-term use.

The strategies for implementation of spatial objectives as well as the statutory and non-statutory instruments available to local authorities will be set out in this paper.

One possible strategy could be to accept shrinkage and align spatial strategies accordingly to it. This would include development land provision as well as the provision of infrastructure.

On the other hand, there are authorities in strong economic environments. They often are looking for sites to accommodate economic growth and housing. They are pressured to prepare planning documents as fast as possible in heated real estate markets. Added pressure may be exerted from the national real estate institution (BImA) which is interested in selling former military sites quickly.

The implementation of interim uses is a possibility to limited costs and physical decline of abandoned sites. This is especially useful in the scope of long planning processes with no viable long-term use in sight. However, this brings new challenges to conversion processes. For example adapting interim uses to long-term goals set out in statutory planning documents.

The main result of the research set out in this paper will clarify the preferred options of local authorities imbedded in different spatial and economical contexts. This can have potential impacts on planning theory (conceptualizing behavior of decision makers) and on planning practice (providing a basis for decision making in the context of military conversion).

----- * -----

Municipalities as enablers of citizen-led urban initiatives - Possibilities and constraints

Rosa Danenberg
KTH, SWEDEN
rosadanenberg@gmail.com

Background

In recent years, bottom-up urban development has started growing as an alternative to conventional top-down planning. Small-scale local initiatives pop up at unusual places and in surprising forms and shapes. In large proportions, citizens and communities initiate small-scale interventions; which suddenly have seemed to grow into a trend of bottom-up urbanism. These urban practices are collected under titles such as Everyday Urbanism, Guerrilla urbanism, DIY-urbanism and Tactical Urbanism. Citizens generally have developed an increasing demand and interest to take control over immediate surroundings. As a result, more and more cities are witnessing not only the growth of but also an interest for these initiatives, as they bear the potential to reshape urban spaces. A closer look at the origins of citizen-initiated urban development reveals that this trend has existed for a longer time. Currently, an increased active approach from citizens seemed to re-appear, resulting in bottom-up initiatives developed outside the regular system and interventions in urban environments.

Theoretical/practical implications

The implications of the informal and alternative citizen efforts in relation to formal and structured planning framework create groundings for further exploration of governance dynamics. The consequences of the efforts propose alternative lifestyles and uses of urban space. Such emerging new dynamics in the urban environment inevitably affects the controlled city planning and its administration. A growing worldwide phenomenon of municipal bottom-up urban development can be observed that calls for an adequate governance structure. Reinventing governance structures catering an enabling relationship between top-down and bottom-up urban actors benefits from a governance innovation perspective. Adopting the lens of urban governance provides an alternative approach that emphasizes the need for new urban governance arrangements. Thus, this paper explores how local municipalities can enable citizen-led urban initiatives through examining its possibilities and constraints. The aim of this paper is to contribute knowledge to how municipalities can enable citizen-led urban initiatives. Additionally, the analysis of the initiatives and the cities are aimed to provide more generalizable conclusions that are potentially applicable to municipal bottom-up practices in other cities.

Methods

The research that feeds the results of this paper is a qualitatively-based explorative study that utilizes an interactive approach deriving from a reflective viewpoint. Throughout the research, the theoretical base shifts from one academic field to another. Namely, the academic-based theoretical framework takes departure from bottom-up urbanism and further on utilizes the more concrete suggestions and complexities from an urban governance perspective. These form the possibilities and constraints that become the indicators for “how” municipalities can enable the initiatives. Empirically, cases are used to gather data. The two cases Stockholm and Istanbul do not naturally appear in debates on bottom-up urban development and differ in many respects; however their strong top-down planning system is probably the most alike characteristic relevant to this research and of influence on bottom-up urban development. Both cities have been home location to the researcher, as is the main reason to study the cities. Four examples of citizen-led urban initiatives in both cities, one municipal representative in Stockholm, and a political councilor and municipal official in Istanbul are analyzed. The critical realism paradigm is adopted to explore underlying mechanism and structures to strive for fundamental change. This reflects the transformative character of the research.

Indicative findings of the paper

The citizen-led urban initiatives have generally emerged from the need for a place outside government structures and to evade the sensed pressing neoliberal agenda in planning (Stockholm), and from the need for functions and services not provided and sometimes not accepted by the municipality (Istanbul). Addressing such needs pressures an alternative approach to urban development. Although, the cities are extreme opposites; in fact, this paper has drawn a rather unifying conclusion. Not only its city characteristics, but also the major constraints for citizen-led urban initiatives to relate to the municipality, as well as the ideologies and motifs for the initiatives to emerge are considerably different. Yet, the suggested possibilities

for an enabling relationship are converging new urban governance arrangements: the combination of a neighborhood council with a municipal guide, while allowing the initiatives to adopt a politicizing attitude. This could imply that for a municipal organizational structure that is, on the one hand, overly bureaucratic and sensed neoliberal-oriented, while, on the other hand, overly dominated by municipal politics and governmental hierarchy, there is an accurate governance structure. Which in fact eliminates most of the constraints that were found. What is crucial is that it should cater for a more entangled relationship between municipalities and initiatives with enhanced involvement of the initiatives in decision-making processes. Future research on neighborhood councils and municipal guides can expand knowledge on how it can effectively contribute to an enabling relationship between municipalities and citizen-led urban initiatives.

----- * -----

Session T5.5 | June 2 | 11:00 – 12:30

Multi-level climate change adaptation governance and local government planning processes in Australia

Hartmut Fünfgeld; Robin Goodman; Stephen Rowley
Centre for Urban Research, School of Global, Urban and Social Studies, RMIT University, AUSTRALIA
hartmut.fuenfgeld@rmit.edu.au

For many cities and communities, climate change has become a reality that is increasingly experienced through localised effects, such as changing weather patterns, more frequent extreme weather events, and sea-level rise. These local changes challenge existing spatial structures and processes, calling for careful adjustment of land use planning and other spatially relevant policy mechanisms. To that end, climate change adaptation is a typical multi-level governance challenge that requires coordination and collaboration, vertically across all levels of government and horizontally across agencies, to enable effective adaptation planning and implementation.
In the developed world, south-eastern Australia is one of the climate change hotspots, where multiple climate change risks overlap, creating significant threats to urban populations and challenges to urban planners aiming to reduce the vulnerability of people, infrastructure and services in cities. For example, heatwaves often occur concurrently with wildfires on the urban fringe, leading to spikes in air pollution and, consequently, hazards to human health and well-being.
While it is generally assumed that Australia as a nation has a comparatively high institutional capacity to adapt, government-led climate change adaptation planning and implementation is highly differentiated across the country. In the absence of a clear multi-level policy framework, much of the climate change adaptation efforts have taken place at the local government level and in the form of experimentation with limited vertical or horizontal coordination. Many local governments have developed adaptation strategies and climate risk assessments, yet only few have progressed to a stage of implementing meaningful and effective adaptation actions.
In this paper, we examine the extent to which strategic thinking with regard to climate change adaptation is impacting on land use decision making frameworks in urban contexts in Victoria, Australia. We draw on empirical and desktop-based research, which included interviews with senior management in different municipalities, as well as detailed analysis of both strategic and regulatory planning documents. The research shows that the regulatory planning system is resistant to strategic thinking on climate change adaptation, making it difficult for municipal planners and decision-makers to be proactive. Based on these findings, we argue that individual and organisational leadership, institutional innovation, and collaboration are critical factors in addressing the strategic challenges that cities face in the context of climate change impacts.

----- * -----

The Significance of Environmental Sustainability in Erbil City Urban Planning

Karwan Taha
The University of Sheffield, Department of Urban Studies and Planning, UNITED KINGDOM
kmtaha1@sheffield.ac.uk

Kurdistan Region of Iraq especially Erbil, the capital of the region, has progressed rapidly. Different urban development projects have been constructed in the city that led to fast urban sprawl. These sprawls have converted significant areas previous agricultural land to built-up areas, which challenge sustainability and environmental sensitivity of the city, at a time when KRG is embarking sustainability and sustainable

development in the region. My research seeks to find out how spatial planning and governance aid environmental sustainable development in urban centers.
Discourse and sociological institutionalism are applied for understanding whether and how sustainability come into the process of urban expansion and then how it is embodied in practice and what will be the actor's interpretations while the policy is translated into practice. The approaches of discourse analysis and sociological institutionalism are reinforced by the relationship between agency and structure from critical realist perspective.
The objectives of the research are two folded: understanding the decision-making process regarding land use and the investigation of the coming environmental sustainability into the policy. The study tries to answer the questions of how does the decision-making process regarding land use in Erbil works. How do the ideas of environmental sustainability embedded in the KRG's policy? When the development starts whether the ideas of sustainability comes into the process? Finally, in the implementation process how do different aspects of environmental sustainability interacts and which aspect is dominant by determining the outcome?
Three cases are selected and studied depending on criteria related to the distinction between brown/green agenda priorities and their environmental impacts. Depending on the qualitative methods for data collection and analysis, three methods of data collection are used: governmental documents collection is used for providing insights of the source and embodiment of environmental sustainability in the KRG's policy. Interviewing key officials who are involved in the implementation of the policy and the decision-making process regarding urban expansion in Erbil are conducted for understanding actors' interpretations of environmental sustainability. Observation is also used for finding out how the idea of environmental sustainability policy is translated into practice.
The findings suggest that to a wide range the environmental dimensions has been neglected in decision-making processes concerning land allocation for investment projects, yet in the decision-making processes regarding licensing investment projects environmental ideas have existence. However, the existence of environmental ideas in the identified process does not necessarily mean that all the environmental criteria have been translated into actions. This attributes to several challenges in the Kurdish region, ranging at national and local level. At Iraqi level, the political, economic relationship between the federal government in Baghdad and the Kurdish government in Erbil has created obstacles for implementing most of the KRG's strategies including the environmental one. The cut of the KRG's budget in early 2014 and the Kurds attitude towards independent economy has tight the inherited disputes. These crises followed by the so-called Islamic states (IS) occupying large areas of Iraq. At Kurdistan level, the challenges are multi-dimensional. To start with, there are concerns about the institutional capacity for implementing policy, in particular the capacity of environmental institutions. Then, the existent of old rules and norms with newly passed rules are other contributors that create obstacles in implementing policy. Simultaneously, there is lack of shared understanding to environmental sustainable development among planners and decision-makers, which comes from variety of foreign sources. These issues to some extent have their influence in policy implementation.
A Significant number of the identified challenges are linked to the political and social organization of the context of my study. Taking all the identified aspects together has created a complex atmosphere for implementing environmental sustainable development policy.

----- * -----

LA21 in Urban Communities: a slow but promising beginning of grassroot innovation

Nurussaadah Mokhtar; Melasutra Md. Dali
Department of Urban and Regional Planning, Faculty of Built Environment, University of Malaya, MALAYSIA
nurussaadahmokhtar@gmail.com

The progress of Local Agenda 21 in Malaysia may have been underestimated by scholars who measure community participation using mainly Arnstein's ladder of participation. These studies proved a sideways look at the potential of Local Agenda 21 since all local authorities were summoned by the Ministry to uphold its principles in partnership and participation. They are somehow divorced from literature in community learning and leadership which in a view are relevant and pertinent aspects of social capital crucial in the discourse of sustainable development. Through case studies of neighbourhoods in urbanized city of Petaling Jaya, the paper attempts to evaluate the development of sustainable community initiatives since the year 2001 when the then Municipal Council of Petaling Jaya undertook the pilot project of Local Agenda 21. Triangulated data collection methods comprise of direct observation, document analysis and structured interviews with key-experts were undertaken to describe the varieties of community initiatives under strong community leadership at their neighbourhood levels. This qualitative study finds that in partnership with local authority and networking, some local neighbourhoods have substantially improved their learning in

sustainable way of life although Local Agenda 21 was once viewed in a narrow perspective by these local neighbourhoods. After 14 years of implementation however, the study also finds that there are local neighborhoods left behind and have not managed to ensure the sustainability of their local initiatives. These findings suggest that the progress of Local Agenda 21 in this urban community is slow but the extent of community learning signals a promising beginning of grassroot innovation.

----- * -----

The impact of and typhoons on low-income housing

Suyeon Lee; Seyeon Lee
University of Wisconsin-Madison, USA
seyeon79@tamu.edu

This research investigates and records post-flood and typhoon conditions of low income housing in the Thua Thien Hue Province, Vietnam; area prone to extreme flooding in Thua Thien Hue province, Vietnam The cost of rebuilding houses after flood and typhoon has been always a burden for low income households. These costs often lead to the elimination of essential construction practices for disaster resistance. Despite relief efforts from international non-profit organizations and Vietnam government, the impacts of flood and typhoon damages to residential construction has been reoccurring to the same neighborhood annually. Notwithstanding its importance, this topic has not been systematically investigated.
The study is limited to assistance provided to low income households documenting existing conditions of low income homes impacted by post flood and typhoon conditions in the Thua Thien Hue Province. The research identifies leading causes of the building failure from the natural disasters. Relief efforts and progress made since the last typhoon is documented. The quality of construction and repairs are assessed based on Home Builders Guide to Coastal Construction (FEMA, 2010) by Federal Emergency Management Agency. Local residents in four different communities were interviewed and surveyed to get incites on repair effort by the non-profit organizations and Vietnam government and their needs post flood and typhoon.
The findings from the field study informed that many of the local people are now aware of the importance of improving housing conditions as one of the key coping strategies to withstand flood and typhoon events as it makes housing and community more resilient to future events. While there has been a remarkable improvement of housing and infrastructure with the support from the local government as well as the non-profit organizations, many households in the study areas are found to still live in weak and fragile housing conditions without gaining access to the aid to repair and strengthen the houses. Given that the major immediate recovery action taken by the local people tends to focus on repairing damaged houses, and on this ground, low-income households spend a considerable amount of their income on housing repair, providing proper and applicable construction practices will not only improve the housing condition, but also contribute to reducing poverty in Vietnam.

----- * -----

Session T5.6 | June 2 | 16:00 – 17:30

Densifying Ecuadorian Middle Cities. Questions, Problems, Design Issues

Antonio di Campli; María de los Angeles Cuenca; María Fernanda Luzuriaga; Holger Patricio Cuadrado
antoniodicampli@gmail.com; mdcuenca@utpl.edu.ec; mfluzuriaga@utpl.edu.ec; hpcuadrado@utpl.edu.ec

Many contemporary Ecuadorian middle cities are characterized by particular processes of social and spatial fragmentation related with particular environmental problems at the urban scale.
The relatively small extension of these middle-sized cities is marked by repetitive low-density urban fabrics indifferent to the environmental system which is often redefined as a residual space or as a barrier between districts inhabited by different social classes. Moreover, Ecuadorian middle cities urban growth phenomena are almost never accompanied by the definition of polycentric urban structures. On the contrary, here urban growth phenomena almost always strengthen the tertiary, commercial and administrative roles of consolidated central parts of the city that were already characterized by such features. This phenomenon causes strong commuters movements between downtown and the suburbs.
The purpose of this research is to identify strategies for a spatial, social as well as environmental recomposition of Ecuadorian middle cities and for the redefinition, in most inclusive ways, of its specific forms

of dwelling, social interactions at the scale of 'proximity'. The hypothesis is that the identification of precise urban densification strategies focused on the invention of particular urban-environmental devices located along the minor hydrographic systems and characterized by a superposition of uses, functions and ecologies will help make the urban mosaic of Ecuadorian medium size cities more livable, inclusive, and finally polycentric. The configuration of this geography of places, designed according to radical ecological design techniques, as social and spatial 'membranes' between neighborhood inhabited by different social classes will help making Ecuadorian middle cities urban spaces less socially segregated and environmentally virtuous. These 'membranes' presuppose a collective ownership and self-management of space founded on the permanent participation of the interested parties with their multiple, varied, and even contradictory interests, skills and visions. It thus also presupposes confrontation. The membranes help to surpass separations and dissociations between social groups, spaces and finally times. On the horizon, then, it is not a matter of quantities of dense urban fabrics, rather it is a matter of producing spaces and environments capable to redefine dwelling practices at the proximity scale in a more just and inclusive way.
The new polycentric urban conditions so defined will trigger incremental urban densification processes in the districts affected by the presence of these new membranes. The research foreshadow two different urban densification developments. In middle-class districts, incremental growth will be mostly characterized by substitution processes; in low-middle class and low class districts densification will be characterized by saturation phenomena. The case study considered in this research is the Andean city of Loja.
Research methods incorporates spatial, environmental and social analyses (descriptive research, correlational research, experimental research, and design research), conceptualizing questions, measure variables, planning and design issues, and data analyses. Specific intervention areas and planning and design themes are defined proposing by three densification 'scenarios'.
Strategies for urban densification are here conceived as 'protocols' intended to be replicable in different Ecuadorian middle cities. Densification, definitely, here is understood a a series of protocols defining strategies of consolidation and intensification of uses and social exchanges more than increasing of volumes or inhabitants per hectare.

----- * -----

Eco-villages to Just Cities: An assessment of Freiburg and Isle of Eigg

David Santiago Perez Rodriguez
Heriot-Watt University, UNITED KINGDOM
dsp2@hw.ac.uk

In today's globalised and interconnected world, over half of the population (54 per cent) live in urban areas. The World Urbanization Prospects published by the UN projects that by 2050, an additional 2.5 billion people will concentrate in urban centres, increasing urban populations to sixty-six per cent. As a result, urban areas world-wide are committing to major community-led urban and rural development initiatives focused on social, environmental and economic justice for their inhabitants. This paper will assess the concepts of the "just city" within two existing "eco-villages/cities:" Freiburg, Germany and Isle of Eigg in Scotland.
Henri Lefebvre defined urban space as a social construction where all social groups should have a "Right to the City," a right to better opportunities to enhance the quality of life of its people. A few decades later, Susan Feinstein redefined Lefebvre's "Right to the City" and proposed the formation of "the Just City," where democracy, diversity, and equity are the three governing principles for achieving urban justice. In this definition, urban policy transitions away from focusing on competitiveness, and instead towards a discourse about urban justice.
Freiburg, thanks largely to policies introduced in the 1970s, is positioned as one of the most sustainable cities in the world. A top-down policy-based model consisting of socio-civic initiatives, the formation of Local Agenda 21, and the signing of the Aalborg Commitments (culminating in the creation of the Freiburg Sustainability Council) have resulted in renewable energy technologies and solar energy as its mainstream energy source. Isle of Eigg in Scotland (driven by a national commitment to reduce 40% of carbon emissions by 2020 and 80% by 2050) demonstrates a community-led sustainability agenda, coinciding with the historic transition from a formal feudal aristocracy into a more equitable land-use/ownership regimen. These factors laid the foundation for a sustainability agenda resulting in the Isle of Eigg Heritage Trust (UK Gold Award winner), which devised a unique electricity capping system that dramatically reduced household carbon emissions by nearly 50 percent.
While both cases illustrate great achievements moving towards low-carbon communities, sustainability is more than just carbon reduction. This paper will apply concepts of the "just city," as well as cultural and urban ecology theoretical analysis to review planning strategies, policies and practices in Freiburg and Isle of Eigg, and assess key factors of social and environmental justice.

----- * -----

Pilot projects and their significance in approaching challenges – exemplified by refugee aid

Elena Gilcher; Gerhard Steinebach
Chair of Town Planning, University of Kaiserslautern, GERMANY
elena.gilcher@ru.uni-kl.de; gerhard.steinebach@ru.uni-kl.de

In this paper, we illustrate a pilot project that aims at generating knowledge for a novel challenge of spatial planning. We depict the lifecycle of such a pilot project, from the emergence of the challenge to the execution and continuous evaluation of the project. To illustrate these stages, we exemplify each with the current issue of aid for the rush of refugees. Our aim is to establish criteria for identifying conclusions that qualify for general application. These can be transferred to other settings and thus serve for future best practice guidelines.

Pilot projects are small scale studies conducted in order to generate knowledge and experiences required for the design and deployment of general solutions to a large-scale problem. They are commonly employed to study novel challenges. Thereby, they test approaches by instance, not by theoretical considerations only. In spatial planning, pilot projects differ from conventional planning tasks as they do not follow pre-defined processes to attain a target. Their processes are composed of new individual activities, each distinguishable and continuously evaluated during the project period (Wiechmann et al., 2012). Activities are, for example, developing and implementing innovative and practical solutions in collaboration with local stakeholders in politics, economy and the civil society. This makes them process- and practice-oriented implementations of proposed approaches. As spatial planning decisions usually concern a large population, public authorities like the federal government or states provide the financial resources. A pilot project aiming at a specific target is then carried out in multiple regions that serve as a model for the addressed problem's relevant population. The continuous evaluation of the activities implemented in the project is most important. Therefore, cooperation between science and the executing local stakeholders is a priority task. Thereby, the role of academia is strengthened compared to conception processes of the federal government and the states (Einig, 2011). In this paper, we focus on the evaluation. It is fundamental for employing knowledge derived in a model region for drafting bills that improve the legal framework.

We will illustrate these theoretical aims by a sample pilot project. Pilot projects share a common lifecycle and we will exemplify each stage's practical execution by a running example. We chose the unprecedented rush of refugees that currently imposes a great challenge on spatial planning. It constitutes novel issues, especially to municipalities. In 2015, Germany recorded over one million refugees and asylum seekers. The EU Commission estimates that between the beginning of 2016 and the end of 2017 up to three million asylum seekers arrive in Europe (European Commission, 2015).

Due to its novelty, there are no experiences to rely on and thus evaluated solution approaches do not exist. Therefore, the government might decide to initiate a pilot project. This is the first stage in its life. The initiators funding the project aim to close the gap in knowledge about handling short-term issues like initial reception of refugees and their appropriate allocation as well as mid- and long-term issues that need to be considered. These are, among others, spatial concentration of ethnic groups entitled to political asylum, integration into the labor market, and cultural participation (Steinebach, 2016). The project proposal aspires to implement innovative solutions by uniting political, economical and academic stakeholders with the civil society and refugees.

The government's pilot project proposal usually attracts many applicants from the various stakeholders that are thought to take part. In the context of our running example, we study a project proposal in which stakeholders are required to apply in groups instead of individually. Therefore, academic or private institutions interested in the scientific monitoring role have to find model regions. This constitutes the first evaluation within the pilot project's lifecycle. The interested scientific stakeholders preselect their potential partner regions based on the criteria already given in the project proposal.

The federal government or states also evaluate the received applications on the basis of various criteria. Most important among them are:

- An application's innovativeness in the proposals to cope with the novel challenges researched in the project, as well as
- the assessment of the region's potential pilot function, sample function and transferability of results, i.e., if the region can serve as a comprehensive model.

Moreover, in this second evaluation, the project initiators can comparatively analyze different applications. This allows to contrast the scientific stakeholders that chose their regional partners in the previous step. Only a small number of applications is selected for participation in a pilot project. Thus, these projects are a competitive instrument of the current spatial planning framework.

During the period of the pilot project, innovative and practical solutions are developed in collaboration of the participants. In this paper, we focus on the evaluation processes of pilot projects. These are, the continuous evaluation of the proposal's activities as well as the final evaluation that is supposed to identify generally applicable conclusions that can be transferred to large-scale problem solutions. The evaluation processes in this final stage of a project's life have not seen much treatment in the literature. In the context of the refugee aid example, we present real world experiences that are currently made – in pilot projects as well as other initiatives. They cover aspects like the collaboration of stakeholders and refugees that should lead to better integration, or if an exchange between model regions within the pilot project generates new ideas. In the end, we also draw general conclusions from these current examples.

References:
Einig, K. (2011): Funktion und Folgen von Modellvorhaben für die Politikberatung. Informationen zur Raumentwicklung, 7/8, 435-451.
European Commission (2015): Autumn 2015 Economic Forecast: Moderate recovery despite challenges. [online] http://europa.eu/rapid/press-release_IP-15-5996_en.htm
(accessed 02/14/2016).
Steinebach, G. (2016): LevoPark, Bad Segeberg, Konversion einer Kaserne in eine Erstunterkunft für 2.000 Asylbewerber und die Integration in Arbeitsmarkt und Gesellschaft. A.ST. Steinebach GmbH, Kaiserslautern/Germany.
Wiechmann, T., Mörl, K., & Vock, A. (2012): Evaluation von Modellvorhaben der Raumordnung. Informationen zur Raumentwicklung, 1/2, 79-90.

----- * -----

The quest for social mix – the Copenhagen experience

Sónia Alves
Instituto de Ciências Sociais, Universidade de Lisboa, PORTUGAL
Danish Building Research Institute, Aalborg University
sonia.alves@ics.ulisboa.pt

Several national and local European governments have made a clear commitment to supporting the development of mixed communities. Such advocacy has been made though planning, housing, and regeneration policies and has involved collaboration with a number of public and private agencies.
Whilst at the political level, ideas of social mix have been seen as a solution to processes of income segregation and urban decay, at the academic level they have raised several epistemological concerns related to its goals, ideological assumptions, and social and urban effects.
The task of this paper is twofold. In the first instance to discuss perspectives regarding the concept of social mix and mixed communities and the main assumptions and objectives that have come to justify the launch of these ideas in Copenhagen. The second is to analyse how these strategies have been implemented at the local level. What problems are they designed to address? What are the theoretical assumptions behind them? How are these strategies perceived by the population and public officials? What crucial elements of urban governance have been used in the construction of mixed communities?
The methodology used in this research involves literature reviews and in-depth interviews with officials and academics who have been involved in policy-making, implementation, or evaluation of housing policies in Copenhagen.

----- * -----

Session T5.7 | June 3 | 9:00 – 10:30

Environmental Planning Process Research

G. William Page
Department of Urban and Regional Planning
University a Buffalo, The State University of New York
114 Diefendorf Hall, Buffalo, NY 14214-8032, USA
gpage@buffalo.edu

Using a detailed case studies research method, this paper reports research that focuses on the process of solving diverse environmental problems. My research identifies deviations from the generic land use planning process that are adapted to resolve environmental problems or to take advantage of opportunities to enhance and preserve environmental amenities. I investigate whether deviations in the type of

environmental problem, the scale of the problem, or the level of government in the decision making role produce differences in the process of planning and implementing a solution to the problem.

Planning problems at all scales fit the definition of “wicked problems” as defined by Rittel and Webber, because of the complexity, ambiguity, open-endedness, and their potential for producing conflict (Rittel and Webber 1973). Environmental problems are often especially complex, and creating a plan to solve some environmental problems, such as climate change, have been described as “super wicked problems.”

This is research is important, because while there has been considerable study of the generalized planning process, there is less research on the short-term use of the planning process to solve environmental problems. The collaborative process to develop and implement long term master plans has been well studied. These plans are usually 20 to 30 year plans to guide the future of communities; however, creating plans to solve environmental problems differs from the process to create community land use plans in several significant ways. Some of the most striking differences are in problem identification, the technical complexity of the problems, the greater diversity and range of stakeholders and experts involved in the planning process, and in the scale of external funding needed for developing solution options and plan implementation. In addition, proposal writing for pilot projects is often needed to fund research to understand the problem, explore potential solution methods, and to contribute to strong funding proposals to obtain sufficient funds to implement the preferred solution. In this paper, I examine these issues.

There has been research on the collaborative process of solving environmental problems (Margerum and Whitall 2004; Margerum 2008; Margerum 2011). Research by Prokopy et al. (2014) presents a generalized typology that describes the catalytic events that can identify an environmental problem and initiate a planning process to solve some types of environmental problems. There is research that identifies the social criteria that are important in predicting which environmental problems will successfully initiate a planning process to solve the problem (Babin et al. 2015).

In my research, I utilize a case studies method to examine the special planning process issues arising when attempting to solve environmental problems. The case studies of environmental problems studied were diverse:

* Federal Superfund (CERCLA) cleanup of industrial site contamination
* Green infrastructure and environmental services for storm water runoff
* Habitat restoration
* Invasive species control
* Land management for biodiversity
* Landscape management for specific species protection
* Recycling and solid waste management
* Remediating and putting into productive use abandoned industrial properties
* Riparian zone restoration
* Stream and river restoration
* Turning derelict urban land into community gardens
* Wetlands restoration

Each case study documents the identification of the problem, research to understand the problem, plan making, and implementation of efforts to solve diverse environmental problems. Each case documents, over a period of years, the process for planning and implementing solutions to specific environmental problems. Each case study includes photos over time of the on-the-ground conditions. For some case studies there are photos prior to plan implementation, implementation of solutions in-progress, and outcome changes. The case studies include projects that were successful, partially successful, long-term on-going projects, and failures.

The scale of problems examined by the case studies vary widely, from national or regional problems, for example federal superfund sites and Great Lakes toxic hot spots, to local environmental problems like stream restoration. This is important, because the scale of an environmental problem influences the process of creating and implementing plans to solve the problem. The effort to solve environmental problems becomes more difficult when the scale of the problem is larger and the greater the number of governmental decision-making stakeholders in the process.

This research also investigated the role of professional urban/spatial planners in solving environmental problems. In the case studies investigated, the range of involvement of professional planners ranged from minor to significant. The research documents the roles of planners in the collaborative efforts that produced and implemented plans to solve the specific environmental problems and suggests how academic planning curricula can be modified to enhance the skills professional planners need to play significant roles in the collaborative efforts needed to solve environmental problems and take advantage of opportunities to enhance and preserve environmental amenities.

References

N. Babin, N. Mullendore, and L. Prokopy 2015. Using social criteria to select watersheds for non-point source agricultural pollution abatement projects. Land use Policy.
R. Margerum and D. Whitall 2004. The Challenges and Implications of Collaborative Management on a River Basin Scale, Journal of Environmental Planning & Management, 47 (3) 407-428.
R. Margerum 2008. A typology of collaboration efforts in environmental management, Environmental Management, 41(4): 487-500.
R. Margerum 2011. Beyond Consensus: Improving Collaborative Planning and Management, MIT Press
L. Prokopy, N. Mullendore, K. Brasier, and K Flores 2014. A Typology of Catalyst Events for Collaborative Watershed Management in the United States, Society & Natural Resources, 27 (11), 1177-1191.

----- * -----

A Good City for Living. Citizen Science and Urban Regeneration for Sustainable Development

Paulo Castro Seixas; Ricardo Dias; Pedro Queirós Pereira
CAPP-ISCSP-Universidade de Lisboa, PORTUGAL
(ISCSP – ULisboa)
(CAPP e IPVC)
pseixas@iscsp.ulisboa.pt

In an integrated development framework, cities play a brokers' role between a desired global transformational plan (the SDG agenda towards 2030) and the transformational plans of individuals, groups and institutions. The paper proposes that urban regeneration may, and perhaps should, be conceived as the possible matching of those transformational plans. Supported by a paradigm of "Cultural Planning", the paper argues that urban regeneration that leads to a "city for people" implies that people may be reflective researchers (through participative thinking) of this regeneration. Therefore, public policy on urban regeneration should be actively monitored at all stages of its cycle by the people who live the city in a broad sense.
Following methodologies of participation in a "cultural planning" and "citizen science" umbrella, the paper discusses the following questions: ""Does both SDG transformational conception and the transformational elements proposed by the citizen match to characterize a good city for living?" and "How may these transformational plans be useful on a urban regeneration for a city for people?". The data was collected through a case study approach in the town of Viana do Castelo, Portugal, with a two generation focus group approach based on projective techniques (portraying, patchwork and conversation). The article discusses the views of ordinary people regarding a good city for living, the transformational elements that characterize these views and the proximity of these conceptions on the 5Ps advanced by SDG.
The article is a reflective description of the project 'A Good City for Living'. The civic experiences of this project incorporate an extensive program of civic knowledge, with research, education and action triangulation and resulting in citizens audits. The university/research centers adopt the role of mediators/facilitators between citizens and the city institutions, turning citizens an integral part of public policy development process.

----- * -----

The Ongoing Transformation of Regional Planning in the United States

Robert Leiter [(1)]; Rocky Piro [(2)]
[(1)] FAICP, University of California, San Diego, USA
[(2)] FAICP, University of Colorado, Denver, USA

Regional planning in the United States has undergone an evolution over the past several decades – and continues to evolve. Throughout most of the 20th century, regional plans only addressed single subject areas, most typically transportation. In addition, single-subject regional plans were also developed parks and open space, housing or regional economic development.
This paper focuses on the transformation of regional planning in the U.S. into more multidimensional and comprehensive area-wide plans and long-range strategies that integrate related topical areas, such as land use, transportation, natural resources, open space, air quality and climate change, economic development, and housing.
The evolution of U.S. regional planning in the early part of the 21st century reflects a shift toward a more "systems" approach – with a growing focus on sustainability. As with other aspects of the planning practice in

the U.S., more attention is also being paid to collaboration with existing and new partners, implementation, and monitoring actions and outcomes. The following six emerging trends are highlighted in this paper.

1. Regional Planning for Sustainability
2. Integrated Regional Planning Across Related Topics
3. Inclusive Engagement and Expanded Partnerships in Regional Planning
4. New Approaches for Implementation
5. Forecasting for Demographic Changes and Changing Regions
6. New Tools and Techniques for Regional Planning

Examples are provided from a variety of regions across the U.S.

Background: The authors have distinguished careers as regional planning practitioners, as well as academicians. Both have been active in the Regional and Intergovernmental Planning Division of the American Planning Association, including sequential terms as Division Chair. This paper is an outgrowth of a Planning Advisory Service report project the two authors led with a team of more than a dozen and half regional planning professionals and researchers for the American Planning Association.

Mr. Leiter served as Director of Transportation and Land Use Planning at the San Diego Association of Governments and is currently a planning consultant and is research faculty member in the Department of Urban Studies and Planning at the University of California San Diego.

Dr. Piro served as Growth Management Program Manager at the Puget Sound Regional Council and is currently Executive Director of the Colorado Center for Sustainable Urbanism. He is on the Board of Directors of the International Urban Planning and Environment Association.

Theoretical and practical implications: This paper contributes to practice of regional planning, sustainability planning, collaborative planning, and governance and policy-making. It adds to the base of information for academic studies of regional planning and provides value to practitioners in various fields engaged in intergovernmental planning. It also is written with applications for decision-makers and citizens.

Methods and data sources: This paper uniquely blends observations of practitioners with case study methods and content analysis. Examples of the transformation of regional planning come from a variety of urban regions and planning agencies from distinct locations across the U.S.

Findings: The paper lays out information and observations on the evolving nature of regional planning and outlines prospects for the future of regional planning. While the focus is on the planning practice in the U.S. there are practical lessons for regional planning in other national contexts.

----- * -----

Governance tales: crossing boundaries, bridging divides, building-up common approaches, instruments and rules

Jorge L. Karol
Faculty of Architecture and Urbanism, Universidad Nacional de La Plata, ARGENTINA
jorge.karol@gmail.com

The paper deals with several types of borders, limits, frontiers, edges – continuous lines of spatial / social / conceptual / institutional / organizational demarcations, be they natural, conventional or imaginary – that separate and at the same time unite territories at each side of it. These borders may be closed, opened or admit several degrees of porousness and permeability. Their most exciting potentialities are the one of being expanded, extended, displaced, moved and the one of being crossed or trespassed – and thus, connecting those who inhabit each of its sides.

Some of the different 'borders' herein referred to include (i) between various scientific disciplines ("scientists"; (ii) between various policy formulation, planning and management State agencies ("politicians"; (iii) between "scientists" and "politicians"; (iv) between technical and institutional planning devices.

A subject densely discussed during one of UPE 11's tracks sessions and round tables, the present discussion relies on two ongoing projects located in Greater La Plata micro-region: (1) setting -up a simulation model of urban dynamics aimed at supporting the elaboration, numerical experimentation and assessment of alternative land use, mobility and energy policies (initial developments already presented at UPE8) and (2) building-up an integrated hydric risk management system.

The paper explores and discusses several approaches to establish and build-up interfaces and common boundaries and instruments between two and/or more actors in urban and environmental planning settings. Following the pioneer works of Star & Griesemer (1989), in order to "translate between different viewpoints involved", these scenarios require standardizing methods and developing 'boundary objects'. Well before the use and application of any type of operational toolkits, the paper identifies, proposes the logic and explains the functioning of 2-3 of the 'boundary objects' which are being developed and applied for conducting these two projects.

In order to enhance the likelihood of developing institutional learning capacities that enable planning and management arrangements (and their authorities) to effectively steer processes of extremely high systemic complexity – i.e., progressively sustainable urban and environmental development - both projects emphasize the need to distinguish, articulate and combine the simultaneous construction of both (a) technical and (b) institutional devices, building-up scenarios that channel interactions and cooperation among many different actors with distinctive interests, viewpoints, rationalities, languages, conceptual and methodological tools and power, through complex participatory engineering.

Technical devices - simulation / numerical experimentation models, explanatory diagnosis, causal reverse engineering explanations - should provide an agreed-upon sensitive and proper representation of the structure and dynamics of the system to be intervened upon.

Institutional devices should aim to connect intervening actors through networks, conventional circuits of information circulation and activities' protocols. The participatory elaboration of both circuits and protocols may be triggered by 'complex' questions (such as "who should know which information through which communication means when, in order to support which decision-making processes in which conditions").

But this last is not just a technical issue: governance – i.e, the process of building institutional connection among actors and the system of rules governing their interaction – is essentially a political issue, for it reflects the relative amount and quality of power among them.

Indicate findings: Considering the social constructions deriving from contradictory interactions among diverse stakeholders and rationalities and especially - in these specific projects - inside the States (an often underestimated sphere of intervention in the urban and environmental planning setting itself), it seems apparent that the processes of building-up both (i) technical and (ii) institutional devices should continuously mirror one another. It is worth noting that the development and effective construction of these 'objects' is extremely sensitive and vulnerable to variations in contextual conditions.

Bibliographic references

Star, S.L., Griesemer, J.R., (1989) Institutional ecology, 'Translations' and Boundary objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1917-39. Social Studies of Science, XIX: 3: 387-420)

Karol, J. (2011) Inside the States: building - up local management models for territorial sustainability. 10th Int'l Conference of Territorial Intelligence, Liege.

----- * -----

Track 06

ECONOMY AND JOBS: *towards equitable cities*

Chair: José Antunes Ferreira, Universidade de Lisboa, Portugal

Scientific Committee: Daniel Rauhut, Norwegian Institute for Urban and Regional Research, Norway
Jorge J. Karol, University of La Plata, Argentina
José Reis, Universidade de Coimbra, Portugal
Peter Phibbs, University of Western Sydney, Australia

In the last decades, large changes in the world economic order have occurred. The crises affected product growth, and induced a decline in production of some sectors and a consequent increase of unemployment in North America and Europe, while BRIC`s and other emerging industrial and trade economies are of growing importance in the world arena.

These changes have a large and expressive relevance in cities and metropolis, where capital, innovation and qualified human resources are concentrated unleashing labor market segmentation and structural unemployment, contributing to increase inequalities.

Employment solutions, not only to improve competitiveness, but also to promote equity and social inclusion have been leading policy goals addressing territorial and social cohesion, namely in EU countries.

This track accommodates papers that will discuss these aspects.

Households income vulnerability during the 2008 crisis in four Portuguese cities

Carlos Gonçalves
Instituto de Geografia e Ordenamento do Território, Centro de Estudos Geográficos, Universidade de Lisboa, Edifício IGOT - Rua Branca Edmée Marques, 1600-276 Lisboa, PORTUGAL
c.goncalves@campus.ul.pt

Seen in the context of the urban systems, resilience can assume different profiles: (i) to consider the change rhythm in the different structures that constitute the urban system, in such a way to activate the absorption capacities or reactive answers; (ii) to consider flexibility factors which confer adaptive capacity, matching persistence with introduction of incremental adaptations.
The communities are more resilient as more robust are their skills: (i) to adjust the unexpected, developing planning structures that are able to host unforeseen events; (ii) to absorb the "new" (new populations, new ideas, new productive structures, new values, etc.); and (iii) to change, facilitating institutional changes when these ones are desirable.
A community with high resiliency, anticipates or manages to mitigate threats and develops a future vision that places the resiliency as a priority, creating a planning structure that allow to open ways of recovery allowing, in a very short period of time, to recover the main functions and trigger "new normality patterns".
To discuss the resiliency in the communities scale implies that we integrate, three segments: (i) the starting point, this means that the status quo is analyzed in what concerns the presented results within a given time (can be before a particular crisis episode); ii) the post-crisis framework, which includes the consequences and challenges that adversity presents to the community; and (iii) the results and the sense of the actions carried out post-crisis.
The resilience of a region can be assessed by the ability to create employment, to increase the family's income or to reduce social iniquities (observed, for example, in the expansion or contraction of middle class). This means: positive outputs on access to income and social cohesion are associated to the regional development consolidation, transposing to different measures of success by reference to the challenge type, towards the one the region is placed (Chapple and Lesterb, 2010). Thereby, the regional resiliency is reflected in the 'outputs transformation competences that a region presents towards a given challenge" (Chapple and Lesterb, 2010, p. 86).
The issue that we propose to answer in this communication is: given the crisis framework lived between 2008 and 2014 and its effects on the income accessibility, the cities of NUT III West, manifested resilient or vulnerable? To perform that, we present indicators that locate the starting point and others that evaluate the transformations that have occurred in that first phase (6 years) of crisis.
The crisis impact assessment (started in 2008) on income access, by families with residence in the cities of Alcobaça, Caldas da Rainha, Peniche and Torres Vedras, results of an exercise of field work (performed between the 4th of April and the 6th of May 2014), through which were applied 387 inquiries. From these interviews came out information about 1028 individuals (enlarged sample), corresponding to the totality of people included in 387 family households (restricted sample). In this way, it was possible to evaluate different types of crisis impacts. In this work we pointed to the changes in the income accessibility by families.
The crisis impacts are based on a vulnerable structure, marked by very low levels of income (46% of households do not have more than 437€ per capita monthly). This aspect determines the life quality and drags the families to vulnerability conditions that make it impossible to contribute to the community progress. Many families, because of the reduction that they have suffered in monthly income (65% has lost at least 1/4 of its monthly gain), have joined this category in the 6 years studied. In addition, to the preceding point, the fact that more than half of the families envisage degradation possibilities in their income sources framework (57% considers their family incomes unstable or very unstable). Thus, the conditions to qualify the family life and the social context (in its multiple dimensions) are degraded.
The fact that, for every 100 inactive there are only 75 actives is a severe bottleneck to the ability to mobilize the development effort. It comes up in a double constraint: on one hand, this increases the part of the effort of the actives, that are a minority; on the other hand (and if we take into account that the inactive are mainly unemployed (31%) and retired or pensioners (corresponding to 37.4% of active employees), the fragility of the slice that can support or introduce changes in the economic structure, is high. Here's a strict knot around the development potential;
The proportion of unemployed swept aside from any income source (41%, not receiving unemployment benefit) erodes a significant part of the active population, placing it in contexts of great marginality, that gradually tear them apart from society, exempting, in this way, their potential.

In the most benevolent scenario, on term, resources are wasted/ undertaken. Joined together with the previous aspects, amplifying them, is the fact that a good part of the unemployed (45%) have more than 45 years, exposing them to greatest weaknesses towards a social protection framework and a labor market which excludes them.
The strong contraction in employment accessibility and the different degradation forms of income sources access shows the lack of the resilience capacity of socio-economic structures of these cities. However, the variations indicated between the 4 cities, do matter to identify factors that strengthen and others that weaken these communities.

----- * -----

Economic dynamics and competitiveness in the city centre of Oporto (Portugal)

Célia Marisa Fonseca Ferreira [(1)]; Teresa Sá Marques [(2)]; Paula Guerra [(3)]
[(1)] CEGOT / Faculdade de Letras da Universidade do Porto, PORTUGAL celiamarisaferreira@gmail.com
[(2)] CEGOT / Faculdade de Letras da Universidade do Porto, PORTUGAL teresasamarques@gmail.com
[(3)] CEGOT / Faculdade de Letras da Universidade do Porto, PORTUGAL; IS –UP / Instituto de Sociologia / Universidade do Porto; Griffith Centre for Cultural Research / Griffith University / Australia, mariadeguerra@gmail.com

Globalization has changed the structure and nature of economic activities. The importance of knowledge has raised and the role of information and communication technologies has become increasingly essential to the functioning and prosperity of economic activities. Significant emphasis has been given to human capital and social capital in recent years with the recognition of their contribution to the production and dissemination of knowledge and creation of innovation. The processes of knowledge and innovation production have an increasing attention in the academia, the business sector and in public decision due to the recognition of its importance to economic growth, in particular, and the development of societies, in general.
The concept of smart city marks the present political agenda worldwide, being the economic prosperity of urban areas one of the three principal aims. Urban development promoted by business entrepreneurship characterizes many of the so called smart cities. Normally these urban areas promote a vibrant economy where new businesses open and existing businesses easily expand. Public intentions are often combined with private interests, creating public-private partnerships to pursue the goal of urban competitiveness.
Each city has a unique history, political and institutional context and cultural legacy. However, cities are conditioned by policies, strategies and regulations at different scales: European, national, regional.
Economic processes occur in time and space. The evolution of urban economic activity must be understood both within the context of economic processes occurring at different scales of analysis and within the institutional context (regulatory and normative, but also cultural and cognitive) that characterizes different territories.
The economic dynamics are conditioned by the type and characteristics of economic agents and the way how they act and interact. Economic action is based upon social relations, structures and processes of communication and adjustments between companies, suppliers, customers and different organizations.
In the present work, economic activity in the city centre of Oporto, in Portugal, is analysed. The city has currently significant visibility at a national and international level, especially due to the prosperity of the tourism sector. The paper seeks and discusses answers to the following questions. What is the city centre of Oporto today? Is it dominated by traditional economic activities, have it a strong component of innovation in terms of facilities, products and services or is it a place where the user can find both traditional and innovative establishments, products and services, with great diversification of supply that meets the expectations of different population groups and different urban experiences? Is there considerable variability of businesses or is their survival rate guided by business success? This analysis is done from entrepreneurs point of view.

----- * -----

Technological Park of Mato Grosso – Challenges and opportunities for regional – Global competitiveness

Rosinaldo Barbosa da Silva [(1)]; Nelba Azevedo Penna [(2)]
[(1)] Scholarship by the Foundation for the State of Mato Grosso Research - FAPEMAT. PhD in Geography at the Graduate Geography Program (POS-GEA), -ICC Science Center Institute - University of Brasilia - search Line of Urban Space Production, Rural and Regional. Area of concentration: "Environmental and Land Management", BRASIL rosinaldovirtual@yahoo.com.br.
[(2)] Profª. Dra. Department of Geography Associate. - Graduate Program in Geography at the University of Brasilia – UNB, BRASIL

This article is an approach discusses on the concepts and practices of contemporary world trends regarding the development of competitive and productive cities, which has expanded by means of the realization of metropolitan economic strategies, aiming inter-regional, national and global integration, with increasing use of the science and technology. The challenges to achieving the economic strategies, permeate the overcoming of socio-spatial disparities within metropolitan areas especially in "developing countries", such as Brazil, which has a democratic system not broadly consolidated. On which the rights properties not are yet assured to all citizens, constituting as barriers to investment and economic development for large and small producers. The search of competitiveness and the growth of production needs involvement of various sectors of society: private sector, public sector and civil society. Providing evidence of the need to promote "governance" of the metropolitan regions encompassing corporate interests, often conflicting. Besides that, locational incentives mechanisms for the installation of industrial, business and trade center development and services has proven effective in attractiveness of economic enterprises intensifying inter-regional competitiveness, provided by public-private partnerships in the invested infrastructure, enabling mobility the capital-goods-consumption and labor. In this sense, we will explain on metropolitan transformations in regional production from the installation of the Technological Park of the State of Mato Grosso, in the city of Várzea Grande - investigating major urban changes resulting from the transformation of the city in a scientific and technological center, in order to increase productivity and regional economic competitiveness. We reflect on the main challenges and possibilities of inter-regional and global integration that tends to consolidate with the innovative development of science and technology to strengthen the "local productive culture." Restructuring this way, the agricultural production relations by the global agribusiness, means that the state of Mato Grosso has emerged as one of the largest producers in Brazil. The intent of this article is therefore to understand in the light of the geographical theory the production of competitive and more productive cities in the context of the metropolitan area in order to contribute to the understanding and practical construction of the regional organization in the economic, social and spatial aspect, the order to reduce the socio-spatial inequalities and promoting more competitive cities, economically developed and socially just. The methodology used to develop this paper is based on review of literature and documents analysis, such as the plan "Mato Development Plan Grosso - MT + 20" and "Plan of urban expansion" held by the company Prisma Engineering Architecture and Sanitation LTD in 2013. These subsidized as the main sources of information and data on the Mato Grosso State Government's strategy to promote competitiveness and productivity of the metropolitan area. We also use the cartographic techniques in the preparation of maps, through the program "ArcGIS", for representation of the major changes in the urban space, resulting from the implementation of the Technological Park of Mato Grosso. Preliminary results are expanding the city limits, changes in zoning, expansion of investments in fixed capital (urban infrastructure), creating locational incentives laws, public-private partnership laws, as well as creating a new urban dynamic with attraction new investors in real estate and finally the identification of the formation of a new urban center, with a tendency to hand expertise of skilled workforce, and strengthening supply urban goods and services, showing the process of formation of a more competitive and productive city the regional economic context.

The publication of this research has the financial incentive of Research Support of Federal-FAPDF District Foundation

----- * -----

The Impact of Floods and Typhoons on Housing Welfare: Case Study of Thua Thien Hue Province, Vietnam

Suyeon Lee; Seyeon Lee
University of Wisconsin-Madison, USA; Texas A&M University, USA
sy81sunshine@gmail.com

This research investigates and records post-flood and typhoon conditions of low income housing in the Thua Thien Hue Province, Vietnam; area prone to extreme flooding in Thua Thien Hue province, Vietnam The cost of rebuilding houses after flood and typhoon has been always a burden for low income households. These costs often lead to the elimination of essential construction practices for disaster resistance. Despite relief efforts from international non-profit organizations and Vietnam government, the impacts of flood and typhoon damages to residential construction has been reoccurring to the same neighborhood annually. Notwithstanding its importance, this topic has not been systematically investigated.
The study is limited to assistance provided to low income households documenting existing conditions of low income homes impacted by post flood and typhoon conditions in the Thua Thien Hue Province. The research identifies leading causes of the building failure from the natural disasters. Relief efforts and progress made

since the last typhoon is documented. The quality of construction and repairs are assessed based on Home Builders Guide to Coastal Construction (FEMA, 2010) by Federal Emergency Management Agency. Local residents in four different communities were interviewed and surveyed to get incites on repair effort by the non-profit organizations and Vietnam government and their needs post flood and typhoon.
The findings from the field study informed that many of the local people are now aware of the importance of improving housing conditions as one of the key coping strategies to withstand flood and typhoon events as it makes housing and community more resilient to future events. While there has been a remarkable improvement of housing and infrastructure with the support from the local government as well as the non-profit organizations, many households in the study areas are found to still live in weak and fragile housing conditions without gaining access to the aid to repair and strengthen the houses. Given that the major immediate recovery action taken by the local people tends to focus on repairing damaged houses, and on this ground, low-income households spend a considerable amount of their income on housing repair, providing proper and applicable construction practices will not only improve the housing condition, but also contribute to reducing poverty in Vietnam.

----- * -----

Session T6.2 | June 3 | 9:00 – 10:30

Public Transit Equity and the Geography of Opportunity in the Atlanta Region

Alex Karner [(1)]; Catherine Ross [(1)]; Peter Hylton [(1)]; Richard Duckworth [(1)]; Subhrajit Guhathakurta [(2)]
[(1)] Center for Quality Growth and Regional Development. School of City and Regional Planning, Georgia Institute of Technology; Atlanta, GA 30308, USA
[(2)] Center for Geographic Information Systems. School of City and Regional Planning, Georgia Institute of Technology; Atlanta, GA 30308, USA
alex.karner@coa.gatech.edu; catherine.ross@coa.gatech.edu; peter.hylton@gatech.edu; rduckworth@gatech.edu; subhro.guha@coa.gatech.edu

In cities across the United States, patterns of urban migration are shifting and rapid demographic change is occurring. After decades of out-migration from central cities, their populations are growing and wealth is flooding back in. Although often viewed as a boon by elected officials and some city residents, this influx of wealth and prosperity can raise property values, rents, and the cost of basic goods, ultimately leading to gentrification and displacement of existing residents. These changes can intensity patterns of regional inequity. Importantly, central city areas are also the locations where high quality public transit systems are located. If low-income transit-dependent workers are displaced to the urban and suburban fringe, they will either be forced into costly automobile ownership or forced to endure long and grueling commutes by public transit. The net effect of these shifts could be reduced economic competitiveness or diminished wellbeing as potential workers are separated from economic opportunities. In many instances these workers cannot afford an automobile.
Effective public transit systems are absolutely vital for the economic productivity of regions, yet we know surprisingly little about the connectivity and accessibility of public transit systems in the context of dynamically changing cities and regions. In this paper, we take the Atlanta, Georgia metropolitan region as a case study to assess the extent to which historical, existing, and planned public transit supply is matched to the connectivity and accessibility needs of the changing transit dependent population. We employ publicly available data on transit routes and schedules combined with other information on the location of existing and emerging economic opportunities. We will assess recent regional transportation plans and transportation improvement programs prepared by the regional planning agency as well as long-range plans prepared by the Metropolitan Atlanta Rapid Transit Authority (MARTA) to determine whether and to what extent expected demographic changes and the needs of transit dependents are taken into account. Specifically, we will identify emerging clusters of economic opportunity and quantify their accessibility by public transit for low-income workers, people of color, and zero-vehicle households as compared to high-income workers. We will also examine how this accessibility has changed over time.
Atlanta is a rich case study for multiple reasons. First, it is highly segregated by race. Interstate 20 has been a surprisingly tenacious dividing line, separating the region in to north (largely white) and south (largely black). Over the years, wealth and economic opportunity has shifted northward. Few studies of transit systems have systematically engaged with issues of persistent racial segregation in a meaningful way. Additionally, MARTA recently undertook its first service expansion outside of the original two-county area since service began in the early 1960s. Clayton County, located south of I-20, received new bus service beginning in late-2015. The proportion of white residents in Clayton county dropped from 70% in 1990 to

20% by 2012 as median household income dropped from approximately $60,000 to $40,000 over the same period. These demographic changes created a strong and politically active constituency for investments in public transit. This is the first new county to join MARTA in 35 years. In addition to the changes sociodemographic characteristics, we examine the political and institutional drivers leading to Clayton County residents' agreement to join Marta. Understanding how the region as a whole has changed over time and engages (or not) with this challenging past will provide a window into its prospects for an equitable future.

----- * -----

Urban Sustainability-Consumerism-Media: The Case of Gated Communities in İstanbul

Ayşe Akbulut [(1)]; Özlem Özçevik [(2)]
[(1)] Res. Assist., Nigde University, Urban and Regional Planning Department, 51240 Nigde, TURKEY, ayseakbulut@nigde.edu.tr
[(2)] Assoc. Prof. Dr., İstanbul Technical University, Urban and Regional Planning Department, 34367 Istanbul, TURKEY, ozceviko@itu.edu.tr

The aim of this study is to examine the relationship between sustainability and consumer society from the perspective of Baudrillard's system of thought which clarifies today's postmodern era. Doing a literature review about key words also testing it with commercials from the media and location choice of the gated communities in the city of İstanbul case form the scope of the study.
The components of sustainable development known as 3E(economy-ecology-equity) has been studied since 1987.
There are discussions on this subject about the significance,comprehensiveness and integration into countries of these components. The economy represents a significant role in these discussions. Economic and environmental attitudes that globally adopted; use-distribution of natural resources and waste show that the world moves away from sustainability. Besides, the consumption factor creates another significant problem in this situation. Sustainable development is affected negatively in all economies by the consumption-oriented lifestyle In this context, the main problem question that directs the study is: even if all technological developments and new economic regulations will be provided, can sustainable development be achieved in consumerist society? According to Baudrillard there are 4 ways of having an object. They are: functional, exchange , symbolic and sign value. It can be said that the fourth value is at the forefront in 21st century's postmodern consumer mentality. He says also that a large part of our world has become fictitious universe that we react to many media images rather than real people or places. In this case ; achieving sustainability objectives, the urban planning has focused on it since the last quarter of 20th century, get more difficult situation by this improved consumerism.
The method of the study to examine this issue can be listed as follows : general history of planning and sustainability relations, consumer society and the media influence on it by the perspective of key thinker/ sociologist Baudrillard, relationship between commercials of the gated communities and consuming (owning) it, the development and marketing history of gated communities in İstanbul and superposing their location choice with natural land cover (forest areas, watershed areas, agricultural areas) by using GIS (Geographic Information Systems), analyzing and interpretting the results according to sustainability goal of urban planning.
In conclusion; the consumerist society approach made easier to come out of the crisis stronger and cultural reproduction of capitalism. According to poststructrist and postmarxist Baudrillard, in the 21st century post-modernist information era, people move away from their real identity and transformed it to virtual avatar in simulation life. Therefore, people in this era want to have objects for their sign value rather than functional, exchange or symbolic value. Consumption factor is directly related to fill and complete this simulation parallel life. Media is using this second life option and emphasize sign value of the objects, offered them to be special ones with the commercials. Gated communities commercials offer a new life and being special for owners with not only with technical oppportunities but also with segregation from the others, other parts of the city. But Baudrillard and his students' studies show that seeking for the equality issue is behind the hedonistic consumerist behaviour indeed. Gated communities is chosen for the best explaining case to examine the relationship among sustainability, media and consuming in İstanbul.
The results of the study show that in Istanbul there is a quiet increasing trend for the gated communities. The number of them increased 363% in last 15 years for İstanbul. %20 of the officially planned residential areas are used as gated communites. In 2015 (April) the number of the gated communities is 1452 for completed and 315 for the underconstruction ones. Esenyurt and Pendik Districts have both the most completed projects and the most new planned underconstruction gated communities. So, it can be said that there is an investment tendency about these districts. Their sprawl in both inner and outer city of both the European and Asian sides is encouraged mainly through the north periphery where quantity and quality of natural elements

are high. %38 of these developments are located in naturally rich areas. Especially there is a gated community construction pressure on the watershed areas (%18 of total areas). Indeed, this study doesn't focus on social impacts. It can be said that their choice of location not only has detrimental effects on the natural environment but also on the social environment. Gated communites create a chaos and a class division between rural and upper class families. They threaten both natural and social sustainability. Therefore, since 1970's sustainability which is main goal of the urban planning, with gated communites that is a reflection of the decisions taken at different scales by using media effect, is becoming more inaccessible request day by day. In this situation, planning discipline need to revise for how can develop its tools for not losing goal realism.

----- * -----

Sustainable and Social Integration of the International Students in the Canadian Universities

Bernard Delpeche
Acadia University, CANADA
bernard.delpeche@acadiau.ca

This paper analyzes different issues dealing with a sustainaible integration of the international students in the Canadian universities. Canada has a long tradition of social diversities, however the concept of the Canadian inter-culturalism needs to be re-evaluated from time to time in order to maintain the harmony between national/international students and their cutural environment. The number of international students increases largely in all Canadian provinces. For instance, they represent today 1/3 of the unversity population in the Atalantic coast of Canada, according to Statistics Canada.This is the reason why this paper focuses on numerous strategies to develop inside and outside the classroom a dynamic convergence between the international students and the social, economic and cutural patterns of the Canadian Atlantic regions.

----- * -----

Lusophone 01

Urban Planning for sustainable development in lusophone contexts

Chair: Isabel Loupa Ramos, Universidade de Lisboa, Portugal

Scientific Committee: Dennilson Pinto, Direcção da Ordem dos Engenheiros de Angola, Angola
Judite Nascimento, University of Cabo Verde, Cabo Verde
Margarida Queirós, Universidade de Lisboa, Portugal
Maria Encarnação Sposito, Universidade Estadual Paulista, Brasil
Maria Rosário Partidário, Universidade de Lisboa, Portugal

A fast urbanization process linked to road infrastructures and sprawl housing and economic activities expansion characterizes many countries in the last decades.

This track is dedicated to the presentation of urban planning in practice supported in the analysis of the main transformations in Portuguese-speaking territories and the presentation of legal and instrumental frameworks related to sustainable development.

- What are the main problems that cover these territories?
- Which main conflicts are emerging?
- Which programs and solutions are being pursued?

Proposta de expansão urbana para o município de Palhoça/SC, Brasil

Arthur Wippel de Carvalho [1]; Bruno Franklin Lopes Gaspar [2]; Jean de Bona Veronez [3]; Tiago Umberto Pazolini [4]

[1] Analista Ambiental; Geógrafo pela Universidade Federal de Santa Catarina – Campus Reitor João David Ferreira Lima, s/n, Trindade, Florianópolis, Santa Catarina, BRASIL

[2] Agente de Pesquisa e Mapeamento; Licenciado em Geografia pela Universidade Federal de Santa Catarina – Campus Reitor João David Ferreira Lima, s/n, Trindade, Florianópolis, Santa Catarina, BRASIL

[3] Acadêmico de Geologia pela Universidade Federal de Santa Catarina – Campus Reitor João David Ferreira Lima, s/n, Trindade, Florianópolis, Santa Catarina, BRASIL

[4] Técnico em Cartografia; Geógrafo pela Universidade Federal de Santa Catarina – Campus Reitor João David Ferreira Lima, s/n, Trindade, Florianópolis, Santa Catarina, BRASIL

arthur.wippel7@gmail.com; brunofranklin6@gmail.com; jeangeol13@gmail.com tiago_pazolini@hotmail.com

No Brasil o processo de expansão urbana cresceu consideravelmente nas últimas décadas, principalmente após a consolidação da indústria nacional iniciada em meados da década de 1930. Com as mudanças no cenário político-econômico brasileiro, grande parte da população iniciou o processo de migração campo-cidade. Com isso, inúmeras cidades passaram a apresentar um expressivo crescimento demográfico, dificultando a capacidade da administração pública em fornecer os insumos básicos para o progresso e desenvolvimento urbano, como por exemplo, moradia, saneamento básico, transporte, entre outros. A ausência de mecanismos de fiscalização no ordenamento relativo ao uso e ocupação do solo é um problema intrínseco na história territorial brasileira. Um dos principais problemas identificados em relação a isto é a ineficácia das leis e mecanismos para o direcionamento do crescimento urbano, que ao longo da história deste país foi realizado de forma desorganizada, ou seja, indicando um acréscimo populacional sem a infraestrutura necessária para atender tal expansão. Como resultado desta falta de planejamento, atualmente é possível verificar que diversos municípios apresentam dificuldades na elaboração de estudos e projetos que envolvam o controle do uso e ocupação do solo. Tendo em vista as limitações por parte do poder público em relação ao controle da expansão urbana, o presente trabalho objetiva apresentar uma ferramenta alternativa visando proporcionar o entendimento das áreas aptas para o crescimento urbano municipal. Como área de estudo foi escolhido o município de Palhoça/SC, município o qual apresentou um expressivo crescimento populacional nos últimos anos, sendo que neste século a sua população aumentou em mais de 50%, com referência ao recenseamento do Instituto Brasileiro de Geografia e Estatística (IBGE) realizado no ano 2000 e a estimativa populacional produzida pela mesma instituição em 2015. Com esse crescimento é necessário observar onde estão sendo instaladas as atuais habitações e para quais áreas pode vir a ocorrer a expansão urbana do município. Como forma de auxílio na análise e direcionamento estratégico para os tomadores de decisões, e para contrapor a Lei municipal que rege o ordenamento territorial desde o ano de 1993 - Zoneamento de Uso e Ocupação do Território do município de Palhoça (Lei Municipal nº 16/1993) - foram escolhidas ferramentas de Sistemas de Informação Geográfica (SIG) que analisam, de forma multicriterial, parâmetros como geologia, geomorfologia, pedologia, climatologia, uso e ocupação do solo, áreas de preservação permanente, unidades de conservação, territórios indígenas e quilombolas, áreas vulneráveis à inundação, entre outros. Com a análise multicritério é possível definir pesos para cada uma das classes avaliadas, hierarquizando-as numa escala que expressa a aptidão de determinada área (ainda desprovida de urbanização) em transformar-se em áreas urbanas. Após essa hierarquização inicial em cada uma das classes em uma escala numérica pré-definida, no caso deste trabalho de 1 a 3, a etapa que segue remete ao cruzamento das informações dentro da ferramenta *Weighted Overlay*, do software ArcGIS. Esta ferramenta correlaciona os valores expressos em cada um dos parâmetros escolhidos para o estudo em questão. Como resultado se tem um arquivo matricial no qual cada pixel possui um valor resultante da operação realizada no SIG. Esse valor será analisado na escala de 1 a 3 que remete à aptidão da área em suportar a implantação de mecanismos urbanos sem prejudicar o ambiente em questão e as estruturas que serão acrescentadas nele. A análise multicritério, neste caso, serve como auxílio ao tomador de decisões em definir a expansão urbana do município de Palhoça/SC, considerando parâmetros físicos, bióticos e antrópicos em sua análise. Como resultado, diversos polígonos indicando aptidão se formaram dentro do território do município, apontando as melhores áreas em condições de receber estruturas como residências, prédios, estradas e obras de infraestrutura de modo geral. Para uma melhor forma de representação da informação gerada a partir da análise multicritério, foi elaborado o Mapa Geoambiental do município de Palhoça, o qual apresenta os polígonos citados acima, bem como as áreas de restrição ambiental para uma futura expansão urbana. Esse mapeamento não só apenas subsidiará os tomadores de decisão, mas também servirá como base para possíveis investidores que buscam a instalação de novos empreendimentos no município, fato este que vem ocorrendo e

crescendo cada vez mais nas últimas décadas, como apontam os estudos do IBGE. Os locais que apresentaram inaptidão para a ocupação antrópica devem receber técnicas especiais de engenharia para a implantação de futuros empreendimentos, pois representam terrenos com alta declividade, sedimentos pouco a não-consolidados e solos pouco desenvolvidos, retratando um ambiente que expressa o claro predomínio dos processos morfogenéticos frente aos pedogenéticos. As áreas com restrição ambiental não podem sofrer processo de ocupação, pois constituem áreas de preservação permanente, unidades de conservação, territórios indígenas, dentre outros locais que, de acordo com as legislações vigentes em território nacional, desqualificam a alteração dessas áreas pelo homem. Vale ressaltar que o resultado final derivado da análise na ferramenta *Weighted Overlay* não deve ser considerado por si só, pois muitas características peculiares do município também devem ser acrescentadas na tomada de decisão por parte do poder público municipal. A utilização do SIG para o planejamento urbano vem sendo amplamente discutido e cada vez mais utilizado. Dentre suas grandes vantagens pode-se citar a possibilidade em se integrar dados distintos em um único ambiente de análise, fornecendo uma visão mais completa sobre o município ao gestor público. Visto isso, é possível concluir que apresentar as áreas ambientalmente favoráveis e restritas para a expansão urbana por meio de um mapeamento favorece um melhor entendimento de diversos públicos interessados nessa informação, pois os mapas atuam como veículos de transmissão do conhecimento. No caso deste estudo em especial, o mapeamento aponta para áreas inaptas a serem ocupadas por estar em conflito com áreas de vulnerabilidade e/ou preservação ambiental. Para isso, as prefeituras municipais e demais instituições precisam acervar bases cartográficas em boa escala para os mais diversos temas, além de possuir departamentos e profissionais que saibam manuseá-las. Agregar o conhecimento cartográfico aos gestores públicos facilita, agiliza e pode enriquecer os debates e definir as tomadas de decisão, como neste caso, orientando a expansão urbana do município e enfatizando um desenvolvimento sustentável, que visa a manutenção da fauna e flora, da qualidade da água, dos remanescentes florestais e das demais riquezas naturais que o município possui.

----- * -----

O Planejamento Urbano em evidência: estudo de caso em Teresina, Piauí, Brasil

Erica Cecília de Sousa Soares [(1)]; Wilza Gomes Reis Lopes [(2)]

[(1)] Arquiteta, Mestranda em Desenvolvimento e Meio Ambiente, da Universidade Federal do Piauí, UFPI, BRASIL

[(2)] Arquiteta, Doutora, Professora Associada do Departamento de Construção Civil e Arquitetura e do Mestrado e Doutorado em Desenvolvimento e Meio Ambiente, da Universidade Federal do Piauí, UFPI, BRASIL

ericacecilia@ufpi.edu.br; izalopes@uol.com.br

Nos últimos anos, tem sido possível observar o crescimento populacional brasileiro e, consequentemente, de suas cidades, que apresentam forte poder de atração, fazendo com que mais pessoas as procurem, na busca por melhores oportunidades de vida – emprego, saúde e educação –, demandando, dessa forma, mais áreas construídas, que atendam às necessidades básicas desse contingente humano. Aliado a esse crescimento, aumentam os problemas urbanos, como déficit habitacional, produção de lixo, violência, poluição, como também as dificuldades de gestão desses problemas pelo poder público. No Brasil, de forma geral, percebe-se que no processo de urbanização – aqui entendido como a transformação do ambiente a partir da atividade antrópica – as áreas urbanas do país apresentam graves problemas ambientais, consideráveis transformações na paisagem e pontos críticos de degradação como os assentamentos ilegais, as áreas de preservação descaracterizadas e poluídas e infraestrutura deficiente. Intervenções que busquem a organização, ordenamento e aparelhamento das cidades como soluções para os problemas urbanos, sociais e ambientais são essenciais e devem ser implantadas pelo poder público, a partir de um planejamento, que foque nos processos de produção, estruturação e apropriação do espaço urbano. Teresina, capital do Piauí, Estado da região Nordeste do Brasil, não fica à margem desse contexto, uma vez que, seus maiores problemas, também, são reflexos do acelerado e desordenado crescimento urbano, evidenciado nas últimas décadas, bem como da dificuldade do poder público em gerenciar crescimento econômico com melhoramento da qualidade de vida. Teresina, assim como a maioria das cidades, apresenta altos preços da terra urbana servida de infraestrutura, dificultando, assim, sua aquisição e resultando na ocupação de áreas irregulares e de risco, por parte da população mais pobre. A Zona Norte da capital, por constituir-se de terrenos mais baratos ou desocupados, é uma área propensa a essa ocupação, apresentando risco de inundação, principalmente, na região denominada “Lagoas do Norte”, cuja configuração natural do terreno é uma extensa planície inundável que, sem planejamento eficiente, sofreu alterações ao longo dos últimos 40 anos, em que foram realizadas intervenções hidráulicas, como diques, sistemas de interligação das lagoas e sistemas de controle de nível, entre outras. Continua sendo, também,

uma área carente de saneamento ambiental, de melhorias habitacionais, de oportunidades de geração de renda e de acessibilidade. Na perspectiva de corrigir a degradação ambiental e as deficiências de infraestrutura presentes na região das lagoas da Zona Norte da cidade, a Prefeitura Municipal, vem operacionalizando desde 2004, dois anos após a instituição do Plano Diretor de Teresina, o Programa Lagoas do Norte (PLN), que a partir de 2008 vem sendo implantado com o financiamento parcial do Banco Mundial. Neste trabalho discute-se a relação entre o planejamento urbano de Teresina e a concepção do Programa Lagoas do Norte (PLN), destacando suas ações relacionadas às diretrizes previstas no plano diretor do município, voltadas para a sustentabilidade. Para tanto, realizou-se revisão de literatura sobre algumas tendências recentes do planejamento urbano no Brasil, para analisar como os temas Sustentabilidade, Planejamento Estratégico e Estatuto da Cidade foram incorporados à construção e ao desenvolvimento do plano diretor de Teresina (Teresina Agenda 2015) e, também, ao PLN. Foram destacados os elementos, a metodologia, as diretrizes e as propostas de programas presentes na Agenda 2015 e que se originaram dela, em especial o PLN, e como esses temas, também, estiveram presentes na elaboração deste programa. Utilizou-se as informações obtidas no documento síntese da Agenda 2015 de Teresina, o Plano Diretor de Drenagem Urbana (PDDrU) e os documentos oficiais do PLN. Identificou-se que a mesma metodologia utilizada na elaboração da Agenda 2015 foi usada no PLN. Constatou-se que o PLN foi criado visando atender as diretrizes do plano diretor relacionadas ao meio ambiente e saneamento, e que as etapas implantadas pelo PLN, vêm contemplando exatamente essas diretrizes com a execução de ações de drenagem urbana, saneamento, reabilitação de áreas degradadas com a criação de parque linear no entorno de algumas lagoas, e remoção de edificações nas margens imediatas às lagoas. A importância do PLN está associada à sua potencialidade para contribuir na solução de problemas não só de drenagem urbana, mas também de saneamento, de degradação ambiental e, ainda, os relacionados à área social. Ressalta-se, também a necessidade e a importância do planejamento urbano e de iniciativas como as que estão sendo implementadas em Teresina, com vistas ao melhoramento das condições de vida urbana, social e ambiental na cidade.

----- * -----

Reasons to live in the historic center the case of Belém, Pará, Brazil

Helena Lucia Zagury Tourinho; Marco Aurélio Arbage Lobo; Samia Saady Morhy
Universidade da Amazônia – Programa Pos-graduação em Desenvolvimento e meio ambiente urbano, BRAZIL
helenazt@uol.com.br

Several major Brazilian cities centers have sprung up around ports, railways or highways, and have developed from the concentration of shops, administrative and religious facilities, as well as from the homes of the wealthiest sections of society. In such areas buildings, squares, and the most sumptuous public spaces were located to where most important roads converged, including lines of trolley cars and, later, lines of buses and other types of public transportation. Thus, besides being a space of great accessibility, economic value, and symbolic and architectural significance, the urban center has become the most relevant urban epicenter of the city. After the 1970s, Brazilian traditional centers have faced traffic jam problems, degradation of the architectural and urban heritage, economic decline and population decrease, among others. These were caused by indiscriminate use of private cars; moving of high income population to other city areas; decentralization process of economic activities; and dissemination of real estate market innovations – which, in turn, generated architectural new typologies and need for differentiated spaces rather than the ones available at the center. In the case of the city of Belem, this process had its own particularities. From its origin, dating back to the Portuguese colonial period, to its peak, which occurred at the time of the cycle of exploitation of the rubber plant in the Amazon (late nineteenth century and early twentieth century), the Historic Center of Belem (CHB) accumulated an important historical, artistic and cultural heritage. After the 1970s, this heritage has shown signs of accelerated physical degradation, expressed by vacancy of poor condition real estate. Historical buildings enlisting (municipal, state, and federal ones), as well as specific works in architectural and urban redevelopment were not enough to prevent that there were 230 buildings vacant and 1,262 properties in poor condition in Belém, according to results from a research supervised by Federal University of Pernambuco on Real Estate Market in Historic Centers of Brazilian Cities, in 2013. Despite this situation, from year 2000 to 2010, resident population and number of households in CHB, according to the Brazilian Institute of Geography and Statistics (IBGE), increased 7.5% and 23.5%, namely. This work aims to (i) identifying socioeconomic profile of the population that rented and/or bought property for residential purpose in CHB; and to (ii) identifying main reasons ono would choose living in CHB, where physical degradation process and lack of relevant public policy takes place. Therefore, it uses data from 2000 and 2010 IBGE Demographic Census, and also information from questionnaires applied to house units

in CHB, selected according to sampling plan. The article shows that in the period of 2000 to 2010: i) resident population increased 7.5% (10,067 to 10,817 inhabitants); ii) number of households grew at faster pace than population, summing up 23.5% (2,630 to 3,249), which shows a trend of reduction in the average number of people per household, affecting real estate market, and also iii) showed that the increase by 357 units in the amount of rented houses (from 1,177 to 820 units). was greater than that of own homes, which was 249 units (jumping from 1.680 to 1.929 unit). Regarding rental market, the work shows that it is focused especially for intermediate income layers: 65.2% of tenants that have family income of up to six minimum wages; 45.7% work as autonomous; 71.8% have no more than average education. Concerning the residents that come to CHB through the buying and selling market (the owners), results showed that they have a higher socioeconomic profile: 81.9% have higher family income greater than six minimum wages; 63.3% work as autonomous; 81.6% have higher education. Results from questioning about the reasons that led one to choose living in CHB were associated to the characteristic of being such a central area near various facilities such: local employment (cited by 44.68% and 36.36% of the tenants of the owners); commercial establishments and services (mentioned by 44.68% of the interviewed and 36.36% of owners); family residences and/or friends (cited by 21:28% tenants and 9.9% of the owners). One should emphasize that 42.6% of tenants and 63.6% of owners said they work in CHB; 80% of tenants and 72.7% of the owners reported that they perform their daily shopping at CHB; and 55.3% of tenants and 54.5% of owners said they seek for entertainment within the CHB. The article concludes that, despite the absence of government housing programs and business investments in the provision of housing, there is a growing demand for residences in CHB, empowering competition with other land uses in housing market. Results also show that even suffering from physical degradation process, the BHC still does not show signs of depopulation or socioeconomic and cultural decline. Finally, in a moment of urban mobility crisis, this study highlights the role of duration and cost in mobility as a main aspect to residents housing decision in CHB, due to benefits of the centrality of the area. Therefore, the paper suggests the possibility to reverse the CHB degradation process, by studying policies to adapt empty and/or underutilized real estate and/or sub-used buildings to habitational purposes, especially those in the segments that work and demand goods and services offered in the area; and the rental market.

----- * -----

Baía de Sepetiba: o anacronismo no Planejamento

Silvio Cesar Alves Rodrigues [(1)]; Marcelo Bessa de Freitas [(2)]
[(1)] Mestre e Doutorando em Planejamento Urbano e Regional (IPPUR/UFRJ-Brasil), e Doutorando em História (FLUP-Portugal) - Bolsista FAPERJ.
[(2)] Doutor em Saúde Pública (ENSP/DSSA/FIOCRUZ)

A Baía de Sepetiba no estado do Rio de Janeiro, pródiga em atributos naturais, ao longo do tempo atraiu pessoas que ali assentadas desenvolveram atividades artesanais e amalgamaram territorialidades. No final da década de 1950, esse ambiente fluviomarinho começa a ser imolado com a chegada de plantas fabris. A instalação e operação dessas estruturas produtivas além de prejuízos a paisagem, contaminou alguns trechos do estuário com metais pesados, o que, para alguns atores, avigorou sua compreensão como "zona de sacrifício" (Bullard apud Acselrad, 2004, p.9). No alvorecer do século XXI, aproveitando dessa percepção, do passivo ambiental abandonado, e de um discurso legitimador, imposto a fórceps, a parceria público-privada (PPP) projetou a instalação de empreendimentos logísticos, portuários e industriais no território. Desde então, a expensas do erário, a Baía é submetida a transformações geomorfológicas para promover o crescimento econômico e consequente recuperação. Embora o modelo de planejamento adotado reivindique concepções hodiernas e estampe o selo da sustentabilidade, o emprego de técnicas primitivas, como aterros de manguezais e desflorestamento da mata remanescente, a limitação da participação popular às demandas protocolares e a falta de transparência no processo indicam, minimamente, sua vocação anacrônica. Destarte, este exercício – sob o prisma do planejamento urbano e da história ambiental – propõe identificar no atual modelo de planejamento algumas práticas e mentalidades, no âmbito técnico, ambiental, social, econômico e politico, inadequadas a realidade contemporânea. Para refletir sobre o movimento de desestruturação e reestruturação, ordenado pela decisão refrataria de afirmar uma rugosidade urbana e economicista em detrimento a práticas e hábitos tradicionais, nesse domínio ambiental a metodologia recorre: a análise de métodos de construção de cenários futuros (Ghemawat, 2000; Godet, 2000; Porter, 1985; Schoemaker, 1991; e Schwartz, 2006); ao exame dos EIA e RIMA produzidos para a expansão do Porto de Itaguaí, construção do Porto Sudeste, da Usiminas/Ingá, do estaleiro e base de submarinos da Marinha (Prosub-EBN); e a conteúdos obtidos nas pesquisas, "A construção compartilhada de cenários exploratórios e prospectivos entre atores envolvidos em conflitos socioambientais – o caso do passivo ambiental da Companhia Mercantil e Industrial Ingá"

(Freitas et al 2009), e “Impactos de grandes empreendimentos projetados para a região da Baía de Sepetiba nas condições de vida e situação de saúde dos trabalhadores da pesca das Colônias de Pedra de Guaratiba (Z-14), Sepetiba (Z-15) e Itacuruçá (Z16)” (Freitas et al 2013). A leitura transversal desses trabalhos permitiram verificar para além da produção de efeitos negativos e ameaças aos valores ambientais, sociais e culturais, em virtude dos impactos produzidos mesmo considerando as compensações previstas para a mitigação, os procedimentos adotados na instalação das plantas produtivas e assim evidenciar o emprego de métodos em discordância com o tempo presente. Do mesmo modo, identificar a efervescência de interesses, cumplicidades e permissividades na incorporação e privatização do território com o objetivo de intensificar o seu uso em defesa de pretensos vetores de crescimento econômico. Como resultado, aponta o anacronismo de um planejamento que reduz a Baía de Sepetiba a hidrovia e parque industrial, e ao cercá-la de muros simbólicos e concretos parece reeditar uma espécie de “enclosure” no século XXI.

----- * -----

Reflexões sobre o Plano Diretor como instrumento de gestão em Municípios Brasileiros

Wilza Gomes Reis Lopes [(1)]; Antônia Jesuíta de Lima [(2)]; Bartira Araújo da Silva Viana [(3)]; Edmundo Ximenes Rodrigues Neto [(4)]

[(1)] Arquiteta, Doutora, Professora Associada do Departamento de Construção Civil e Arquitetura e do Mestrado e Doutorado em Desenvolvimento e Meio Ambiente, da Universidade Federal do Piauí, UFPI, BRASIL

[(2)] Professora do Departamento de Serviço Social e do Programa de Pós-Graduação em Políticas Públicas da Universidade Federal do Piauí, UFPI, BRASIL

[(3)] Professora Adjunta do Departamento de Geografia e História da Universidade Federal do Piauí, UFPI, BRASIL

[(4)] Professor do Departamento de História da Universidade Estadual do Piauí – UESPI, BRASIL

izalopes@uol.com.br; a.je.l@com.br; bartira.araujo@ufpi.edu.br; edmundouespi@hotmail.com

As cidades continuam a ser atrativas para grande número de pessoas, que as procuram, buscando melhores oportunidades de emprego, saúde e educação. Com o aumento populacional, os núcleos urbanos demandam mais espaços construídos, direcionados para habitação, comércio, serviços, indústrias, além de espaços livres para circulação, como praças e parques. De população predominantemente urbana, já é possível perceber nas cidades brasileiras problemas, como excesso de lixo, inundações, aumento da temperatura do ar, ilhas de calor e carência de habitações, dentre outros. Além disso, o modelo de ocupação e urbanização brasileiro contribuiu para a acentuação dos problemas de desigualdade do uso da terra e do acesso à infraestrutura urbana. Dessa forma, a gestão do ambiente urbano configura-se como um grande desafio, cabendo à administração pública propostas de ações efetivas relacionadas ao planejamento municipal. Entre as ferramentas voltadas para o planejamento municipal, destaca-se a Lei Federal n. 10.257, de 10 de julho de 2001, denominada Estatuto da Cidade. Tal ferramenta, que tem como um de seus instrumentos o Plano Diretor, definiu a participação da sociedade como princípio normativo da política urbana e traçou como uma de suas diretrizes a garantia do direito a cidades sustentáveis, que corresponde ao atendimento dos direitos universais de cidadania. No Brasil, o Plano Diretor foi considerado obrigatório para os municípios com mais de 20 mil habitantes, ou integrantes de regiões metropolitanas, ou situados em áreas de interesse turístico e, ainda, para aqueles localizados em áreas de influência de empreendimentos ou atividades com significativo impacto ambiental na região ou no país, tendo o ano de 2006, como data limite para sua implantação. Dos 224 municípios do Piauí, estado localizado no nordeste brasileiro, 37 municípios tinham a obrigatoriedade de, até 2006, elaborar seus Planos Diretores, segundo determinação constitucional, sendo que destes, apenas 21 realmente, elaboraram seus planos. Passados quase 10 anos da data limite para sua finalização, sente-se necessidade de investigar se os municípios estão, efetivamente, implementando seus planos diretores, identificando como se deu a construção de mecanismos e sistemas de controle e monitoramento dos instrumentos e medidas estabelecidos nos planos diretores. Neste trabalho são apresentadas reflexões sobre a importância e eficácia do Plano Diretor, como ferramenta de planejamento urbano visando cidades sustentáveis e, ainda, a análise do Plano Diretor dos Municípios de União e de Beneditinos, Piauí, identificando as diretrizes, voltadas para o uso e ocupação do solo, infraestrutura urbana e para a habitação, destacando a legislação, planos ou programas específicos, que foram criados, visando sua efetivação. Para isso, foi realizado aprofundamento teórico-conceitual do objeto de estudo, enfocando autores que discutem aspectos ligados ao planejamento urbano, Estatuto da Cidade e plano diretor. Também, foi analisado o Plano Diretor, de cada município, destacando as diretrizes previstas sobre infraestrutura urbana, uso e ocupação do solo e habitação. Foi realizado, ainda, levantamento da legislação, criada pelo município para implantar as ações voltadas para estes temas, por meio de pesquisa em sites da Prefeitura Municipal, no Diário Oficial do Estado, ou em visitas aos

municípios. Foi observado que, nos planos diretores analisados, embora de forma genérica, houve a preocupação em expor diretrizes voltadas para equacionar os problemas urbanos. Destaca-se que o plano diretor do município de Beneditinos, ainda possui muitas de suas diretrizes não realizadas. No município de União, destacam-se a elaboração de leis de regulação do uso, parcelamento e ocupação do solo, as políticas habitacionais e o Plano Municipal de Saneamento Básico, ainda em formulação.

----- * -----

Session L1.2 | 31 Maio | 11:00 – 12:30

Os planos diretores e a gestão ambiental na RIDE Grande Teresina (Brasil)

Antônia Jesuíta de Lima [(1)]; Iane Leite P. Luz [(2)]; Teresinha Queiroz [(1)]; Leianny da S. Reis [(2)]
[(1)] UFPI, BRASIL
[(2)] A. social
a.je.l@uol.com.br; xiannex@hotmail.com; teresinhaqueiroz@bol.com; leiannyr@hotmail.com

O planejamento urbano no Brasil sofreu, no plano normativo, uma inflexão importante com a introdução do capítulo da política urbana na Constituição Federal de 1988. Ao planejamento tecnocrático, autoritário e centralizador, modelo dominante até a década de 1980 se opôs o planejamento participativo e o princípio da gestão democrática da cidade, que se afirmam subsumindo os interesses individuais ao coletivo. O marco legal desse padrão de planejamento (Estatuto da Cidade) afirma, em suas diretrizes, o direito a cidade sustentáveis para todos e a garantia da função social da cidade e da propriedade (BRASIL, 2001), que deve ser assegurado pelo município, condutor da política urbana. A operacionalização de tais medidas têm se constituído o principal desafio dos entes locais em face da magnitude dos problemas urbanos, mas também pela tradição de política centralizada e desvinculada das demandas reais da população. De modo que, na última década, se constituiu objeto de incentivo do Ministério das Cidades a implantação dos planos diretores e, no âmbito das universidades e sociedade civil, se perfilaram estudos sobre o conteúdo desse instrumento.

Esse artigo, inscrevendo-se nesse contexto, traz resultados de uma pesquisa sobre os Planos Diretores dos 14 municípios que formam a Região Integrada de Desenvolvimento de Teresina: 13 municípios do estado do Piauí e um do vizinho estado do Maranhão, situados na região nordeste do Brasil.

Conforme os dados levantados, até 2013 apenas 9 municípios da Grande Teresina tinham elaborado e aprovado planos diretores, de forma que a análise realizada tomou como base os documentos legais desses municípios. No exame do escopo dos planos identificou-se uma forma comum de estruturação do conteúdo constituída de objetivos, diretrizes, definições e proposições generalizantes para a política urbana. Esse caráter amplo dos planos se, de um lado, favorece a afirmação dos pressupostos do Estatuto da Cidade; por outro, diminui o poder normativo no sentido de sua autoaplicabilidade e enquanto instrumento de promoção de ordenamento, desenvolvimento e transformações da cidade com vistas ao bem estar dos cidadãos. Por outro lado, constatou-se que as leis municipais analisadas não definem uma estratégia econômica e socioterritorial de desenvolvimento, não estabelecem metas concretas e programas integrados ou a ser realizados e nem fixam prazos para sua consecução. Como são muito genéricas as formulações, não há, nos Planos, referência à adequação do orçamento municipal a esta ou aquela área, embora, a maioria determine que o orçamento municipal deva atender às diretrizes previstas.

Quanto à existência de uma política municipal de meio ambiente, identificou-se legislação em apenas dois municípios - Monsenhor Gil e Teresina. Em relação às ZEIS, somente Teresina possui ZEIS para preservação ambiental. Mesmo assim não existem instrumentos regulatórios que viabilizem a proteção ambiental, como o zoneamento ambiental. Sobre instrumentos da gestão ambiental urbana, só foi encontrado no município de Monsenhor Gil, que se propõe a estimular a população, por meio de ações educativas, a despertar para o fato de que é necessário preservar o meio ambiente. Nos municípios de Altos, José de Freitas, Monsenhor Gil e Teresina foi identificada a existência de Conselho Municipal de Meio Ambiente. Apenas Teresina e José de Freitas possuem Fundo Municipal específico para o Meio Ambiente.

As conclusões preliminares apontam para o baixo grau de autoaplicabilidade dos planos diretores, assim como a ausência de legislação complementar em grande parte dos municípios analisados. Como demonstrou a análise, os planos diretores compõem-se de um conjunto de diretrizes, objetivos e princípios, sem estabelecer propostas concretas para cada área das políticas urbanas, nem prazos e recursos, o que os qualificam mais como carta de intenções que um conjunto de medidas de planejamento para o município. A despeito da tentativa de adequação dos Planos ao disposto no Estatuto da Cidade, os mesmos não trazem medidas concretas que tornem efetivos seus pressupostos e diretrizes, o que reduz a sua força enquanto instrumento balizador da ação estatal no espaço urbano.

----- * -----

Habitação social e Desenvolvimento urbano sustentável: o caso da região metropolitana de Goiânia

Elcileni de Melo Borges [(1)]; Celene Cunha A. Monteiro Barreira [(2)]
[(1)] Instituto de Estudos Sócio Ambientais-IESA/Universidade Federal de Goiás - UFG; doutoramento em Geografia/Dinâmica Socioespacial, BRASIL
[(2)] Instituto de Estudos Sócio Ambientais-IESA/ Universidade Federal de Goiás – UFG; professora titular, BRASIL
elcimb@uol.com.br; celenemonteiro05@gmail.com

Partindo da observação de que a problemática questão da "insustentabilidade urbana" , decorrente do padrão de urbanização vigente desde a Revolução Industrial, se agrava na mesma proporção do extraordinário crescimento das cidades – em escala planetária; e que, no Brasil (cuja taxa de urbanização corresponde a 86,53% da população) as marcas do modelo de crescimento econômico desigual e concentrador ("modernização conservadora") desnudam um enorme passivo ambiental e social: informalidade urbana, elevado déficit habitacional acumulado do passado e precariedade da moradia (as favelas e as moradias em áreas de risco e insalubres são os exemplos mais fidedignos desse quadro); esta pesquisa toma como objetivo analisar esse conjunto de transformações no espaço urbano de Goiânia e sua jovem região metropolitana.

Criada pela LCE nº 27/1999, a Região Metropolitana de Goiânia é composta por 20 municípios (LCE nº 78/2010) e uma população de 2,173 milhões de habitantes (IBGE, Censo 2010); responsável por 2/3 da população de Goiás e 37,18% do PIB estadual, ainda em franco processo de crescimento demográfico: taxa geométrica de 4,31% (2000-2010) e taxa de urbanização de 98,0% da população (MELO et all, 2013).

A síntese das informações ora apresentadas coaduna nos principais resultados obtidos ou esperados da pesquisa e vem fomentando a participação em diversos artigos publicados em periódicos e/ou apresentados em congressos locais, nacionais e internacionais e redes de pesquisa; bem como do relatório final da pesquisa de doutorado no IESA/UFG. A Metodologia empregada foi dividida em 4 etapas: 1. Survey bibliográfico: debate internacional/nacional e produções acadêmicas; 2. Pesquisa Documental: Prefeitura, Estado, Imprensa, ADEMI.GO, CRECI.GO, SINDUSCON.GO, CAIXA, MCidades, MPOG, IBGE, IPEA, ONU Habitat; 3. Mapeamento georreferenciado (base SIG e banco de imagens); 4. Estudo de Caso: estudo de natureza qualitativa, com base em visitação técnica e observação (relatório fotográfico e depoimento de moradores) – amostra: 20 empreendimentos habitacionais populares produzidos por programas públicos na região metropolitana de Goiânia, no último decênio.

Num primeiro momento, analisa-se o contexto em que Goiânia passou a ostentar o título de "capital verde do país"; apontada como a cidade mais arborizada do Brasil: atualmente possui 32 parques urbanos e bosques, cerca de 950 árvores e 382 espécies diferentes, equivalendo a uma taxa de 89,5% de arborização por 100 mil habitantes (segundo o IBGE) ou área verde média de 94m2 por habitante. No ano de 2009 recebeu o título de "capital brasileira com melhor índice de qualidade de vida" da Organização Mundial de Estados, Municípios e Províncias (OMEMP) e desde 2011 faz parte da rede UBERLAC de cidades sustentáveis (integrada a lista da Comissão Européia e Banco Interamericano de Desenvolvimento – BID); tornou-se signatária do Programa Cidade Sustentável brasileiro, desenvolvendo importantes ações estratégicas e ferramentas de gestão urbana, tais como: o Plano Diretor de Arborização Urbano - PDAU e um programa de Coleta Seletiva de Lixo bastante difundido entre a população, impulsionando a instalação de diversas cooperativas de recicláveis, reforçando a imagem de "cidade ecologicamente correta".

Não obstante, em outro ângulo, o relatório "O Estado das Cidades no Mundo 2010/2011: Unindo o Urbano Dividido", da Organização das Nações Unidas para os Assentamentos Humanos (ONU Habitat) apontou Goiânia como "a 10º cidade mais desigual do mundo e a mais desigual do Brasil", com base na avaliação de indicadores de desigualdade de renda (índice de Gini). No que tange a habitação social observa-se uma situação em que a "justiça socioambiental" não vem pautando a preocupação dos planejadores urbanos: as moradias populares construídas em toda a região metropolitana de Goiânia no último decênio, de modo geral, "localizadas nas franjas da área metropolitana" (BORGES, 2015), muitas em áreas de preservação permanente ou mata nativa, carente de infraestrutura, serviços, saneamento ambiental e difícil acesso ao transporte, evidenciam o modelo prevalecente de "urbanização desigual" ou "urbanização sem cidade" (FIX, 2011) – são os casos dos residenciais: Jardim dos Ipês e Vila Delfiori (Aparecida de Goiânia); Iris Ville, Eldorado Oeste e Buena Vista (Goiânia); Vila Adilair e Lago Azul (Goianira); Palace São Francisco (Senador Canedo), Dna. Alda Tavares (Nerópolis).

E mesmo nos bairros de alta renda a matriz urbana em voga mostra um padrão pouco sustentável: verticalização descontrolada dos bairros de classe média e alta (exemplos: Setor Goiânia 2; Setor Parque Amazônia-Cascavel; Setor Bueno-Parque Vaca Brava; Jardim Goiás-Parque Flamboyant); proliferação de

condomínios horizontais isolados; ampliação ininterrupta do sistema viário destinado aos carros; enfim, uma conjunção de fatores que certamente agrava a sustentabilidade urbana e geram impactos sobre a *urbes* no território goianiense – no presente e no futuro.

----- * -----

Reforço da eficiência energética à escala do município. Um processo em evolução

Francesca Poggi [(1)]; Ana Firmino [(1)];Miguel Amado [(2)]
[(1)] CICS.NOVA - Centro Interdisciplinar de Ciências Sociais, Faculdade de Ciências Sociais e Humanas, Universidade Nova de Lisboa, Avenida de Berna, 26-C, 1069-061, Lisbon, PORTUGAL;
[(2)] Departamento de Engenharia Civil, Arquitectura e Georrecursos, Instituto Superior Tecnico, Universidade de Lisboa, Av. Rovisco Pais, 1, 1049/001 Lisbon, PORTUGAL;
f.poggi@fcsh.unl.pt; am.firmino@fcsh.unl.pt; ma@fct.unl.pt

As alterações climáticas constituem uma ameaça, mas também um desafio para a sociedade e ao seu modo de desenvolvimento, impondo novas abordagens que promovam um paradigma de desenvolvimento energético sustentável. O conceito de eficiência energética, entendido como a capacidade tecnológica e operacional de reduzir o recurso a fonte de energia primária poluidora, coloca-se entre os principais objectivos estratégicos do desenvolvimento sustentável. Contudo, equacionar as questões relacionadas com a eficiência energética implica compreender o enquadramento e a articulação entre diferentes escalas e níveis de intervenção. Constitui-se como um vector estratégico de desenvolvimento em rápida evolução, que tem como o seu alvo diferentes sectores: comportamento da população, transportes, indústria, agricultura e sector dos edifícios/construção. Neste sentido, a promoção da eficiência energética poderá ser feita por diferentes abordagens: programas de sensibilização da população, medidas legislativas dirigidas para a construção dos novos edifícios e melhoria dos existentes, bem como reconfiguração do planeamento e do modelo de gestão do território. Sem descurar qualquer dos aspectos mencionados, é para o último que este artigo procura contribuir, reconhecendo o papel que o planeamento pode desempenhar na integração de diferentes eixos do desenvolvimento sustentável, às várias escalas de intervenção sobre o território.
Assim, o diagnóstico do desempenho energético dos territórios, a identificação de recursos energéticos endógenos e o desenvolvimento de estratégias de eficiência energética ligadas à produção e distribuição espacialmente integradas de energia, são elementos a incorporar na estratégia de sustentabilidade territorial. Tais questões impõem a integração no processo de planeamento urbano de um conjunto de princípios, ferramentas de avaliação e medidas em matéria de eficiência energética que sejam adequadas e eficazes à sua abrangência geográfica e escala de actuação. O processo de revisão dos PDM surge como uma oportunidade para elaborar novas metodologias e implementar acções próprias para o desenvolvimento local, onde o reforço da eficiência energética à escala do município surge como um aspecto a investigar aquando do desenvolvimento de abordagens capazes de acrescentar novos contributos ao processo de revisão dos PDM.
O presente artigo descreve os fundamentos e a metodologia adoptada no processo de revisão do PDM de Arraiolos, em Portugal. Com o objectivo de investigar e desenvolver um processo de diagnóstico do desempenho energético do município, a metodologia assentou numa abordagem “top-down” de avaliação quantitativa e qualitativa dos padrões de consumo energético existentes. Para tal, foram utilizados: dados disponíveis no SCE, relativos aos edifícios residenciais com certificado energético; dados dos consumos de energia por habitante e por sector de actividade, do INE e da DGEG; uma base geográfica de referenciação da informação BGRI 2011 e a cartografia topográfica 1k e 2k cedida pela Câmara Municipal de Arraiolos. A transposição deste conjunto de informações para ambiente SIG resultou na produção de mapas temáticos. A investigação permitiu desenvolver correlações espaciais e estatísticas entre padrões de consumos de energia e incidência de elementos definidores de cada aglomerado urbano do concelho como: orientação das vias; malhas urbanas-, tipologias de edifícios e época de construção.
Os resultados da investigação desenvolvida remetem para uma caracterização criteriosa dos padrões de consumo energético existentes à escala do município, possibilitando delinear um modelo energético de distribuição espacial dos diferentes aglomerados urbanos. A interpretação deste modelo permite relacionar os consumos energéticos obtidos com os principais indicadores de estratégia territorial, fundamentais para a acção de planeamento e gestão municipal. Defende-se que esta abordagem possa evoluir e tornar-se numa das bases para promover o balanço energético no âmbito do modelo de organização espacial do território municipal, balanço este, que assenta no equilíbrio entre a capacidade de produção de energia renovável em meio rural e os níveis de consumo de energia programados para as áreas urbanas. A análise desenvolvida permitiu identificar os principais elementos paramétricos, de estruturação e organização dos aglomerados urbanos, que influenciam o desempenho energético, sendo estes, um suporte que se considera relevante para o planeamento de novas áreas urbanas e a renovação das existentes com vista equacionar o reforço

da eficiência energética. Da reflexão sobre cada um dos domínios acima referidos conclui-se que a abordagem apresentada pode ser um contributo valiosos para o processo de revisão do PDM, de modo a que este incorpore as preocupações energéticas e as adeqúe aos actuais desafios de desenvolvimento energético sustentável do território. Estudos futuros irão ser elaborados em linha com o percurso de investigação decorrente da tese de doutoramento em curso: "Smart Rural: eficiência energética e energias renováveis no espaço rural".

----- * -----

Porque passear no Parque? Benefícios concebidos e percebidos pela ótica da transformative service research

Ítalo Brener de Carvalho [(1)] e Marlusa de Sevilha Gosling [(2)]
[(1)] CEFETMG – Centro Federal de Educação Tecnológica de Minas Gerais, BRASIL
[(2)] CEPEAD - Universidade Federal de Minas Gerais – UFMG, BRASIL
italobrener@hotmail.com; ufmg@gmail.com

Os Parques Urbanos são espaços verdes em áreas urbanizadas de uso público que propiciam a população recreação e lazer aos seus visitantes. Este estudo exploratório em desenvolvimento no NEECIN-TUR/UFMG, Núcleo de Estudos e Estratégias de Comunicação Integrada de Marketing e Turismo busca compreender as percepções do consumidor de espaços públicos gratuitos. As descobertas reforçam a teoria co-criação de valor pelo consumidor, presente na Trasformative Service Research – TSR proposta por Anderson (2010, 2013). Em sua essência, investiga a relação entre serviço ofertado e bem-estar. Mais especificamente, TSR representa investigação que incide sobre a co-criação de experiências destinadas a melhorar a vida dos indivíduos (consumidores e trabalhadores), famílias, comunidades, sociedade e ecossistema de forma mais ampla (Anderson et al. 2013). Este artigo apresenta a normatização do planeamento urbano de áreas verdes no Brasil pela Resolução CONAMA 369. Na prática apoia-se na apresentação da resolução jurídica instrumental que os parques públicos brasileiros devem se enquadrar. Os serviços então são essenciais em nosso cotidiano. A ótica TSR se diferencia de outros trabalhos de pesquisa em serviço pelos resultados que ela apresenta para o turismo e para as cidades, seus indicadores contribuem para o bem-estar, suas propostas métricas se concentram em avaliar os aspectos de bem-estar, como a saúde física, saúde, a discriminação, a marginalização, a alfabetização, a inclusão, o acesso, capacitação e diminuição da disparidade entre outras (Anderson et al 2013; Rosenbaum et al 2011). Apesar de utilizar ferramentas do marketing tradicional como segmentação e pesquisa de mercado para a promoção de uma ideia a mudança cognitiva, de ação e comportamento de pessoas pela compreensão de suas percepções. Este estudo tem por objetivo identificar os benefícios sociais, culturais e educativos do Parque Municipal de Belo Horizonte percebido por seus frequentadores.

----- * -----

Espaços Verdes Urbanos e Qualidade de vida. Uma experiência em Uberlândia.

Lidiane Aparecida Alves; Vítor Ribeiro Filho; Nuno Marques da Costa
lidianeaa@yahoo.com.br; ribeirofilho.vitor@gmail.com; nunocosta@campus.ul.pt

Os espaços verdes urbanos (EVU) para além de contribuírem para a conservação e preservação ambiental, propiciam igualmente o lazer, a recreação e, consequentemente, o bem-estar, a saúde física e psíquica, aumentando a qualidade de vida (QV) nas cidades (Chiesura, 2004; Morris, 2003).
A cidade de Uberlândia dispõe de 8 parques municipais, tendo sido a sua construção relativamente recente, remontando à década de 1970 o primeiro parque municipal da cidade, o Parque do Sabiá, com o objetivo de oferecer à população opções de lazer e recreação. Para além dos parques, as praças, enquanto espaços verdes urbanos de menores dimensões e mais próximos da residência, são igualmente lugares privilegiados para as atividades de lazer e recreação ao ar livre em suas diferentes formas, bem como possuem grande relevância para a construção de cidades saudáveis. Considerando a área das mais de 240 praças públicas e dos 8 parques municipais, a capitação de área verde urbana, o Índice de Áreas Verdes (IAV), em Uberlândia era de 7,6 m²/hab em 2006 e de 6,6 m²/habitante em 2006 (Toledo et al 2009).
A procura por espaços verdes encontra-se associada às suas características, nomeadamente a localização, a dimensão, a segurança, a limpeza, a manutenção, a sinalização, os equipamentos, a sua adequação à prática de atividades desportivas, entre outras (Santana et al, 2014).
O inquérito realizado à população de Uberlândia revela que uma parte significativa dos residentes (42,5%) não tem por hábito a utilização dos espaços verdes disponibilizados pela Prefeitura. O resultado deste inquérito é analisado no sentido de perceber quais as motivações e as sensações proporcionadas pela

utilização dos EVU permitindo compreender em que medida a política municipal tem contribuído para a melhoria da qualidade de vida e a promoção de uma cidade mais saudável.

----- * -----

Session L1.3 | May 31 | 14:00 – 15:30

Integração e cooperação territorial na região metropolitana de Goiânia

Débora Ferreira da Cunha[(1)]; Nuno Marques da Costa[(2)]; Celene Cunha Monteiro A. Barreira[(1)]
[(1)] Universidade Federal de Goiás, BRASIL
[(2)] Universidade de Lisboa, PORTUGAL
deboracunha.ufg@gmail.com; nunocosta@campus.ul.pt; celenemonteiro05@gmail.com

A recente história da urbanização é caracterizada pela consolidação de grandes aglomerações que transformam a escala e a configuração das cidades. Os processos metropolitanos alteram profundamente vários aspectos da vida social, de forma ampla, sejam políticos, culturais e econômicos. No entanto, a sua expressão territorial é uma das características mais visíveis e marcantes. Segundo Gaspar (2011, p. 68) "a urbanização brasileira seguiu um ritmo acelerado, concentrando pessoas e recursos em metrópoles e cidades médias, em faixas seletivas do território nacional, formando centralidades urbanas". Considerando que uma região metropolitana é uma estrutura territorial complexa, a princípio, formada pela concentração de população e de atividades econômicas em uma grande cidade, gerando oferta e demanda de bens e serviços - uma consequência de decisões estratégicas. No Brasil, as regiões metropolitanas são instituídas pelos Estados, mediante lei complementar, seguindo um movimento resultante desta concentração e da aglomeração em torno da grande cidade, geralmente uma metrópole, formando unidades territoriais legalizadas. Em janeiro de 2015 a Lei 13.089 (BRASIL, 2015) instituiu o Estatuto da Metrópole, que manteve os Estados como responsáveis pela criação das "regiões metropolitanas e aglomerações urbanas, constituídas por agrupamento de Municípios limítrofes, para integrar a organização, o planejamento e a execução de funções públicas de interesse comum" (Art. 3º). Entre outras disposições o Estatuto estabeleceu o desafio da governança interfederativa das regiões metropolitanas e das aglomerações urbanas. Porém, a experiência brasileira de quarenta anos de existência da regionalização metropolitana mostra fragilidade e/ou inexistência de gestão metropolitana no país (COSTA, 2013). Assim, o artigo tem como objetivo analisar a estrutura de governança territorial na Região Metropolitana de Goiânia, observando o modelo estabelecido a partir da rede metropolitana de transportes coletivos. Pereira (2014) destaca que a governança multinível está consensualizada como o modelo mais eficaz e eficiente para a governabilidade dos territórios, entretanto, o sistema constitui um desafio das sociedades contemporâneas, já que o conceito, revela debilidades na sua aplicação, tal como se constatou na análise apresentada do exemplo português, de dificuldades de operacionalização do conceito. Em termos metodológicos, parte-se de uma contextualização teórica sobre governança e governança multinível, a coleta de informação apoiou-se na análise documental, dados secundários e em entrevistas semiestruturadas, realizadas com atores que representavam os setores públicos, privados e da sociedade civil organizada. Apesar de existir na Região Metropolitana de Goiânia (RMG) "um bom arranjo institucional", esboçado pela LC no 027/1999, que estabelece instâncias e instrumentos de gestão (instituições, fundos, conselhos e planos), a governança metropolitana da RMG deve ser considerada fraca, pois, o transporte é a única função pública de interesse comum executada, de fato, em âmbito metropolitano. A rede metropolitana de transportes coletivos é a unidade sistêmica regional, composta por todas as linhas e serviços de transportes coletivos, que promove a integração de dezessete municípios com o município de Goiânia, portanto, atende a dezoito municípios, com um serviço de transporte coletivo unificado, abrangendo uma área de 6.576 km2 e uma população de mais de dois milhões de habitantes (IBGE, 2010).

----- * -----

O Papel das Rodovias na Circulação de Cargas Aéreas em Santa Catarina

Diogo Quintilhano
Universidade Federal de Santa Catarina (UFSC) e Universidade Complutense de Madrid (UCM)
diogo_qui@hotmail.com

Os aeroportos dos municípios de Navegantes, Joinville e Florianópolis, localizados no Estado de Santa Catarina, são responsáveis por 98% da movimentação de cargas aéreas nacionais e internacionais (exportação/importação) do estado, das quais as importações representam o maior volume de cargas

movimentadas entre esses aeroportos. Entretanto, 100% dessas cargas aéreas importadas são transportadas pelo modal rodoviário até os aeroportos catarinenses, de um aeroporto para outro, oriundas dos Estados do Rio Grande do Sul, Paraná e São Paulo. Esta logística que fomenta o uso do modal rodoviário para o transporte de cargas tipicamente aéreas agrava ainda mais o trafego de caminhões de grande porte, estes, que circulam em grande medida pela BR 101 em direção aos portos marítimos e terminais portuários de Paranaguá/PR, Itapoá/SC, São Francisco do Sul/SC, Rio Grande/RS e, principalmente, Navegantes e Itajaí/SC. Neste sentido, este artigo analisa quais são os principais fatores que influenciam o uso do modal rodoviário para o transporte de cargas tipicamente aéreas em Santa Catarina. Ademais, o artigo aborda os principais segmentos da economia catarinense e sua relação com o transporte de cargas a partir do modal aéreo. As fontes de dados analisadas estão baseadas nos Boletins Logísticos mensais divulgados pela Empresa Brasileira de Infraestrutura Aeroportuária (Infraero), nos relatórios apresentados pela Agência Nacional de Aviação Civil (Anac), nas entrevistas de campo com os gerentes dos principais Terminais de Carga Aérea (Tecas) de Santa Catarina, além de revisão bibliográfica de livros e artigos científicos especializados. As análises levam em consideração a intensidade (toneladas), a direção (origem/destino) dos fluxos de cargas aéreas, a caracterização da tipologia das cargas e os principais segmentos da indústria regional do estado que utilizam o modal aéreo. Estes, que estão instalados nas Mesorregiões do Vale do Itajaí e na Grande Florianópolis, onde há também a concentração de serviços aduaneiros (export./import.), Centros Logísticos e Industriais Aduaneiros (Clias) etc., que consideram o modal aéreo enquanto mais uma alternativa logística para a circulação de mercadorias em Santa Catarina. No que se refere as implicações teóricas e práticas, o transporte, de forma geral, responde por importantes parcelas da formação de capital, da ocupação da mão de obra, do consumo de insumos energéticos e da formação de clusters produtivos e eixos de circulação (grande fluxo econômico, interações espaciais e desenvolvimento regional) que visa, sobretudo, a redução dos custos com eficácia. O modo de produção capitalista é caracterizado necessariamente por um esforço permanente da superação de todas as barreiras espaciais e, principalmente da “anulação do espaço pelo tempo” (MARX, 1973; HARVEY, 2005). Desta forma, atrelada ao fenômeno da mobilidade do capital, estão as transformações espaciais, como à ampliação das infraestruturas de transporte no território, por meio de políticas públicas e dos instrumentos de planejamento de médio e longo prazo (BARAT, 2012). Mesmo após o anúncio da Presidente Dilma Rousseff, no final do ano de 2012, do Programa de Investimentos em Logística (PIL – Aeroportos), que visa melhorar as infraestruturas aeroportuárias de pequeno e médio porte e diminuir as desigualdades regionais, os aeroportos e terminais de cargas aéreas de Santa Catarina ainda continuam carentes de aviões cargueiros e seguem funcionando como centros aduaneiros, isto é, os Tecas servem somente para o desembaraço, regularização e triagem de cargas transportadas por caminhões provenientes de aeroportos de outros estados. Neste contexto, os principais resultados da investigação mostram que os aeroportos que operam cargas internacionais em Santa Catarina se transformaram em grandes armazéns de cargas e pontos de regularizações aduaneiras e normativas. Tal fato é consequência da inexistência de voos com aviões cargueiros internacionais, com origem/destino em Santa Catarina. O que resulta no uso exclusivo do modal rodoviário para o transporte destas cargas. Sendo esse um aspecto importante para investigação, pois demonstra que o modal rodoviário possui um peso no transporte de mercadorias no país, ainda maior do que as estatísticas apontam, contribuindo para a ampliação do fluxos de cargas em uma parcela da rede urbana catarinense, que já apresenta elevado Volume Diário Médio (VDM) de veículos de grande porte.

----- * -----

Aglomerados subnormais em Teresina, Piauí: reflexões sobre políticas públicas municipais

Geovana Alves Rocha Vieira [(1)]; Wilza Gomes Reis Lopes [(2)]

[(1)] Arquiteta, doutoranda do Programa de Pós-Graduação em Desenvolvimento e Meio Ambiente da Universidade Federal do Piauí, UFPI, BRASIL

[(2)] Arquiteta, Doutora, Professora Associada do Departamento de Construção Civil e Arquitetura e do Mestrado e Doutorado em Desenvolvimento e Meio Ambiente, da Universidade Federal do Piauí, UFPI, BRASIL

geovanarocha@ufpi.edu.br; izalopes@uol.com.br

O processo atual de ocupação das cidades gera territórios urbanos com moradia ineficiente, poluição, violência, precariedade na infraestrutura, congestionamentos, desmatamentos e degradação ao meio

ambiente. A falta de moradia afeta milhares de brasileiros, sendo um problema presente em várias cidades do país. A população de baixa renda, por falta de alternativa se apropria de áreas marginalizadas da cidade, como as situadas em marginais de córregos ou áreas com probabilidade de desabamento, estabelecendo-se em áreas de risco. Diante deste problema, diversas políticas públicas vêm sendo formuladas com o intuito de atender à crescente demanda por moradia e promover o crescimento ordenado das cidades. Todavia, a necessidade de abranger um enorme contingente de pessoas e de forma urgente, muitas vezes, faz com que sejam elaborados projetos ineficazes na busca pela ordenação territorial. A cidade de Teresina, criada em 1852 para ser a capital do Piauí, estado da região nordeste do Brasil, não foge à regra, apresentando déficit habitacional e a presença de habitações em áreas não apropriadas. Este trabalho apresenta a quantificação e distribuição de aglomerados subnormais e reflexões sobre as políticas públicas voltadas para a regularização fundiária, existentes no município de Teresina, Piauí. Para isso, foi realizado levantamento desses tipos de moradia existentes na cidade, e das políticas públicas que abrangem a habitação e o urbanismo, a partir de coleta de dados em órgãos ligados à Prefeitura Municipal. Também, foi elaborado um mapa dos aglomerados habitacionais subnormais identificados, apresentando sua distribuição por regionais da cidade. Foi constatado que as políticas municipais possuem obstáculos que interferem em ações que de fato possam contribuir para um planejamento urbano eficaz. Somente é possível seguir a direção do desenvolvimento sustentável a partir de um ambiente com identidade para todos e bem-estar social, por meio do planejamento urbano e ações governamentais em conjunto com a participação popular.

----- * -----

Incremental urban regeneration: Urban cell as dissemination unit

Miguel Pires Amado; Inês Ramalhete; João C. Freitas; António Ribeiro Amado
Departamento de Engenharia Civil, Arquitectura e Georrecursos do IST UL, PORTUGAL
miguelpamado@tecnico.ulisboa.pt

The faster urbanisation in developing countries is producing an unyielding pressure on existing urban hubs, which is leading to the formation of informal settlements, as there are no alternatives for low-income migrants. Sub-Saharan African Region still showing the worst scenario, where 55% of the population still lives in informal settlements in 2014, according to the United Nations data. Different approaches and strategies have been applied but the scale of the problem, lack of financial resources and political instability are the major constraints for its success. In the majority of the cases, regeneration is fully dependent on the Governments decisions and resources, which delays the process and, sometimes, show inadequacy to local conditions (Werna 2001; Ogunshakin and Olayiwola 1992; Shannon, Meulder, and Lin 2014; Abbott 2002). On the other hand several authors and data from empirical approaches have shown that an incremental process, supported by self-determination, is essential to provides some transformation (Huchzermeyer and Karam 2006; Shannon, Meulder, and Lin 2014; Keivani and Werna 2001; Ogunshakin and Olayiwola 1992; Wekesa, Steyn, and Otieno 2011; Mukhija 2004; Abbas M. Hassan 2015; Blaustein et al. 2014; Greene and Rojas 2008). This paper presents a methodology for an incremental urban regeneration to be applied in a pilot project to the Luanda metropolitan area, in Angola. The methodology presents an approach where urban cells can work as dissemination units for regeneration, considering a self-empowerment of the investors and the population in a framework of partnership. The issue of the research relies in two main scopes: the definition of these urban cells, considering the State's objectives and initiatives; land tenure forms (land titles, former occupancy) and local features (social, economic and environmental); the autonomy of the stakeholders, regarding a process where the State is a supporter and the regeneration operations are made by the private sector and the population. Thus, a criteria framework for the definition of these urban cells is presented, based on literature review and empirical evidences, supported by GIS Database. Furthermore, a set of mechanisms is presented in order to support the self-empowerment process. The conclusions focus in the research for a methodology based on a regeneration process that combines policies and its spatial dissemination within the territory.

----- * -----

A IIRSA/COSIPLAN: as consequências de um modelo de integração territorial preponderantemente rodoviário

Vitor Hélio Pereira de Souza
Doutorando pela Universidade Federal de Santa Catarina (UFSC), BRASIL e Universitat Autònoma de Barcelona (UAB)
vitorgedri@hotmail.com

No início do século XXI, foi criada a Iniciativa para a Integração da Infraestrutura Regional Sul-Americana (IIRSA), que evoluiu no ano de 2008 para o Conselho Sul-Americano de Infraestrutura e Planejamento (COSIPLAN), organismos que se tornaram responsáveis por promover a integração territorial regional Sul-americana. Nessa conjuntura, esse artigo objetiva examinar as limitações dos projetos, decorrentes, especialmente, da centralização de grande parcela dos investimentos e obras no modal rodoviário. Haja vista que, a opção pelo modal rodoviário ainda que contribua com a fluidez territorial regional, por outro lado favorece a ampliação da confluência de fluxos na região da fachada litorânea atlântica, decorrentes da ampliação do comércio (regional e internacional) e, o processo de urbanização no entorno das rodovias.

Nessa investigação, julgamos perspicaz decifrar as redes, não somente por meio da sua história, mas também do território no qual as mesmas estão instaladas, assim como do modo de produção que permitiram a sua instalação e das técnicas que resultaram na forma atual existente (RAFFESTIN, 1993). Nesse sentido o paradigma de Formação Sócio-Espacial (SANTOS, 1983), ofereceu um importante aporte para compreender essa estrutura particular Sul-americana, espacializada e manifestada em formas, cuja função é manter/potencializar as relações de produção vigente, ora preservando algumas estruturas espaciais assumidas em outro espaço/tempo e, ora destruindo outras, para possibilitar espaço para acumulação capitalista.

A metodologia da pesquisa foi pautada na avaliação dos Portfólios e Agendas da IIRSA/COSIPLAN, assim como a revisão bibliográfica de livros e artigos científicos especializados. As análises visaram compreender a evolução do número de obras e investimentos, a composição setorial e a distribuição espacial das obras e, por fim as possíveis implicações do modelo de integração em andamento.

A IIRSA/COSIPLAN, para o ano de 2011 ampliou o seu número de obras de 524 para 531, assim como a estimativa de investimento de US$ 96.119 milhões para US$ 116.120 milhões. A composição setorial do Portfólio em relação ao número de obras programadas aponta que 461 (86,8%) dos projetos foram concernentes ao setor de transporte, restando 61 (11,5%) ao setor de energia e, 9 (1,7%) ao setor de comunicações. O mesmo padrão se manteve em relação aos investimentos com a concentração da maior parcela dos recursos no setor de transportes US$ 65.144,6 (56,1%), ao setor de energia US$ 50.931,3 (43,86%), e apenas US$ 44,7 (0,04%) ao setor de comunicação.

No continente Sul-Americano, foi a porção austral e parte da central, que concentraram 6 dos 9 Eixos de Integração e Desenvolvimento (EIDs) delimitados no Portfólio, centralizando aproximadamente 57% dos investimentos e, cerca de 68% dos projetos. Aspecto que reflete a tendência à seletividade do capital, em sua constante busca para ampliar as “condições gerais de produção” de determinadas áreas em detrimento de outras.

Como é o caso desse recorte espacial, que abarca parcelas da Comunidade Andina (CAN) e do Mercado Comum do Sul (Mercosul), concentrando as maiores taxas de urbanização, os melhores índices econômicos, assim como o melhor desempenho no comércio internacional intra/extrarregional da América do Sul, cuja a “core área” encontra-se conformada pelo corredor Belo Horizonte/MG, São Paulo/SP, Curitiba/PR, Florianópolis/SC, Montevidéu, Buenos Aires, Mendoza/AR, Santiago do Chile/CH e Valparaíso/CH.

Entre os principais resultados, constatou-se que indubitavelmente os projetos e investimentos destinados a ampliação da fluidez territorial do continente são imprescindíveis. Porém, ainda que exista o direcionamento de investimentos para hidrovias e ferrovias, grande parcelas das inversões foram direcionados a ampliação da capacidade das rodovias, o que não modificou profundamente a matriz de transporte Sul-americana.

Tal dinâmica sucede-se nos primeiros anos do século XXI, concomitante ao crescimento das exportações de commodities destinadas em sua maioria ao mercado exterior e, a inexistência (ou precariedade) das ferrovias transversais (leste - oeste), que poderiam conectar as áreas produtoras aos portos e aduanas. Desta maneira, as cargas foram/são destinadas ao modal rodoviário, transitando obrigatoriamente pela área com maior densidade urbana do continente (a fachada litorânea) para, consecutivamente, chegar aos portos onde são embarcadas. Portanto, contribuindo também com a contínua necessidade de investimentos nessas áreas litorâneas visando melhorar/ampliar a capacidade das vias.

Ademais, uma vez que a rodovia em algumas regiões influenciou a morfologia do processo de urbanização, como podemos verificar no caso brasileiro em parcelas da rodovia BR-101, que interliga a região da fachada litorânea atlântica de norte a sul, esse se tornou um espaço marcado pela confluência de fluxos: internacionais, regionais, e também intra/interurbanos. Deste modo, a “rodovia” também é utilizada para mobilidade cotidiana da população, com destaque para deslocamentos pendulares entre municípios e, em alguns casos adquirindo a função de “via urbana” viabilizando o descolamento entre bairros. O resultado dessa confluência de fluxos é a redução, em determinados períodos do dia, das velocidades máximas permitidas à rodovia que é de 110 km/h e, alcançando em deliberados períodos do ano, com os deslocamentos aos balneários turísticos, uma velocidade média inferior a 10 km/h em alguns trechos da rodovia.

Logo, a IIRSA/COSIPLAN ao não diversificar a matriz de transporte dos países Sul-americanos, contribui com uma concentração na porção litorânea atlântica do continente, populacional, econômica, de infraestruturas e fluxos, que persiste e vem sendo ampliada, principalmente, no caso brasileiro.

----- * -----

Session L1.4 | May 31 | 14:00 – 15:30

Lutando por um lugar na cidade de Maceió, Brasil

Débora Cavalcanti
Faculdade de Arquitetura e Urbanismo da Universidade Federal de Alagoas, BRASIL
debora_cavalcanti@hotmail.com

A compreensão da pobreza urbana tem-se alargado na última década, focando menos nas características econômicas e incluindo conceitos como exclusão, vulnerabilidade e violência. Os conceitos e terminologias na literatura sobre pobreza urbana e segregação espacial foram variando de definições baseadas em fatores econômicos (Morduch, 1994) para a inclusão de dimensões qualitativas como independência, liberdade e autoestima (Sen, 1999). Os componentes espaciais da pobreza têm recebido menor atenção, apesar de conceitos tais como direito à cidade estarem presentes na agenda acadêmica e na agenda das políticas públicas. Portanto, como parte do enquadramento teórico da pesquisa, tratou-se de combinar conceitos tais como cultura da pobreza, marginalidade, exclusão e nova marginalidade com os padrões espaciais associados incluindo ocupações, guetos, gated communities e hiperperiferia. Lefebvre (1996) argumenta que o direito à cidade se tornou mais essencial do que nunca. No entanto, a expressão 'direito à cidade' não se refere apenas ao simples direito de visitar a cidade. O que ele pede é uma sociedade urbana renovada, onde seja claro o direito de não ser excluído da centralidade e de ser capaz de participar politicamente na tomada de decisões, sendo particularmente significativo para as classes menos privilegiadas. Adquirir o direito à cidade assumiu no Brasil um significado mais claro, a sociedade civil (em particular movimentos sociais, ONGs e universidades) defendeu a criação de um novo quadro jurídico após o final do período de ditadura em 1985. Logrou-se a aprovação da lei 'Estatuto da Cidade' (2001) que reconhece o direito à cidade, no entanto, a sua implementação não obteve os efeitos desejados. No Brasil, os direitos não são concedidos a todos; apenas para aqueles que estão bem posicionados, que possuem um bom rendimento, ou pertençam a um determinado gênero ou grupo racial. Harvey (2003) acredita que há uma relação direta entre o 'direito à cidade' de Lefebvre e a ideia de justiça social. O direito à cidade está ligado à justiça social em sua oposição à separação social e à exploração de pessoas enquanto produtores, consumidores de produtos e consumidores de espaço. Na visão de Harvey (1973), o caminho para produzir uma cidade socialmente justa é a realização de políticas urbanas destinadas à redistribuição da riqueza, incentivando ação em setores mais pobres e restringindo-os nos distritos de renda média e alta. Esta mudança é pouco provável na estrutura atual do mercado capitalista onde a riqueza é gerada e compartilhada entre os mais poderosos, apesar (ou por causa) do controle do governo. A suposta igualdade entre os consumidores da cidade produz mais riqueza para aqueles que estão bem situados e mais pobreza para aqueles que não disfrutam do apoio do sistema econômico. Os espaços na cidade se tornam fragmentados e para usar as palavras de Harvey: 'cities become more ghettoised as the rich seal themselves off for protection while the poor become ghettoised by default' (id., 940). O direito à cidade portanto representa um passo no sentido da integração urbana dos pobres, mas a questão é como conciliar isso com os interesses gerais da sociedade e os interesses particulares de todos os grupos sociais. Dentro deste contexto, este artigo explora a dinâmica da integração social e espacial através da observação do cotidiano de assentamentos precários em Maceió, cidade de médio porte no nordeste brasileiro como uma forma de conhecer as necessidades e propor a aplicação do 'direito à cidade'. Foi empregada uma abordagem qualitativa que une pobreza, mobilidade, organizações sociais e ações estatais para afirmar que os assentamentos precários são armadilhas espaciais onde a perspectiva individual e as relações de exploração sobrepõem-se a abordagens coletivas. Histórias de vida e entrevistas com moradores de assentamentos precários e com profissionais do urbano foram usados para desconstruir preconceitos e mostrar como a luta por um espaço na cidade toma forma. Na maior parte dos casos o estado está ausente da vida dos pobres, evidenciando graves infrações dos direitos humanos que leva à perda de relações econômicas, sociais e espaciais. A falta de uma intervenção adequada e de organizações comunitárias fortalecidas significa que os moradores empregam em sua ronda diária várias táticas incluindo violência, oportunismo e barganhas econômicas e políticas, desafiando o estado e a sociedade a repensar as políticas de invisibilidade e o que chamo a territorialização da pobreza. O legado geracional de vulnerabilidade e exclusão no cotidiano dos pobres urbanos revela as dificuldades de implementar o direito à cidade quando confrontados com as piores práticas do estado e das organizações sociais. Contínua mobilidade e

segregação espacial, vulnerabilidade e exclusão revelam que além de qualquer retórica de direito à cidade, a luta por um espaço na cidade ainda continua. O artigo conclui apresentando uma série de sugestões sobre o que deveria ser uma política diferente de habitação para os pobres urbanos, intervindo nos territórios da pobreza. Com base nos resultados dessa pesquisa, as políticas de habitação devem: i) levar em conta a mobilidade residencial como uma meta desejável; ii) ser flexíveis quanto aos espaços de modo que possam ser adaptados às necessidades de famílias pobres; iii) refletir sobre os diferentes produtos habitacionais que podem servir para as pessoas em diferentes estágios de integração urbana; iv) reverter a tendência de isolar os assentamentos precários no ambiente urbano para que as comunidades de baixa renda não sejam agrupadas sob a forma de guetos onde há pouca perspectiva de superação da pobreza; v) tomar medidas para escolher o tamanho e a localização mais adequados para os assentamentos e, posteriormente, fazer uma avaliação cuidadosa do grau de sucesso de cada projeto; vi) limitar a expansão urbana horizontal; vii) aumentar a densidade global das cidades, enquanto se inclui a população de baixa renda no tecido urbano; viii) introduzir serviços de saúde e de educação de boa qualidade para famílias de baixa renda; ix) incentivar a criatividade e o potencial de negócios dos pobres urbanos; e x) dar às pessoas uma chance de sobreviver através de meios legais e, assim, se evitaria o uso de estratégias que produzem destruição social e física do meio ambiente.

----- * -----

Analysis of socio-environmental vulnerability in the municipality of Rio de Janeiro

Fernanda Siqueira Malta; Alessandra Magrini; Eduarda Marques da Costa
Federal University of Rio de Janeiro, BRASIL
fernandamalta@ppe.ufrj.br; ale@ppe.ufrj.br

For a long time the term vulnerability has been considered synonymous with risk, but gradually, authors and national and international organizations have begun to conceptualize the vulnerability in a more specific way. According to the United Nations (UNDP - 2004), vulnerability is the condition determined by physical, social, economic and environmental factors that increase susceptibility to disaster impacts. Following the same thinking, the Prevention Center to Natural Disasters in Central America (CEPREDENAC - 2006), defines vulnerability, usually interpreted in hazardous areas and disaster as referring to a series of socially constructed characteristics that make society susceptible to damage and loss and to face difficulties in recovering autonomously. In Brazil, the Ministry of Cities (2006), determined that the vulnerability is the degree of loss to a given element, group or community within a certain passiível area to be affected by a phenomenon or process.

In recent years, the term vulnerability has been used more often in academic studies as well as by government agencies in Brazil and worldwide, this growth occurs by the need to understand more deeply the society and their different degrees of vulnerability.

Besides the above mentioned concepts, authors such as MOSER (1998), define vulnerability as a situation where are present three components: risk exposure, inability to react, and the difficulty of adaptation. Another line of analysis about vulnerability, present mainly in the field of geography, comes from the study of natural hazards and risk assessment. In this context, vulnerability can be analyzed as the interaction between the risk inherent in a particular region and the degree of exposure of the population living there (CUTTER, 1994).

Studies of vulnerability have different approaches, some with a more sociological emphasis (MOSER, 1998;. Kaztman et al, 1999), where social vulnerability is analyzed in relation to individuals, families or social groups. And others, more related to risks and natural disasters (CUTTER, 1994; 1996), where environmental vulnerability has been discussed in territorial terms.

This difference between the two approaches in terms of the type of analysis object and the scale used, must be considered in the construction of the concept of socio-environmental vulnerability, which aims to integrate social and environmental dimensions.

Taschner (2000) develops systematic reflections about what she identified as ""slums in environmental risk situation"". It is a close socio-environmental vulnerability formulation, because it refers to certain particularly marginalized groups, which would also be additionally affected by environmental risk. In this regard it is noteworthy that in recent decades, there has been a strong process of expanding slums in the city of Rio de Janeiro, which generally occupy public areas, often located in areas at risk of flooding, or slopes with steep slopes, with high propensity to erosion, setting up situations of socio-environmental vulnerabilities.

The objective of this study is to analyze the areas of socio-environmental vulnerability in the municipality of Rio de Janeiro.

In 2010 about 6.3 million people lived in Rio de Janeiro, approximately 40% of all the Rio de Janeiro state population, which became the largest city of the Brazilian coast.

Due to its location on the coast zone, Rio de Janeiro is particularly vulnerable to two interconnected aspects: the sea level elevation and the occurrence of extreme events, such as strong winds, storm waves and torrential rains. Besides these aspects there is also much relief in the city, which, being quite some bumpy, increases the landslide vulnerability. These three aspects when combined can produce devastating effects, causing social, economic, infrastructure and environmental impacts.
In this context, the search for methods to characterize socio-environmental vulnerabilities in coastal zones is becoming more present in public administration and in academic circles.
To characterize the socio-environmental vulnerabilities were used two groups of variables. To characterize the social vulnerability we used the Social Vulnerability Index, developed by the Applied Economic Research Institute (IPEA) and to characterize the environmental vulnerability was used the map of susceptibility to landslide developed by the Institute for Geotechnical (Geo-Rio), an agency of the municipality of Rio de Janeiro.
By using GIS techniques, such as spatial overlap between the Social Vulnerability Index and areas susceptible to slip, were identified areas of Very High, High, Moderate, Low and Very Low socio-environmental vulnerability. To show the spatial distribution of socio-environmental vulnerability areas, the Kernel estimate was applied.
The expected result is a mapping of the spatial distribution of areas in socio-environmental vulnerability in the municipality of Rio de Janeiro, thus expressing the starting point for more detailed analysis of the socio-environmental vulnerability of the region. It is hoped that these results may serve as input to form and implement public policies in metropolitan areas, being, therefore, fundamental to spatially locate the areas that concentrate the most vulnerable population segments, which should be, initially, priority targets of policies and public interventions.

----- * -----

Portugal Community Coalitions in Lisbon

Filipe de Lacerda Matos
Instituto de Geografia e Ordenamento do Território, PORTUGAL
filipematos@campus.ul.pt

Current ways of life and social organization models in western countries face major and profound changes. Western mainstream political ideologies and democratic configuration seem to fail with satisfactory solutions to great systemic and multi-level risks and challenges as climate change or distribution of wealth, putting us in an uncertain transition period. At the same time, citizens often mistrust and feel disconnected to political decisions, as we stand by the emergence of a new wave of social movements engaged with humanistic and ecological narratives, that question the dominant paradigms of prosperity and development, inducing major reflections on limits to growth, spatial planning and, ultimately, everyday life.
As cities and local contexts are increasingly recognized to play a crucial role in Europe's development models, territorial and urban dimensions gain importance in the European Union's Cohesion Policy. Several strategic documents (Territorial Agenda 2020, Cities of Tomorrow) and programs of territorial intervention (URBAN, URBACT, DLBC) produced and promoted within the European Union recommend and encourage new forms of territorial governance, which should include different actors in decision making processes, namely civil society actors, in order to overcome current complex challenges.
Simultaneously, there's also been a profusion of academic discussion regarding governance and its territorial dimension. There are several views on territorial governance which analyze transformations in the relations between state, markets, and civil society regarding the production and management of cities. The current discussion around territorial governance emerges in a period where western national welfare policies contract and private actors gain space in public interest matters. Thus, when referring to governance, we may refer to processes that lead to social innovation and empowering processes, or we may refer to selective, and hardly legitimate or transparent processes.
In Portugal, citizen and civil society participation in urban planning is very recent, and has been promoted essentially through consultative instruments, as information sessions or public consultation. Nonetheless, we may find several experiences, policies or instruments of territorial governance, which in some way have been promoting the participation of diverse stakeholders in the decision making processes regarding urban planning.
After some experiences in community intervention in the 60s and 70s, the entrance of Portugal to the European Union opened the doors to several European programs like EQUAL and LEADER, which constitute relevant experiences in territorial governance. In the end of the 90s, the national wide program Social Network (Rede Social) was conceived and then implemented in 2000, maintaining activity until today. This program promoted the existence of local integrated social support networks, putting together local

authorities and public or private non-profit institutions that voluntarily join the network, in order to join efforts to the reduction of poverty and social exclusion. By law, every municipality and parish should promote Local Social Action Boards (Conselhos Locais de Acção Social) and Parish Social Committees (Comissões Sociais de Freguesia), respectively. Although having similar structures, each Board and Committee set their rules, meaning that these instruments were put in action in distinct ways, in order to adapt to the local reality. In the municipality of Lisbon, the implementation of these governance platforms coexists with other municipal local development strategies as the BIP/ZIP (Neighborhoods or Areas of Priority Intervention) and other municipal initiatives as Participatory Budgeting and Local Agenda 21.

Simultaneously, there are other informal governance structures – community coalitions (grupos comunitários) – whose intervention focuses essentially on the neighborhood level. These are very diverse territorial platforms, with the peculiarity of including – and in some cases being led by – grassroots organizations and citizens. This communication will focus on these community coalitions, trying to understand their role in the territories where they exist, the patterns and differences in their actions and impacts, and mostly try to frame their existence in the broader strategies for local development. In Lisbon different policies, instruments and initiatives of territorial governance coexist, not always in an integrated way. Thus, this communication argues that Lisbon's local development strategy should consider the knowledge, practices and structures of these community coalitions, both by a matter of optimization of resources and efficiency of the social and territorial interventions, and by a matter of social justice, as in promoting the empowerment and the participation of local stakeholders in urban planning processes.

This communication draws on an on-going PhD research on territorial governance, which is being undertaken with an action research approach, meaning that the investigator is an active part of one of the community coalitions that will be highlighted (Parceria Local de Telheiras). Thus, the thoughts here presented draw on the direct participation of the investigator, as well as on several interviews and collective meetings with representatives from these platforms.

----- * -----

O *Crowdsourcing* utilizado como tática de resiliência em um planejamento urbano colaborativo

Renata da Silva Oliveira
Rua Silveira Lobo, 21 apto 301 – Loft Casa forte – Poço da Panela
52061-030 Recife/Pernambuco, BRASIL
renata.oliveira@vdgcine.com.br

Investigando novas ferramentas de participação social, um aplicativo foi utilizado para testar um planejamento urbano mais colaborativo e participativo. Estudou-se o *crowdsourcing* por meio da plataforma *opensource Crowdmap*, incorporando na sua parametrização conceitos de resiliência comunitária e do Novo Urbanismo, já que ambos visam atender às necessidades locais através dos próprios cidadãos, focando sobretudo na multiplicidade de usos nos espaços públicos. Cinco eixos teóricos envolveram a sua configuração: inicialmente foram observados os usos de dados e tecnologia no planejamento urbano; e o *crowdsourcing.* Em seguida foram avaliados os ativismos sociais; seguido dos processos de implantação do Novo Urbanismo; e, por fim, a dinâmica da resiliência comunitária. Procurou-se, através de tais temas, agregar conceitos que ajudassem na construção de soluções táticas diante de problemas no ambiente urbano. A premissa partiu do pressuposto de que qualquer comunidade, utilizando aplicativos similares, pode participar de maneira rápida, dinâmica e barata no aprimoramento de seus bairros, construindo comunidades mais ativas, resilientes e inclusivas. Brabham respalda esta abordagem, quando considera como pertinente e assertiva a utilização de aplicativos para o planejamento das cidades, enxergando o intelecto coletivo como parte de soluções projetuais criativas e facilitadoras do planejamento urbano obtido através do conhecimento local, com o não-especialista acrescentando *insights* sobre os espaços e o meio ambiente construído. Goldstein também é otimista ao defender que aliar aspectos de resiliência ao uso de aplicativos vai além de uma simples ferramenta, pois ações colaborativas, dado seu perfil interativo, proporcionam uma capacidade de adaptação que reforça a ligação com o lugar e possibilita um olhar otimista para alternativas perante as adversidades; considera ainda que o *crowdsoursing* tem um aspecto transformador, pois suas narrativas expressam o significado subjetivo e simbólico de resistência, envolvem múltiplas vozes, e permitem uma democrática auto-organização sobre as decisões. Percebe-se, assim, o papel do *crowdsourcing* como um elemento de resiliência e, mais ainda, como um elemento de resiliência tática para cidadãos. Koen de Wandeler, por exemplo, discute a distinção que Michel de Certeau criou entre "táticas", entendidas como as práticas cotidianas com as quais grande parte da população responde contra o poder ou ordem rígida, fonte das "estratégias": com tal discurso é possível reforçar o entendimento do *crowdsourcing* como organizador de táticas. Parte da motivação deste trabalho se deu pela constatação da

ausência, no contexto brasileiro, desta postura em seus cidadãos para a produção de tais táticas: principalmente quando diante de problemas urbanos, tais sujeitos insistem em atribuir a responsabilidade unicamente aos gestores públicos. A sociedade parece renunciar e hibernar o seu papel cívico ao esquecer seus deveres e direitos. Ignoram que antes de protestar, poderiam elaborar propostas de maneira colaborativa e proativa. Muitos desconhecem por exemplo a Lei Federal brasileira - *Estatuto das Cidades*, de 2001, que legitima um princípio constitucional de que a sociedade civil organizada, pode elaborar propostas para o planejamento das cidades. Isso posto, parametrizou-se o *crowdmap* utilizando categorias que sugerissem novos usos baseados nos princípios do Novo Urbanismo, adaptando o método- *IPS* – do Urbanismo Sustentável de Douglas Farr. Em um sítio eletrônico, um tutorial (passo a passo) permitia que cada morador da região objeto de estudo - bairro de Santo Amaro, Recife- PE, Brasil – identificasse, através de imagens, as sugestões de espaços que ilustravam as categorias disponibilizadas. Um *link* levava o usuário ao *crowdmap* para que votasse em novos usos para seu bairro. Com divulgação pelas redes sociais, o teste durou 12 dias, ao fim dos quais um mapa georeferenciado foi construído pela comunidade. Ao término da coleta de dados, estes foram impressos e anexados às informações estatísticas que o próprio *crowdmap* disponibiliza instantaneamente, gerando uma espécie de caderno tático com desejos da comunidade. De 44 categorias elencadas, 41 receberam votos, sendo “aluguel de bicicletas” a que recebeu mais indicações, ficando em segundo lugar “criação de sombras nas ruas”, “calçadas largas”, “café e bar aberto para a rua”. Em terceiro lugar ficaram “wi-fi público”, “espaços para passeio com cães”, “rua para pedestres”, “padaria”, “bicicletário”, “horta comunitária” e “posto policial”. Tanto nas informações recolhidas na revisão bibliográfica, como na consolidação dos dados gerados pela interação da comunidade com o *site* comprovou-se que o diálogo da resiliência com os ativismos participativos e colaborativos, com o Novo Urbanismo, aliados às tecnologias de *crowdsourcing* e *crowdmap*, é pertinente e relevante. Tratam-se de novos métodos, potencializadores de rápidos diagnósticos na construção de lugares possíveis. As tecnologias são úteis, inclusivas, multifuncionais e possibilitam os contatos sociais, melhorando a resiliência e a qualidade de vida dos moradores. Os resultados comprovam a viabilidade e os bons prognósticos para sua maior exploração, sugerindo que aplicativos colaborativos sejam incorporados como novos métodos no processo projetual de contexto urbano, capazes de proporcionar diagnósticos coesos, rápidos, baratos e transparentes, ao invés de informações desconectadas, difusas e, sobretudo, manipuláveis, normalmente obtidas por meio de questionários convencionais e reuniões de audiências públicas longas e onerosas. A inteligência coletiva levantou a provocação de que, no futuro, se investigue as potencialidades do *crowdsourcing* como metodologia de produção das cidades através de aplicativos e *sites* que fomentem comunidades colaborativas e participativas.

----- * -----

Políticas e Equipamentos culturais na área metropolitana de Brasília – pensando os desafios da espacialidade participante

Wallace Wagner Rodrigues Pantoja [(1)]; Maria de Fátima Rodrigues Makiuchi [(2)]

[(1)] Doutorando em Geografia (UNB), Professor da Rede Estadual do Pará, Bolsista do Observatório de Políticas Culturais (OPCULT), BRASIL

[(2)] Profª. Dra. do Programa de Pós-graduação em Desenvolvimento, Sociedade e Cooperação Internacional (PPGDSCI) do Centro de Estudos Avançados Multidisciplinares (CEAM-UNB). Coordenadora do Observatório de Políticas Culturais (OPCULT), BRASIL

demithri@yahoo.com.br; fatima.makiuchi@gmail.com

A Área Metropolitana de Brasília (AMB), formada pelo Distrito Federal e 12 municípios do entorno goiano, no Brasil Central, historicamente aponta para um fomento de espaços culturais e equipamentos variados. A própria monumentalidade da capital brasileira evoca o cultural como expressão do moderno. Entretanto, a distribuição destes equipamentos na AMB deve ser problematizado no sentido participativo, ou seja, qual o acesso e a interatividade que os mesmos possibilitam no conjunto metropolitano? A questão que nos move enfatiza a relação entre participação, política e cultura. A pesquisa, iniciada em 2014, pretende discutir a partir dos territórios que compõem a metrópole, os programas e equipamentos culturais como um dos fundamentos da cidadania e da participação na dinâmica viva das relações humanas que a metrópole pode possibilitar ou fraturar. Metodologicamente, partimos da revisão de literatura sobre política cultural”, pesquisa de campo para levantamento dos espaços e ações de cultura e consequente produção cartográfica utilizando os dados e informações levantadas (ao nível distrital, estadual, metropolitano e federal). O intuito é inferir sobre a distribuição, as tendências e lógicas de usos dos equipamentos culturais na AMB, confrontando com os discursos dos documentos oficiais destes programas e equipamentos, especificamente no que se refere a participação da sociedade nos usos dos mesmos. Entre as conclusões, destacamos s que há uma forte concentração dos equipamentos culturais no chamado Plano Piloto de

Brasília, em relação aos demais territórios que compõem a metrópole. Esta concentração, se contextualizada no território a partir de indicadores de mobilidade urbana, renda média e nível de instrução, corrobora a ideia de que a produção do espaço metropolitano de Brasília é caracterizada pela segregação sócio espacial, no qual as áreas ditas periféricas possuem um maior índice de vulnerabilidade e um menor aporte de recursos públicos na forma de equipamentos e programas. Do ponto de vista da participação, ainda que estes equipamentos e programas culturais, quanto em seus usos múltiplos estejam disponíveis para todo o cidadão da metrópole, efetivamente refletem uma fragmentação do sentido da fruição e do viver em Brasília como espacialidade cultural. Entretanto, o mapeamento revela alternativas espaciais e caminhos para repensar a participação em uma perspectiva geográfica e, assim, construir um aprendizado político-espacial tendo em vista o futuro como projeto.

----- * -----

Lusophone 02

Multilevel governance experiences for sustainable urban and environmental development

Chair: Nuno Marques da Costa, Universidade de Lisboa, Portugal

Scientific Committee: Glaucio José Marafon, Universidade do Estado do Rio de Janeiro, Brasil
Helsio Azevedo, Universidade Eduardo Mondlane, Moçambique
Margarida Pereira, Universidade Nova de Lisboa, Portugal
Neli Aparecida Mello, Universidade de Sao Paulo, Brasil
Teresa Alves, Universidade de Lisboa

In Portuguese-speaking countries, planning systems are young, both in spatial planning instruments for different scales and in governance structures.

Besides that, new problems of aging, scarcity in providing health and education services, unsustainable mobility, and housing pressures all demand new approaches and a multilevel planning system. This track is dedicated to the discussion of innovations and experiences in addressing these issues.

- How are environmental and sustainable urban development paradigms placed in multilevel and integrated spatial planning approaches?
- What are the challenges for governance multilevel?

Participação popular em Natal/RN e possibilidades para uma nova estratégia urbana

Ana Mônica Medeiros Ferreira
UFRN, BRAZIL
anamonicamf@gmail.com

O objetivo deste estudo é discutir o direito à cidade e a necessidade de repensar o direito urbanístico, que atualmente não responde as demandas sociais e relacionar com a falta de efetiva participação popular. A opção do tema abordado neste artigo tem o escopo de realizar uma reflexão sobre o esgotamento da técnica pura do Direito Urbanístico para explicar a necessidade de participação popular na elaboração do Plano Diretor de Natal – RN bem como fomentar o debate acerca da legitimidade da gestão pública e o direito à cidade.

Fazendo uso da abordagem dialética, esse breve artigo prioriza dois aspectos complementares. O primeiro refere-se ao debate social, que possibilita a ampliação do olhar sobre a temática do direito à cidade como utopia. O segundo diz respeito ao arcabouço jurídico e aos processos para a garantia de tal direito, incluindo a crítica ao direito urbanístico que é reflexo da crise do paradigma do direito moderno que impede um enfrentamento definitivo sobre a questão da democracia e a participação popular.

Considerando que para entender a sociedade urbana devemos nos conduzir a uma prática, prática urbana que deverá ser apreendida ou re-apreendida, faz-se a reflexão do direito à cidade a partir das contribuições de Henry Lefebvre e Boaventura de Souza Santos para contextualizar a crise do modelo hegemônico e exaltar a importância da participação da sociedade na condução dos rumos das cidades.

Henry Lefebvre nos aponta o problema quando afirma que o urbanismo objetivo na aparência é um urbanismo de classe e encerra uma estratégia de classe onde o valor de uso é deixado de lado pelo desenvolvimento do valor de troca. Nos ensina que é preciso denunciar o urbanismo tradicional ao mesmo tempo como máscara e como instrumento: máscara do Estado e da ação política, instrumento dos interesses dissimulados numa estratégia e numa sócio-lógica (LEFEBVRE, 2008, p. 161). O urbanismo não procura modelar o espaço como uma obra de arte, nem segundo razões técnicas como pretende. O que o urbanismo elabora é um espaço político.

Pode-se inferir a partir do pensamento que ter direito à cidade significa, portanto, a reivindicação do "direito" aos direitos fundamentais na vida cotidiana das cidades ou como condição para a realização dos demais direitos, diz respeito, portanto, ao acesso e a participação em uma sociedade urbana. Assim, a cidade deve ser entendida pela ciência e pela sociedade como objeto de luta e como elemento central da sociedade atual, por isso nos parece essencial resgatar - ou ao menos esclarecer e perseguir um projeto utópico na sociedade urbana brasileira: o direito à cidade.

Pensar em uma nova estratégia urbana significa também repensar a participação política e o controle social na gestão da cidade. Em outras palavras, o entendimento da cidade só pode ser alcançado a partir da unidade de dois níveis de análise: aquele do capital e o da sociedade como um todo onde o indivíduo é antes de tudo um cidadão com todos os direitos que o termo implica (CARLOS, 2015, p. 81).

Nesse sentido adverte-se para os perigos da utilização acrítica dos termos cidadania e sociedade civil. Entendendo que para que a democracia recupere o seu verdadeiro significado de governo pelo povo ou do povo é necessário transformar radicalmente o capitalismo, sistema econômico e social que retira gradativamente diversas esferas da vida social do controle popular e democrático (WOOD, 2011, p. 23).

De acordo a Constituição Federal a política urbana deve ser, necessariamente, produto resultante da participação popular. Mas a questão não é apenas jurídica. O Brasil não tem tradição em efetivos instrumentos de participação e tampouco no compartilhamento na solução de problemas da esfera pública. Observa-se que não é suficiente o comando constitucional de garantia da participação popular e o dever do Estado na sua efetivação, importa agregar outro elemento: o compromisso político e programático do governo, que comanda as diferentes parcelas do Estado.

Atualmente o controle social no âmbito municipal no contexto atual do Sistema de Planejamento e Gestão Urbana do Município está previsto no artigo 93, § 1º e 2º da Lei Complementar nº 082/07. Porém verifica-se que os conselhos são pautados pela ideia clássica de controle, consolidada até o início da redemocratização do país como um conjunto de métodos conduzidos pelo Estado com o objetivo de estabelecer a ordem social e a finalidade de disciplinar os indivíduos. Em outras palavras, ainda distantes de uma relação dialógica entre o Estado e Sociedade, que possibilita a ampla participação dos setores organizados, na formulação, acompanhamento e verificação de políticas, em nível mais geral até os planos, programas e projetos em seus diferentes estágios de execução, inclusive o da alocação de recursos.

Defende-se que pensar no Direito à cidade implica em pensar o Direito Urbanístico, além de instrumentos e a estrutura que poderá realizar tal tarefa, que por sua vez nos remete ao debate sobre políticas públicas e políticas sociais, além de uma análise global do próprio Estado Democrático de Direito. Nas palavras de

Boaventura de Souza Santos o conhecimento científico emancipatório do direito visa descobrir, inventar e promover as alternativas progressistas que a transformação social possa exigir. É uma utopia intelectual que torna possível uma utopia política (SANTOS, 2011, p.167).
Acredita-se que a essência da participação social se consubstancia na universalização dos direitos sociais, na ampliação do conceito de cidadania e em uma nova compreensão sobre o papel e o caráter do Estado, compreendido como arena de conflitos políticos onde diferentes grupos de interesses disputam espaço e atendimento de suas demandas, a partir de um debate público.

----- * -----

Portugal: Governância e vulnerabilidade no sistema urbano do Oeste entre 2008 e 2014

Carlos Gonçalves
Instituto de Geografia e Ordenamento do Território, Centro de Estudos Geográficos, Universidade de Lisboa, PORTUGAL
c.goncalves@campus.ul.pt

Uma comunidade resiliente antecipa e/ou mitiga ameaças comprometedoras do seu progresso, planeando a multiplicação de oportunidades, resgatando o núcleo de funções principais ou desencadeando “novas normalidades”.
Os quadros de governância, percecionados através do poder gerado pelas comunidades, induzem diferentes arranjos de oportunidades e de constrangimentos, reforçando resiliência ou, pelo contrário, aprofundando vulnerabilidades. O entrosamento e a capacidade de intervenção cívica, assim como, a qualidade das lideranças geradas e legitimadas (ou não), interfere com a solidez dos modelos de desenvolvimento regionais, urbanos, comunitários (Foster, 2007).
As cidades onde as estruturas de governância são robustas, fomentam a distribuição do acesso a serviços (distribuição de água, energia, saúde, educação, segurança, justiça, entre outros) pela população. Sem mecanismos ativos de redistribuição efetiva, a pobreza e a exclusão nos sistemas urbanos, normalmente tendem a aprofundar-se (Pirez, 2002 citado em Resilience Aliance, 2007). Sintetizando, os campos da “boa governância” ramificam-se pela: capacidade de prestar serviços de interesse geral; capacidade de gerir convenientemente os recursos financeiros disponíveis; competências para capitalizar a diversidade urbana, suprimir a fragmentação e a iniquidade; capacidade para atalhar ou aumentar a insegurança nos espaços urbanos; capacidade para gerar pontes e mecanismos de articulação para lidar com a crescente complexidade de autoridades, centros de poder e jurisdições (Resilience Aliance, 2007).
As relações familiares, o círculo de amizades, os espaços de sociabilidade associados aos lugares de trabalho são alguns exemplos de ligações que desenham redes. Redes que, de acordo com a respetiva densidade de ligações, criam padrões de resiliência nas respetivas comunidades. Muito do capital social é forjado nesse emaranhado de fluxos por onde circula informação, reciprocidade e confiança que por sua vez, faz emergir um conjunto de recursos sociais. As capacidades de uma comunidade podem ser vistas no sentido de responsabilidade, no envolvimento coletivo, na partilha de crenças ou no perfilhar de objetivos que projetem qualidade de vida no longo prazo. Podem ainda, traduzir competências para identificar oportunidades de restabelecimento de capital social perdido ou de o fazer progredir, por oposição à conceção de ações reativas face a riscos. Este padrão de comportamento manifesta-se no quotidiano e reafirma-se em situações ameaçadoras ou de crise. O nível de conhecimentos que caracteriza uma comunidade, os seus círculos de interações, o seu capital de confiança, o nível de coesão e a latitude dos espaços de cooperação configuram uma dada organização social que por sua vez apresentam determinado alcance, enquanto alavancas de resiliência (Mancini e Roberto, 2009).
A avaliação dos impactos da crise (iniciada em 2008) na capacidade de interferir nas estruturas de governância, por parte das famílias residentes nestas cidades, resulta de um exercício de trabalho de campo (realizado entre os dias 4 de abril e 6 de maio de 2014), mediante o qual se aplicaram 387 inquéritos nas cidades desse sistema urbano. Destas entrevistas resultou informação sobre 1028 indivíduos (amostra alargada), correspondendo à totalidade das pessoas incluídas nos 387 agregados familiares (amostra restrita). Deste modo, foi possível, avaliar os impactos da crise em vários quadrantes, entre os quais, destacámos aqui, as alterações que degradam a capacidade das comunidades influenciarem o quadro de governância.
A reduzida participação dos cidadãos em espaços de ação coletiva (74% não participa em atividades de clubes, associações, sociedades) constitui uma debilidade do sistema urbano estudado, retirando-lhe, para além do mais, capacidade de perceber e discutir a extensão dos desafios e desencadear transformações de fundo nas estruturas sociais em que se inserem. Reforçam as estruturas de representação que, embora pouco participadas, polarizam mais facilmente os espaços onde se tomam decisões. Trata-se de

comunidades menos aptas para forçar mudanças, reprimir opções menos profícuas, tomar consciência de problemas e desencadear soluções.
Presença significativa de cidadãos que não participa na escolha dos decisores políticos locais (32% não votou nas últimas eleições autárquicas) aumenta a vulnerabilidade. Aprofundando o aspeto referido no ponto anterior, a abstenção eleitoral, assinala uma debilidade na representação política, quer se veja pelo lado das responsabilidades dos políticos, quer pelo lado dos cidadãos. No final, resultam sempre num défice que estas cidades internalizam e que condicionam a introdução de transformações. A fragilidade da representação política implica menor vinculação dos decisores às necessidades das comunidades e menor responsabilidade e participação dos cidadãos no desenho de estratégias de desenvolvimento. Aumenta-se a dependência face a centros de poder muito restritos ao mesmo tempo que se reduz a capacidade de condicionar as decisões aí tomadas. A fragilidade da participação nas decisões políticas constitui um impedimento à resiliência. Os resultados demonstram a dimensão do comportamento apolítico (32% dos abstencionistas posicionam-se na margem mais distante da participação). Essa desconfiança face à representação política aprofunda a vulnerabilidade.
A desconfiança generalizada (72%, de um modo geral não confia nos seus concidadãos), é demonstrativa do sentimento de insegurança, comprometendo a capacidade de reação da comunidade. Em suma, no período estudado o ceticismo intra-comunidade aumentou. Esta alteração diminui a sua capacidade de resiliência.

----- * -----

O desafio da participação na construção da nossa cidade: uma escola de planejamento urbano popular

Débora Cavalcanti; Regina Dulce Lins
Faculdade de Arquitetura e Urbanismo da Universidade Federal de Alagoas, BRASIL
debora_cavalcanti@hotmail.com e reginalins.br@gmail.com

Em um contexto de grandes mudanças sociais e políticas, a participação cidadã na definição das políticas públicas deve ser repensada. As diversas experiências têm demonstrado um afastamento cada vez maior do cidadão da gestão do seu território e a incapacidade dos gestores públicos de planejarem ações que venham ao encontro das necessidades e situações vividas pela população. A cidadania insurgente recentemente visível nos movimentos rebeldes, animada pelas redes sociais, não foi capaz de transformar a realidade mas deixou pistas sobre a possibilidade de mobilização e de formação de novas lideranças. O projeto da Escola de Planejamento Urbano Popular em Alagoas, estado do Nordeste brasileiro, a ser apresentado neste artigo surge da necessidade de capacitar todos os envolvidos na gestão urbana sustentável e principalmente as lideranças comunitárias que, diante de fragilidades de diferentes ordens, são constantemente cooptadas pelo setor público em troca de favores comunitários ou mesmo pessoais. A ideia é criar um programa de formação articulado a processos territorializados de desenvolvimento local, que fortaleçam os aspectos institucionais das organizações populares, preparando-as para pensarem e agirem sobre o território onde vivem e transitam. Além do mais, diante da dificuldade de diálogo entre os populares e o setor público e privado, a escola buscará inovar no sentido de propor espaços de confrontos e discussão de ideias, para a sensibilização mútua sobre objetivos e limitações dos envolvidos. O artigo apresenta inicialmente a teoria e a prática da participação popular no Brasil e em Alagoas, seguido da análise da experiência exitosa 'Escola de Planejamento Urbano e Pesquisa Popular' (EPUPP) da ONG Cearah Periferia (Fortaleza/CE) que tem atuado na perspectiva de formar lideranças populares para serem pesquisadores e pesquisadoras populares, capazes de intervir propositivamente no planejamento da cidade e nos diversos espaços de interlocução e negociação das políticas públicas. O processo de capacitação adotado pela Escola pauta-se na troca e na construção de saberes, por meio de conhecimentos entre moradores/as de diversos setores, com facilitação de professores/as, acadêmicos/as e profissionais de organizações sem fins lucrativos. Para finalizar apresenta-se a proposta da Escola de Planejamento Urbano Popular em Alagoas, que buscará se contrapor ao analfabetismo urbanístico de que sofre a população de forma geral.

----- * -----

Políticas públicas e o desenvolvimento do turismo: análise da implementação do plano estratégico do município de Inhambane (2009-2019)

Helsio Amiro de Albuquerque Azevedo; Egídio Victor Banze; Sónia Cardoso Nhantumbo
Universidade Eduardo Mondlane, MOZAMBIQUE
helazevedo@uem.mz

Os planos estratégicos de turismo são instrumentos, geralmente públicos, que direccionam as acções que cada um dos intervenientes, do sector do turismo, deve desencadear para mudar determinado cenário de desenvolvimento identificado como negativou ou ainda para direccionar acções para manter a qualidade dos aspectos que forem identificados como positivos. Sua elaboração e execução resulta de reflexões participativas e de estudos preliminares que definem um objectivo que norteará o desenvolvimento do turismo no território. Neste artigo, analisa-se o grau de implementação do Plano Estratégico do município de Inhambane (2009-2019), decorridos sete anos de sua aprovação e início de execução. Esta política pública prevê um conjunto de acções para potencializar este município como um destino turístico competitivo na escala regional, nacional e internacional. Inhambane é um dos destinos turísticos moçambicanos que mais visitantes recebe e sua organização territorial é uma premissa para garantir-se a qualidade da oferta. A análise deste instrumento objectivou a verificação do (im) cumprimento e execução do plano, isto é, especificamente, identificam-se as realizações e limitações no cumprimento das acções planificadas, do plano, para o sector do turismo. Para o alcance dos objectivos, recorreu-se a pesquisa bibliográfica, documental e ao trabalho de campo. Assim, observa-se que o cumprimento deste plano está desfasado do que foi projectado, facto que limita, a curto e médio prazo, o desenvolvimento integrado do turismo. Mais de 50% das accões planificadas não estão cumpridas, no tempo planificado, e continuam, até aos dias actuais, sem início ou conclusão, o que demonstra a inoperância deste instrumento como guia de desenvolvimento local.

----- * -----

Belo Horizonte/MG: Práticas de desenvolvimento do vetor norte metropolitano

Luciano dos Santos Diniz
Doutor em Ciências Sociais pela PUC-SP, professor adjunto I do CEFET/MG, BRASIL
lucianodiniz@dcsa.cefetmg.br

Enquadramento: Na cidade capitalista atual, a supremacia do capital financeiro frente ao industrial redefine o sentido de espaço, que passa a assumir, também, a condição de produto imobiliário. A urbanização se torna um negócio rentável, favorecendo que o capital financeiro se aproprie do espaço-mercadoria como locus de realização de investimento produtivo, tendo o capital imobiliário, como reprodutor do espaço enquanto mercadoria consumível individualmente, sob a forma de propriedade privada. O arranjo espacial da cidade capitalista é, então, moldado pelo interesse do capital, que utiliza o solo urbano com o propósito de aumentar as forças produtivas.

Nesse processo, o Estado tem papel determinante com agente indutor da (re)produção da cidade, tanto como regulador do solo urbano, quanto como proprietário fundiário e promotor imobiliário, influindo diretamente na transformação do espaço urbano. Em geral, as diversas políticas e projetos de intervenção no espaço, sejam eles públicos ou privados, favorecem a (re)conquista de áreas pelo capital corporativo e especulativo, fomentando o intenso processo de valorização da terra e a expulsão/segregação de grande número de moradores pobres em diferentes níveis e regiões das cidades.

Desde 2005, o Poder Público, em articulação com o capital privado, tem implementado ações destinadas à reestruturação econômico-espacial do Vetor Norte da Região Metropolitana de Belo Horizonte (RMBH), a partir da implementação de um modelo de gestão estratégica do espaço metropolitano, com base em autores como Gottdiener, Borja, Castells e Harvey. Essas ações integram o Plano Diretor de Desenvolvimento Integrado da Região Metropolitana de Belo Horizonte (PDDI-RMBH) e visam potencializar o desenvolvimento dos Municípios metropolitanos, consolidando o papel da cidade de Belo Horizonte no cenário econômico nacional, além de garantir sua maior competitividade no mercado global.

A reestruturação produtiva objetiva a diversificação da base industrial da região, a partir da atração de investimentos e da criação de polos de alta tecnologia (aeronáutica, biotecnologia, semicondutores, informação, microeletrônica, softwares), sendo acompanhada de grandes obras públicas de infraestrutura e de suporte a serviços de caráter metropolitano.

As ações modificadoras procedidas pelo Poder Público têm influenciado a valorização da terra urbana e a apropriação do espaço pelo mercado fundiário/imobiliário, corroborando a tese da cidade como growth machine.

Métodos: Nessa perspectiva, o presente trabalho tem como objetivo avaliar o processo de restruturação econômica espacial implementado pelo Poder Público, no Vetor Norte da Região Metropolitana de Belo Horizonte, a partir de 2005, e a apropriação do espaço pelo mercado fundiário/imobiliário na região norte e periférica da capital, buscando-se identificar os elementos que contribuem para a alteração da ordem fundiária e, também, para a elitização dos espaços.

Para identificar os elementos que caracterizam o processo de (re)estruturação do Vetor Norte da RMBH, assim como pesquisar sobre a renda urbana da terra, a produção e o consumo do espaço urbano, os instrumentos de gestão e política urbana, foi utilizada a pesquisa bibliográfica, elaborada a partir de materiais impressos ou em formato eletrônico, de autores nacionais e estrangeiros. Por sua vez, a identificação das alterações ocorridas na infraestrutura urbana do Vetor Norte metropolitano baseou-se nos documentos oficiais do Governo do Estado de Minas Gerais e da Prefeitura Municipal de Belo Horizonte. Finalmente, utilizou-se o software Google Earth, para identificar o processo de expansão da urbanização a partir das imagens aéreas da região.

Resultados: A pesquisa demonstrou que o plano estratégico metropolitano prevê políticas integradas de médio e longo prazo, destinadas à execução de grandes projetos que conciliam crescimento econômico e desenvolvimento urbano, com tomadas de decisões de caráter especulativo, formulação de diagnósticos que evidenciem os aspectos internos e externos da cidade (forças, fraquezas, oportunidades e ameaças) e "parceria público-privada" – PPP.

As estratégias de desenvolvimento urbano do Vetor Norte da RMBH envolvem, basicamente: a criação de infraestruturas físicas de produção, circulação e consumo; a reestruturação e fortalecimento da base econômica da região; o estímulo à criação de produtos de alto valor agregado e novas tecnologias; a redução dos custos locais, com concessão de subsídios e renúncias fiscais; a qualidade, quantidade e custos da oferta local de mão-de-obra; a consolidação metropolitana no cenário nacional e a internacionalização competitiva no mercado global.

O artigo compreende parte dos estudos empreendidos sobre a recente (re)estruturação urbana de Belo Horizonte e o processo de elitização de áreas específicas da cidade, que culminaram na elaboração da tese de doutorado do autor, intitulada: "(Re)estruturação urbana e o processo de gentrificação em Venda Nova – Belo Horizonte/MG".

----- * -----

Federação, competição e cooperação: estratégias de gestão na região metropolitana do Rio de Janeiro, Brasil

Augusto César Pinheiro da Silva[(1)]; Glaucio José Marafon[(2)]

[(1)] Líder do grupo de pesquisa Gestão Territorial no Estado do Rio de Janeiro (GeTERJ). Doutor em Geografia (UFRJ) e professor adjunto do Departamento de Geografia e Meio Ambiente da PUC-Rio. Pós-doutor em Políticas Públicas Educacionais pela Universidad Autónoma de Madrid, Espanha (2010). Pesquisador Jovem Cientista Nosso Estado (FAPERJ) / INEP, BRASIL

[(2)] Líder do Núcleo de Estudos de Geografia Fluminense (NEGEF). Doutor em Geografia (UFRJ) e professor associado do Instituto de Geografia da UERJ. Pós-doutor em Geografia pela UFU. Pesquisador CNPq / CNE/FAPERJ, BRASIL

acpinheiro08@gmail.com ou augustoc@puc-rio.br; glauciomarafon@hotmail.com

A sociedade brasileira vem ganhando maturidade político-institucional após quase 30 anos de retorno à democracia do voto, ao fortalecer o repensar sobre as mazelas estruturais que dificultam a identificação de caminhos para mudanças no planejamento e gestão dos territórios. Apesar da negação de algumas forças do pensamento acadêmico brasileiro em se estudar a instituição Estado e sua capacidade de estruturar a vida social de milhões de pessoas, os temas sobre políticas territoriais ganham amplitude nos círculos de investigação de institutos, centros e unidades de pesquisa das universidades brasileiras, trazendo-se a Geografia para o centro das discussões sobre ações públicas interescalares e interterritoriais, e as competências federativas dos seus entes de representação, com vistas à adequação, no país, dos temas sobre 'justiça social', 'desenvolvimento' e 'sustentabilidades'.

A percepção efetiva de que a atual engenharia de organização político-institucional no Brasil é ineficiente tem atraído novos pesquisadores das ciências humanas, sociais, jurídicas e econômicas para o estudo do Federalismo brasileiro e a sua necessária reengenharia, o que implicará em arquiteturas territoriais de gestão mais condizentes com os padrões espaciais reais de organização societária. Dessa diversidade de ideias, emergem perspectivas que valorizam práticas pouco conhecidas e utilizadas pela sociedade civil organizada, partidos políticos e representações diversas, reafirmando a busca por uma governação mais cooperativa em prol dessas realidades.

Nesse contexto, na área de Geografia de duas universidades da cidade do Rio de Janeiro, o grupo de pesquisa Gestão Territorial no Estado do Rio de Janeiro (GeTERJ), da PUC-Rio, e o Núcleo de Estudos de Geografia Fluminense (NEGEF), da UERJ, vêm juntando esforços acadêmicos para compreender espacialmente o estado e a cidade do Rio de Janeiro como unidades territoriais potencialmente capazes de promover mudanças político-institucionais nas formas de gestão em bases territoriais múltiplas.

Dentre essas bases territoriais, as Regiões Metropolitanas brasileiras (RM, ou suas congêneres na forma de Regiões Integradas de Desenvolvimento – RIDE) apresentam-se como excelentes 'laboratórios espaciais' para a aplicação de novas arquiteturas de gestão, refazendo-se práticas de governação sob um Federalismo reformado e ressignificado entre as esferas de decisão. Pela complexidade da legislação que rege essas aglomerações com milhões de pessoas (RM de São Paulo: ~ 21 milhões; RM do Rio de Janeiro: ~ 12 milhões; RM de Belo Horizonte: ~ 06 milhões; RM de Porto Alegre: ~ 04 milhões; RIDE do Distrito Federal e seu entorno: ~ 04 milhões... Dados estimados do IBGE para 2015), a coleta de dados diversos advindos de autarquias dos três níveis do federalismo brasileiro é primordial para a pesquisa, pois indicam se há possibilidades reais de universalização dos serviços essenciais oferecidos a milhões de pessoas em formações territoriais distintas, assim como a sua qualidade e distribuição espacial. A base de aprofundamento teórico-conceitual da pesquisa valoriza a noção de federalismo competitivo para que sejam compreendidos os diversos gargalos que afetam a qualidade das ações públicas conjugadas nas escalas vertical (as assimetrias entre os poderes públicos – do federal ao municipal) e horizontal (a cooperação entre esferas de gestão de mesma ordem: municípios/municípios; estados/estados...) com vistas à geração de qualidade de vida e bem estar coletivo.

Especificamente, uma dessas aglomerações espaciais no Brasil, a RM do Rio de Janeiro, é o destaque desta investigação. A formação do atual estado do Rio de Janeiro é um caso singular no contexto federativo brasileiro, pois com a junção de duas unidades em 1975 foi criado um território político-administrativo híbrido, onde não foi levada em conta uma série de processos para a organização dos territórios carioca e fluminense, gerando tensões entre agentes e atores na gestão desse território híbrido. Em torno da metrópole Rio de Janeiro, com os seus atuais 6,65 milhões de habitantes (estimativa, IBGE 2015), definiu-se também, em 1975, uma RM que concentra, atualmente, ~ 06 milhões de habitantes (estimativa, IBGE 2015) distribuídos em 18 municípios altamente conurbados à metrópole carioca. A pressão demográfica sobre o total do território do estado do Rio de Janeiro é imensa, pois nos demais 73 municípios não metropolitanos do estado se concentram 'apenas' 4,7 milhões de habitantes (estimativa, IBGE 2015).

Nesse contexto singular, a elevada concentração demográfica na faixa da região metropolitana fluminense (cerca de 13 milhões de habitantes) obriga as representações instituídas e coletividades instituintes a pensarem formas e estratégias de gestão mais equitativas no que se refere aos serviços essenciais cotidianos como os médico-hospitalares, educacionais, de saneamento básico, mobilidade urbana, abastecimento de água, coleta, circulação e deposição de resíduos sólidos, nessa aglomeração demográfica milionária.

Portanto, a RM do Rio de Janeiro se torna um referencial de estudos geográficos identificadores de estratégias de gestão de redução das competições interescalares através de um Federalismo reconfigurado. A promoção de um ambiente político-institucional mais interativo estimulará gestões cooperativas e produtivas, onde a união de forças horizontais e verticais se apresente como uma possibilidade de resolução mais criativa dos problemas políticos, administrativos e sociais, de forma sustentável, enfrentados hoje pela gestão oficial. E esse deve ser o objetivo central dos poderes instituídos: atender o interesse de milhões de pessoas.

----- * -----

Vigilância e prevenção contra o *Aedes aegypti*: articulação multinível, inetrsetorialidade e mobilização social

Samuel do Carmo Lima
Diretor de Vigilância em Saúde, Prefeitura Municipal de Uberlândia; Universidade Federal de Uberlândia - BRASIL
samuel@ufu.br

O *Aedes aegypti* (Linnaeus, 1762) foi descrito pela primeira vez em 1762, *Culex aegypti.* Mais tarde, após a descrição do gênero *Aedes,* em 1818, verificou-se que a espécie *aegypti* apresentava características morfológicas e biológicas de *Aedes* e não de *Culex*, quando então, passou a ser reconhecido por *Aedes aegypti*. Os adultos, machos e fêmeas se alimentam de açúcares (néctar de plantas), mas a fêmea necessita de proteínas do sangue para produzir aminoácidos necessários à maturação dos ovos. O repasto sanguíneo ocorre quase sempre durante o dia, nas primeiras horas da manhã ou ao entardecer (EIRAS 2005). Recentemente, o principal vetor de transmissão da dengue, apresenta-se como o responsável pelas epidemias de chikungunya vírus e zika vírus no Brasil e em diversos países da América do Sul e Central. A dengue é um dos principais problemas de saúde pública no mundo. O Plano Nacional de Controle da Dengue (BRASIL 2002), que tinha como objetivos reduzir a infestação pelo *Aedes aegypti*, reduzir a incidência da dengue e reduzir a letalidade por febre hemorrágica de dengue, não foi capaz de impedir as sucessivas epidemias de dengue que continuam assolar o Brasil todos os anos, com mortes todos os anos.

Em Dezembro de 2015, O Ministério da Saúde decretou estado de emergência em saúde pública por causa do surto de microcefalia relacionado ao zika vírus, reconhecendo que era preciso instituir uma estratégia mais forte para o controle desse mosquito, agora não mais só por causa da dengue.

Este trabalho apresenta a experiência do município de Uberlândia (Brasil) na vigilância e controle do *Aedes aegypti* na tentativa de impedir uma epidemia de dengue no verão de 2015/2016, bem como a circulação dos vírus chikungunya e zika em seu território. O princípio da estratégia foi abandonar as ideias de Oswaldo Cruz e Emílio Ribas, sanitaristas brasileiros do início do século 20 que livraram o Rio de Janeiro, São Paulo e Santos da amarela urbana transmitidas pelo *Aedes aegypti*. O que eles fizeram para combater o *Aedes aegypti*? Contrataram um verdadeiro exército de servidores públicos, chamado de "brigada mata-mosquito", que usava métodos militares, truculência e muito veneno (inseticida). Esses não eram somente agentes de saúde, tinham poder de polícia. Podiam entrar nas casas, mandar prender que se opuser a isso e, ainda, podiam jogar abaixo as casas dos pobres (cortiços) sob a alegação de que essa ação higienista era uma questão de saúde pública.

Porque isso já não funciona? Em primeiro lugar, ainda que o mosquito seja o mesmo, ele está mais adaptado ao nosso modus vivendi; nossas cidades já não são as mesmas, a mobilidade urbana, a mobilidade entre cidades e entre países é muito maior; e principalmente, não temos a mínima condição de ter um verdadeiro exército de mata-mosquitos que seja capaz de limpar todas as casas da cidade, todos os dias, eliminando os criadouros do mosquito. No Brasil, as epidemias de dengue se sucedem todos os anos e, agora de zika vírus, porque combatemos anteriormente a *Aedes aegypti* com campanhas, baseadas no trabalho dos agentes de endemias, ignorando a mobilização social. O poder público acredita que pode controlar os focos do mosquito e a população aceita isso, esperando que os agentes de saúde venham limpar as suas casas. Quando se verifica que a estratégia é ineficaz, a população culpa o governo que não foi capaz de impedir a epidemia e as mortes e o governo culpa a população que por não fazer a sua parte.

O que pode dar certo é mobilizar a sociedade para um pacto que envolva a participação de todos, "cada um cuidado de sua própria saúde, da saúde de sua família e do lugar onde vive". O modo de fazer isso, ou seja, convencer as famílias a limpar a sua casa e eliminar os criadouros do mosquito envolve uma nova estratégia de combate ao *Aedes aegypti*, com análise territorial multiescalar, compreendendo a cidade e seus microterritórios; articulação intersetorial, usando todas as áreas da gestão pública, não só do setor saúde, mas também da educação, do desenvolvimento social, do meio ambiente, do planejamento urbano; e mobilização social a partir das organizações da sociedade civil, usando a força do grupo social para colocar os indivíduos em movimento (mobilização). O que este trabalho vai mostrar é como em Uberlândia, se conseguiu impedir uma epidemia de dengue e o aumento dos casos de chikungunya e zika vírus, num contexto em que as epidemias assolavam o Brasil no verão de 2015/2016, abandonando as ideias biologicistas de combate ao mosquito em favor de uma concepção de mobilização social contra o *Aedes aegypti*.

----- * -----