

# **C12.01: IGU Applied Geography Commission**

**Report of Commission Activities 2012-2016** 

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# 2. Meetings

# 2.1 Summary of meetings, themes and venues

Location	Date	Major theme	No. of participants	No. of sessions	No. of papers	Other activities
Leeds, UK	May 2013	Applied GIS & spatial modelling	90			2 social events and a short field trip
Kyoto, Japan	August 2013	Applied spatial modelling in health care	45	6	18	Part of IGU main conference in Kyoto
Tel Aviv, Israel	May 2014	Geography and planning	45	14	36	2 social events, 2 walking tours, a 3 days regional tour
Washingt on D.C, USA	Nov. 2014	Applied GIS and location science	20	2	10	Part of the North American Regional Science Meeting
Bangkok, Thailand	May 2015	Applies service analysis and planning	30	9	26	2 social events and half a day tour
Moscow, Russia	August 2015	Applied local and regional development	40	5 + 1 poster session	20	Part of the IGU congress, jointly with the local & regional development commission
Rhodes, Greece	May 2016	Applications of Big Data in geography & planning	30	9	26	2 social events and a short field trip
Beijing, China	August 2016	Applied social and cultural geography	Not yet known	Not yet known		Part of major IGU conference

# 2.2 Leeds May 2013

The theme of the first meeting of 2013 was 'applied GIS and spatial modelling'. The three days witnessed around 80 papers with delegates from the UK, US, Australia, Canada, Israel, Ireland, the Netherlands, Austria, Thailand, Norway, Italy, Portugal, India, Sweden, Estonia, China and Greece. Special sessions were convened by Phil Rees (population dynamics), John Stillwell (commuting and migration) and Alison Heppinstall/Andy Evans/Mark Birkin on agent-based models. Keynote addresses were given by three leading members of the spatial modelling fraternity: Sir Alan Wilson (UCL), Stewart Fotheringham (St Andrews) and Mark Birkin (University of Leeds). The conference was a good social event as well. The delegates enjoyed a trip to the Yorkshire Dales (the sun shone!) and a conference dinner at a fabulous restaurant by the Leeds waterfront. The full programme was:

WEDNESDAY 29<sup>TH</sup> MAY 2013

11.00 Onwards: Registration

12.30 Lunch

**13.45** Welcome

Prof Graham Clarke (University of Leeds)

14.00 Keynote presentation 1:

Chair: Graham Clarke

#### APPLIED URBAN AND REGIONAL MODELLING: A SWOT ANALYSIS

Sir Alan Wilson, Centre for Advanced Spatial Analysis University College London

#### 15.00 Parallel session A: Commuting and Labour Markets

Chair: John Stillwell

Spatial analysis of commuting to work patterns in the UK Thomas Murphy, John Stillwell and Lisa Buckner (University of Leeds )

A spatial microsimulation approach to modelling scenarios of change in commuter systems Robin Lovelace and Dimitris Ballas (University of Sheffield)

Applying a universal model of labour markets to the diverse geography of Europe Mike Coombes, José Manuel Casado-Díaz, Lucas Martínez-Bernabeu and Colin Wymer (Newcastle University, University of Alicante, Trier University, Newcastle University)

#### 15.00 Parallel session B: Housing and Settlement Patterns

Chair: Eli Stern

Cultural diversity in gentrifying neighbourhoods

Stefano Picascia, Bruce Edmonds, Alison Heppenstall (Manchester Metropolitan University, University of Leeds)

To what extent are Australian private housing renters 'mis-located'? A case study of Brisbane, Australia

Yan Liu, David Wadley, Amity James (University of Queensland)

Spatial Search: New Settlements for Israel's Ultra-Orthodox Population Eli Stern (University of the Negev)

16.30 Tea/coffee

#### 17.00 Parallel session A: Economic Geography

Chair: Bob Stimson

Visualizing Local Economic Development: A Comparative Space-Time Data Tool Michael C. Carroll, Will M. Burns (Bowling Green State University)

An Exploratory Analysis of New Firm Formation in New England Jitendra Parajuli, Kingsley E. Haynes (George Mason University)

Using Spatial Modelling to Investigate the Impact of Policy Change: Human Capital in Australia - Implications of the 485 Graduate Visa Scheme in Australia Jonathan Corcoran, Francisco Rowe, Alessandra Faggain, Robert Stimson (University of Queensland, Ohio State University, University of Melbourne)

## 17.00 Parallel session B: Microsimulation modelling

Chair: Eveline van Leeuwen

Modelling the transportation of primary aggregates in England and Wales: exploring the benefits of rail v road initiatives using a spatial microsimulation model Chengchao Zuo, Mark Birkin, Graham Clarke, F.McEvoy, A.Bloodworth (University of Leeds)

Short and Medium-Term Projections of Household Income in Ireland using a Spatial Microsimulation Model

Cathal O'Donoghue, John Lennon, Jason Loughrey and David Meredith (The Irish Agriculture and Food Development Authority, TEAGASC)

Studying micro and macro welfare and income effects of regional economic developments in the energy sector in the Western islands of Scotland

Eveline van Leeuwen, Graham Clarke, Allan Grant, Peter MacGregor, Dimitris.Ballas, Kim Swales (University of Amsterdam, University of Leeds, University of Strathclyde, University of Sheffield, University of Strathclyde)

18.30 Close 19.00 Dinner at Hilton Hotel 20.00 Quiz night in hotel bar

Thursday 30th May

09.30 Parallel session A: Health care modelling

Chair: Melanie Tomintz

Estimating Disease Prevalence Using Spatial Microsimulation and Londitudinal Data Analysis

Stephen Clark, Alison Heppenstall, Mark Birkin (University of Leeds)

A spatial analysis of hospitalization rates in Yorkshire, UK Holly Shulman, Mark Birkin, Graham Clarke (University of Leeds)

Using a spatial simulation approach to map the Austrian smoking situation and to explore spatial inequalities for small areas

Melanie Tomintz, Bernhard Kosar (University of Applied Sciences, Austria)

#### 09.30 Parallel session B: Spatial Modelling and Spatial Statistics

Chair: John Lombard

Sample Size Optimization Through a Multimodel Approach Ward Bryssinckx (Avia GIS)

Modelling the Determinants of Voter Support for Political Parties at the 2010 Federal Election

Robert J. Stimson, Rod McCrea, Tung-Kai Shyy (The University of Melbourne, CSIRO, The University of Queensland)

Optimal Spatial Weighting Functions of Geographically Weighted Regression Models used in Mass Appraisal of Residential Real Estate
Paul Bidanset, John R. Lombard (Office of the Real Estate Assessor
City of Norfolk, Old Dominion University)

11.00 tea/coffee

#### 11.30 Parallel session A: Health care modelling

Chair: Karyn Morrissey

Investigating Suicide by Area in England and Wales Pauline Turnbull (University of Manchester)

Population Ageing and Healthy Life Expectancy in Thailand Phil Rees, Rukchanok Karcharnubarn, Myles Gould (University of Leeds, Chulalongkorn University, Bangkok, University of Leeds))

Examining the Socio-spatial determinants of Depression in the UK Karyn Morrissey (University of Liverpool)

## 11.30 Parallel session B: Spatial modelling

Chair: Robert Baker

Adding reality to Hotelling's main street: an agent-based approach Eveline van Leeuwen and Mark G. Lijesen (Free University, Amsterdam)

Can Cities Bounce-Back? Dynamic Agent Based Simulation of Urban Resilience

Daniel Felsenstein, Yair Grinberger (Hebrew University of Jerusalem)

Recent Advances in Dynamic Spatial Interaction Modelling with Reference to the Study of Global Internet Traffic,

Robert Baker (University of New England)

#### 13.00 Lunch

### 14.00 Parallel session A: Health care modelling

Chair: Michelle Morris

Children at independent schools are more active than those at state schools: a pilot study in Sheffield, United Kingdom

Kim Edwards (University of Nottingham)

Childhood obesity and the obesogenic environments of the school and their neighbourhoods Michelle Almond, Kimberly Edwards, Graham Clarke, Janet Cade (University of Leeds)

Spatial analysis of overweight and obese in the UK Women's Cohort Study (UKWCS) Michelle Morris, Graham Clarke, Kimberley Edwards, Claire Hulme, Janet Cade (University of Leeds, and University of Nottingham)

15.30 Tea/coffee

### **14.00 Parallel session B: Population Dynamics (1)**

Chair: Paul Norman

Uncertainty in population projections - with special reference to the UK Nico Keilman (University of Oslo)

Bayesian cohort component population forecasts for the UK Arek Wisniowski (University of Southampton)

How confident can we be in the projections of the older population of the United Kingdom? Philip Rees (University of Leeds)

15.30 Tea/coffee

#### 16.00 Parallel session A: Geodemographics

Chair: Mark Birkin

Clusters, Cars and Consumers - can Spatial Influence be Detected in the Purchase of Priuses? Alison Pridmore (University of Aberdeen)

Re-thinking households - Using administrative data to count and classify households with some geographical applications

Gill Harper (CASS Business School)

Geodemographics: Creating a Classification at the level of the Individual

Luke Burns, Mark Birkin, Alison Heppenstall, Linda See (University of Leeds, International Institute for Applied Spatial Analysis)

## 16.00 Parallel session B: Population Dynamics (2)

Chair: Phil Rees

Estimates of ethnic group fertility rates for use in subnational projections for England Paul Norman (University of Leeds) and Philip Rees (University of Leeds)

On the decomposition of life expectancy and the limits to life Les Mayhew (City University)

European Regional Populations: Current Trends, Future Pathways, and Policy Options Philip Rees (University of Leeds)

Panel Discussion on Improving Demographic Projections Nico Keilman, Les Mayhew, Paul Norman, Arek Wisniowski, Phil Rees

#### 17.30 Keynote presentation 2:

Chair: Graham Clarke

#### **Localised Spatial Interaction Models**

Stewart Fotheringham, University of St. Andrews

18.30 Close

Free night to enjoy Leeds Friday 31st May

#### 09.30 Parallel session A: Environment Modelling And Remote Sensing

Chair: Gordon Mitchell

Households' willingness to pay for attractive green areas Michiel N. Daams, Frans J. Sijtsma (University of Groningen)

Past, present and future: landscape conservation and urban development planning in the mining district of Bacu Abis (Carbonia) in Sardinia Debora Porra (University of Cagliari)

Periodicities in mean sea level fluctuations? Application of Lotka-Volterra periodic model to Climate Change and Coastal Management

Robert G. V. Baker and Sarah A. McGowan (University of New England)

An urban land use model to test the efficacy of high resolution satellite imagery in preparing land use map – a case study of Portblair, Andaman and Nicobar Islands, India K. Pratheep Moses, Monsingh D. Devadas (Anna University, India)

11.30 Tea/coffee

#### 09.30 Parallel session B: Retail Systems and Geodemographics

Chair: Martin Clarke

Mapping food poverty: identifying areas of greatest need during a time of austerity in England

Dianna Smith, Storm Parker, Alison Heppenstall (Barts and The London School of Medicine and Dentistry, University of Leeds)

Exploring the spatial dynamics of the UK convenience market Nick Hood, Martin Clarke, Graham Clarke (University of Leeds)

Progress in modelling small-area tourist demand Andy Newing, Graham Clarke, Martin Clarke (University of Leeds)

Application of Spatial Interaction Models for Retail Location Analysis in Developing Countries.

Pakorn Meksangsouy, Graham Clarke, Paul Waley (Srinakharinwirot University, Thailand and, University of Leeds)

11.30 tea/coffee

11:45-12.15

IGU Applied Geography Business Meeting (all welcome)

12.15 Lunch

13.00 Tour of Dales and Brewery (including dinner)

Saturday 1<sup>st</sup> June 09.30 Parallel session A: ABM modelling

Chair: Alison Heppenstall

Adaption to changes in geo-systems: an agent based simulation Ifigenia Psarra (Eindhoven University of Technology)

Innovation of density measures for sustainable urban growth Meta Berghauser Pont, Lars Marcus (Sweden and Delft University of Technology)

Optimising an Agent-Based Model to Explore the Behaviour of Simulated Burglars Nick Malleson, Alison Heppenstall (University of Leeds)

#### 09.30 Parallel session B: Transport Modelling

Chair: Les Mayhew

Schoolchildren's road to school: perceived danger compared to actual accidents Edgar Sepp, Jüri Roosaare (University of Tartu, Estonia)

A spatial microsimulation model of people's daily travel behaviour and transport CO<sub>2</sub> emissions in Beijing, China

Jing Ma, Alison Heppenstall, Gordon Mitchell (University of Leeds)

On the impact of fast route geometry on urban form with some strategic applications

Les Mayhew (CASS Business School)

11.00 Tea/coffee

## 11.30 Parallel session A: ABM modelling

Chair: Andy Evans

Exploring Human Behaviour using Agent-Based Modelling, Neural Networks and Land Use/Land Cover (LU/LC): A case study of Flooding in the Limpopo River Basin, Xai-Xai, Mozambique

Robert Fligg, Joana Barros (Natural Resources Canada, Birkbeck, University of London. (Birkbeck)

Simulating Spatial Dynamics and Processes in a Retail Gasoline Market: An Agent-based modelling approach

Alison Heppenstall (University of Leeds)

Early modern human dispersals out of Africa: Testing models for mechanisms using agent based modelling

Penny Spikins, Alison Heppenstall, Andy Evans (University of York, University of Leeds)

#### 11.30 Parallel session B: Ageing and Migration and community background

Chair: John Stillwell

The implications of ageing and migration for the future population, health, labour force and households of Northern England

Phil Rees and Chengchao Zuo (University of Leeds)

Ageing and migration: some reflexions on the effects of the economic and financial crisis on demographic trends in Portuguese regions

Maria-Lucinda Fonseca (University of Lisbon)

Exploring the feasibility of using agent-based and simulation models to study residential migration and associated segregation (with Northern Ireland as an example)
Myles Gould and Ian Shuttleworth (University of Leeds, University of Belfast)

#### 13.00 Lunch

## 14:00 Parallel session A: ABM modelling II

Chair: Kirk Harland

Small scale agent-based modelling of infectious disease transmission Mike Bithell, Erica Bithell and James Brasington (University of Cambridge)

Patterns of Aspiration: Spatial agent-based simulation of school choice policy James Millington (Kings College London)

ABM for Education Planning,

Kirk Harland, Alison Heppenstall (University of Leeds)

## 14.00 Parallel session B: Migration Analysis and Modelling 1

Chair: Stamatis Kalogirou

Visualising and interpreting sub-national migration patterns in the United Kingdom over the past decade

Nik Lomax, Paul Norman, Phil Rees and John Stillwell (University of Leeds)

Destination Choices of Skilled Internal Migrants in China: Jobs, Amenities and Ownership Structure of Economy

Ye Liu and Jianfa Shen (The Chinese University of Hong Kong)

Putting Greece on the map of internal migration modelling: the spatially varying effect of determinants of destination choice of those leaving Athens Stamatis Kalogirou (Harokopio University)

15.30 Tea/coffee

### 16.00 Parallel session A: Time/Space Modelling

Chair: Nick Malleson

Exploring the impact and effectiveness of the 'Project Optimal' Burglary Reduction Initiative in Leeds: A Spatio-Temporal Approach Nicholas Addis (University of Leeds)

Individual Level Daily Time Step Demographic Simulation Modelling Andy Turner, Thomas Doherty (University of Leeds, University of Glasgow)

Spatio-Temporal Text Mining Nick Malleson, Mark Birkin (University of Leeds)

#### 16.00 Parallel session B: Migration Analysis and Modelling 2

Chair: John Stillwell

Modelling individual movers Michael Thomas, Myles Gould and John Stillwell (University of Leeds)

Internal migration and the frictional effect of distance John Stillwell and Konstantinos Daras (University of Leeds)

Modelling migration flows for EU regional policy Adam Dennett (CASA, University College London)

### 17.45 Keynote presentation 3:

Chair: Graham Clarke

'Agent-based Models of Geographical Systems'

Mark Birkin, University of Leeds

18.45 Close

20.00 Drinks and conference dinner

# **2.3 Kyoto August 2013**

The Applied Geography Commission held a joint session at the IGU regional conference in Kyoto with the Commission on Health and the Environment. The theme title was 'Modelling small area data for epidemiological studies'. The papers given were:

Tomoki Nakaya, Ritsumeikan University, 'Modelling Geographic Disparities in Cancer Survival in Osaka Prefecture, Japan'

Yuri Ito, Osaka Medical Center for Cancer and Cardiovascular Diseases, 'Investigating spatial clusters of cancer incidence in Osaka Prefecture, Japan: An application of GIS for Cancer Control'

Ta-Chien Chan, Academia Sinica, 'Balancing the privacy concern and tolerance of precision in epidemiologic study by geographical masking methods'

Kazumasa Hanaoka, Tohoku University, 'Small area estimation of health behavioural indices in Osaka city, Japan'

Satoshi Nagao Japan Planning Systems co., ltd, 'Development of Built-up areas and Walking Habits of elderly people in Kameoka City, Japan'

Michelle Almond, University of Leeds, 'Spatial variations in Childhood Obesity: the school and neighbourhood geographies'

Shigeru Inoue, Tokyo Medical University, 'Associations between objectively-measured environmental attributes and physical activity among Japanese adults'

Michelle A Morris, University of Leeds, 'Spatial analysis of overweight and obese in the UK Women's Cohort Study (UKWCS)'

Ikuho Yamada, Chuo University, 'A space-time analysis of the risk of low birthweight and neighborhood contextual factors'

Shinya Yasumoto, University of Tokyo, 'Longitudinal trends in equity of park accessibility in Japan: An investigation of the role of causal mechanisms'

Monika Vij, Delhi University Industrial Development, 'Human Health and Urban Environment in Delhi Mega City'

Chien Tat Low, The University of Hong Kong, 'Understanding the geography of Traditional Chinese Medicine (TCM) body constitution in population health'

## 2.4 Tel Aviv, May 2014

Our principal 2014 meeting took place in the Carlton Hotel, Tel Aviv, Israel, under the umbrella title of 'GEOGRAPHY AND PLANNING'. It was hosted by the Department of Geography & Environmental Development at Ben-Gurion University of the Negev. Prof. Eli Stern, secretary of the AGC, was the local organizer.

Three days were devoted to research presentations and discussions on the following themes: geographic contributions to planning, geographical tools and methods in planning, geographers involvement in planning: experiences and critiques, and research examples of thematic planning like urban and regional planning, regulatory planning, service planning, transport planning, environmental planning, spatial policy, health planning. "gray space" planning, GIS and geo-simulation, and planning in Israel. In between the sessions there were two walking tours guided by Eli Stern and Yodan Rofe, to the old city of Jaffa and to the "White City" of Tel Aviv – a world heritage site. The meeting started with greetings from Graham Clarke (AGC Chairman) and Robert Stimson (Former AGC Chairman). The opening session hosted representatives from the GIS and geo-informatics market and from the planning practice together with the group of academics

.

Following the meeting we had a three day guided field trip to the Judean foothills, to the Judean desert and to Jerusalem. We visited the Beit Guvrin and Maresha caves, which were subscribed, on June 22<sup>nd</sup> 2014, as a new world heritage site at the 38<sup>th</sup> World Heritage Convention of UNESCO which took place in Doha, Qatar. Another world heritage site which we visited was Massada, near the Dead Sea, Israel's first subscribed world heritage site. Swimming in the Dead Sea and a detailed tour in the old city of Jerusalem were highlights of the rest of the tour. The culinary side, both during the meetings and the field trip, complemented and exemplified the applied aspects of cultural geography.

# Pictures and Captions:



Chair of AGC group, Graham Clarke, at the opening session



At the meeting in Tel Aviv.



Delegates enjoying the post-conference tour

# **Framework Program**

Time	Tuesday	Wednesday	Thursday
	May 13. 2014	May 14. 2014	May 15. 2014
08:00			Onwards: Registration
08:30			Service Planning
09:00	Onwards: Registration	Onwards: Registration	
09:30	Pastries/tea/coffee	Regulative Planning	
10:00	<b>Conference Welcome</b>		<b>Urban Transport Planning</b>
10:30	<b>Opening Session-</b>		
11:00	<b>Keynotes on Geography</b>	Tea/Coffee Break	
11:30	& Planning	"Gray Space" Planning –	Tea/Coffee Break
12:00		Theory & Practice	GIS Mapping & Geo-
12:30	Lunch		Simulation
13:00		Lunch	
13:30	<b>Geography &amp; Planning</b>		Lunch
14:00	in Israel		
14:30		<b>Spatial Movement</b>	<b>Environmental Planning</b>
15:00	Tea/Coffee Break	<b>Analyses and Tools</b>	
15:30	Policy and Spatial		
16:00	Planning	Tea/Coffee Break	Tea/Coffee Break
16:30		GIS & Health Studies	<b>Business Meeting &amp; Closure</b>
17:00	Tea/Coffee Break		
17:30	A walking tour: Along the		A walking tour: The White
18:00	Coastal Promenade to Old	A free/advised evening:	City of Tel Aviv
18:30	Jaffa	Discover the gastronomic	
19:00		treasures of Tel Aviv	
19:30			
20:00	Dinner in Old Jaffa		
20:30			
21:00			<b>Closing Dinner</b>

# 2.5 Washington, November 2014

For our second meeting of the year we jointly hosted two sessions at the 2014 North American Regional Science Meeting in November in Washington DC. The main local convenor was John Lombard, the AGC North American officer. The two sessions were devoted to 'applied location analysis'.

Thursday Nov 13 | 1:30 PM-3:30 PM | Cabinet Suite

**Organizers: John R. Lombard**, Old Dominion University; **Graham P. Clarke**, University of Leeds;

Eliahu Stern, Ben-Gurion University of the Negev Chair: John R. Lombard, Old Dominion University

Geographic Analysis for Location of Energy Power Lines in a Public Private and Social Debate: The Chilean Atacama Desert, Pablo Osses, Pontificia Universidad Católica de Chile Profit Comparison of Spatial Pricing Plans in presence of Heterogeneous Demand and Transportation Cost, Amiya K. Basu, Syracuse University

Applied GIS and Spatial Analysis in Regional Visioning, John R. Lombard, Old Dominion University; George McCleod, Old Dominion University; Sarah Kidd, Hampton Roads Planning District Commission

Delineating Buffer Zones around World Cultural Heritage Sites, Eliahu Stern, Ben-Gurion University of the Negev; Idan Avidan, Ben-Gurion University of the Negev

#### **Discussants:**

John R. Lombard, Old Dominion University Pablo Osses, Pontificia Universidad Católica de Chile Eliahu Stern, Ben-Gurion University of the Negev Charles Ingene, University of Oklahoma

International Geographical Union Applied Geography Commission: Applied Location Analysis II

Thursday Nov 13 | 4:00 PM-6:00 PM | Cabinet Suite

Organizer: John R. Lombard, Old Dominion University

Chair: Graham P. Clarke, University of Leeds

Incorporating E-Commerce into Retail Location Models, Graham P. Clarke, University of Leeds; Elena Kirby-Hawkins, University of Leeds; Mark Birkin, University of Leeds Retail Cluster Formation - Using Longitudinal Geo-Coded Data for Metropolitan Retail Markets, Özge Öner, Jönköping International Business School; Johan P. Larsson, Jönköping International Business School,

Evaluating Spatial Model Accuracy in Mass Real Estate Appraisal: A Comparison of Geographically Weighted Regression (GWR) and the Spatial Lag Model (SLM), Paul Bidanset, University of Ulster; John R. Lombard, Old Dominion University A Spatial Microsimulation Approach for Natural Disaster Impact Assessment at a Neighborhood Level in Japan, Kazumasa Hanaoka, Tohoku University

#### **Discussants:**

Paul Bidanset, University of Ulster Graham P. Clarke, University of Leeds Kazumasa Hanaoka, Tohoku University Özge Öner, Jönköping International Business School

## 2.6 Bangkok, May 2015

The first meeting of 2015 took place in Bangkok. This meeting was devoted to 'Applied spatial modelling in geography and planning'. It was great that two young career academics from Thailand undertook to be local conveners: Dr Pakorn Meksangsouy, *Lecturer in Human Geography at* Srinakharinwirot University, and Dr Charatdao Kongmuang, Department of Natural Resources and Environment, Faculty of Agriculture, Natural Resources and Environment, Naresuan University, Thailand. The full programme was:

## Monday May 11th

11.00 Coffee and registration

12.30 Lunch

#### 13.45 Welcome and introduction

Graham Clarke, University of Leeds

#### 14.00 Applied Economic Geography

Chair: John Carruthers (George Mason University)

#### Wage inequality and the networked positions of cities in the US

Kuo Siong Gordon Tan, Department of Geography, University at Buffalo, the State University of New York

# Globalization, Economic Restructuring and Locational Trajectories of Software Firms in Shanghai

Yehua Dennis Wei, Department of Geography University of Utah, Salt Lake City, Utah, United States

"Prometheus Unbound:" A Spatial and Economic Analysis of the Contemporary American Megalopolis, Negin Askarzadeh, John Carruthers, Ainur Montayeva The George Washington University, USA

15.30 Tea/Coffee

#### 16.00 TRANSPORT GEOGRAPHY

Chair: Bob Stimson (University of Melbourne)

# Spatial Dynamics of the Chinese High Speed Rail: Impact Assessment on Real Estate Price

Zhenhua Chen, School of Public Policy, University of Southern California, USA Kingsley E. Haynes, School of Policy, Government, and International Affairs, George Mason University, USA

# Spatial Analysis of Commuting to Work Intensities and Patterns in England and Wales and the Leeds City Region

Thomas Murphy, John Stillwell and Lisa Buckner, School of Geography and School of Sociology and Social Policy, University of Leeds, Leeds

#### The influence of weather on local geographical patterns of bus transit usage.

Sui Tao<sup>1</sup>, Jonathan Corcoran<sup>2</sup>, Mark Hickman<sup>1</sup>, Robert Stimson<sup>3</sup>, Yan Liu<sup>2</sup>

<sup>1</sup> School of Civil Engineering, The University of Queensland, Queensland, Australia, 4072; <sup>2</sup> School of Geography, Planning and Environmental Management, The University of Queensland, Queensland, Australia, 4072; <sup>3</sup> Australian Urban research Infrastructure

Network, Faculty of Architecture, Building and Planning, The University of Melbourne, Victoria, Australia.

17.30 End

18.30 Dinner (free for those with full conference package)

#### TUESDAY MAY 12TH

## 0930 Retail Geography and Geographies of Consumption (1)

Chair Mark Birkin (University of Leeds)

# Designing a location model for face to face and on-line retailing for the UK grocery market

Elena Kirby-Hawkins, Graham Clarke, Mark Birkin, School of Geography

University of Leeds, Leeds,

# Spatializing Food Equity with Accessibility: An Interpretation of Urban Inequalities in Bangkok

Aswin Subanthore, University of the District of Columbia, Washington, D.C., USA,

Robert D. Garrett, Stamford International University, Bangkok, Thailand

#### The Geography of Consumption: New Evidence and New Methods

Mark Birkin and Michelle Morris, School of Geography, University of Leeds

11.00 Tea/coffee

#### 11.30 URBAN PLANNING

Chair Eli Stern (Ben-Gurion University)

## The Spatial Pattern of Waterfront Temple: the Image of Deterioration of Open space in the Waterfront Settlement

Settawut Bamrungkhul, Terdsak Tachakitkachorn (2)

1 Creative Indigenous Architecture Foundation, 2 Department of Architecture, Chulalongkorn University

#### Visioning-Based Methodology for Strategic Urban Planning:

#### The Case of Tel Aviv

Eliahu Stern, Ben-Gurion University of the Negev Beer Sheva, Israel

#### 12.30 IGU Applied geography AGM (all welcome)

13.00 Lunch

14.00 Afternoon and evening excursions (free for those with full conference package) (includes dinner)

### Wednesday 13th May

### 0900 Regional development, agriculture and strategic planning

Chair: Michael Mann (Columbian College of Arts & Sciences, Washington)

# Quantification and interpretation of erosion risks in agricultural catchments: the effect of tillage method

Tal Svoray<sup>1,\*</sup>, Roei Levi<sup>1</sup>, Rami Zaidenberg<sup>2</sup> and Beny Yaacoby<sup>3</sup>

- <sup>1</sup> Department of Geography and Environmental Development, Ben-Gurion University of the Negev, Beer-Sheva, Israel
- <sup>2</sup> Soil Conservation & Drainage Department, Ministry of Agriculture & Rural Development, Agricultural Centre, Beit-Dagan, Israel

#### Between the Mediterranean Sea and the Jordan River: Strategic Plan 2050

Shlomo Hasson, Department of Geography and the Shasha Center for Strategic Studies, the Hebrew University of Jerusalem

# Low-cost Adaptive Household Geographic Level Mapping for Local Flood Disaster Management

Terdsak Tachakitkachorn, Settawut Bamrungkhul,

1 Department of Architecture, Chulalongkorn University

2 Creative Indigenous Architecture Foundation

# Modelling residential development in California from 2000 to 2050: Integrating wildfire risk, wildland and agricultural encroachment

Michael Mann, Department of Geography, Columbian College of Arts & Sciences, Washington

## 11.00 Tea/coffee

#### 11.30 Health and education

Chair Michelle Morris (University of Leeds)

#### Modelling the distribution of diabetes mellitus for small areas in Austria

Mel Tomintz, Dimitris Ballas, Graham Clarke, University of Carthinia, University of Sheffield, University of Leeds

<sup>&</sup>lt;sup>3</sup> Valley Region, Ministry of Agriculture & Rural Development, Gilboa, Israel

#### **Allocating Thailand Postcode for Health Equity Monitoring**

Charatdao Kongmuang, Department of Natural Resources and Environment, Faculty of Agriculture, Natural Resources and Environment, Naresuan University, Thailand

### Importance of Geography in Education Planning

Kanika Verma, Department of Geography, Texas State University

13.00 Lunch

# 14.00 BIG DATA, NEW DATA: IMPLICATIONS FOR THEORY AND APPLIED GEOGRAPHY

Chair: Graham Clarke (University of Leeds)

# Spatio-temporal analysis of snatch thefts in Osaka City, Japan: Use of mobile phone population data,

Kazumasa Hanaoka (Tohoku University, Japan)

## Can 'Big Data' on consumer purchases supplement national surveys?

Michelle Morris MA, Graham Clarke GP and Mark Birkin, School of Geography, University of Leeds

# Modelling the equity of access to public transport under different fare policies using smart card data

Yan Liu, Jonathan Corcoran and Dong Wang, School of Geography, Planning and Environmental Management, the University of Queensland, St Lucia, QLD Australia 4072

### Neighbourhood Classification: A Dying Art or a Bright Future?

Mark Birkin, School of Geography, University of Leeds

16.00 Tea/coffee

### 16.30 Retail Geography and Geographies of Consumption (2)

Chair: Andy Newing (University of Leeds)

#### Comparing models for forecasting convenience store retailing

Nick Hood, Graham Clarke, Martin Clarke, University of Leeds

### Using the Delta Package to Model Household Energy Consumption Changes

**Bosredon Mélanie,** *PhD Candidate*, Centre for Advanced Spatial Analysis (CASA), University College London (UCL) & *Principal Consultant*, David Simmonds Consultancy Ltd

# Applied retail modelling in tourist resorts – implications for service analysis and planning

Andy Newing, Graham Clarke, Martin Clarke, 18.00 End

19.30 conference dinner (free for those with full conference package)

## 2.7 Moscow August 2015

The AGC joined forces with the Commission on Local and Regional Development to have a joint set of papers at the IGU regional conference in Moscow in August. The details are provided below.

This joint session offered papers on the broad topic of applied issues related to local and regional development, especially in relation to issues concerning the effects of globalization, place-based and local actors' initiatives, infrastructures and regional development, regional and social disparities, as well as local governments as agents of change.

Session 1 – Socio-economic Policy and Development Chair – Anastasia Myadzelets

Nº	Abstract Title	Name of Presenting Author	Affiliations of Presenting Author
1	Modeling of the socio-economic regional situations in the national economic system of the Russian Federation	Anastasia Myadzelets	V.B. Sochava Institute of Geography SB RAS, RF
2	Specifics of Cluster Policy in Russia	Alla Sorokina	Russian Presidential Academy of National Economy and Public Administration, RF
3	Typology of Russian regions for the economic policy purposes	Alla Sorokina	Russian Presidential Academy of National Economy and Public Administration, RF
4	What has geography got to do with it? Spatial variations in the socio-economic development of Ghana	Simon Mariwah	University of Cape Coast, Ghana
5	The Quest for Local and Regional Development in South Africa: A Reflection on the outcomes of 20 years of Local Economic Development Interventions.	Etienne Nel	University of Otago, New Zealand

Session 2 - Case Studies of Sustainable Development Chair - Rishika Singh

1 Tourisme, patrimoine et développement dans la chaîne de Matmata-Demmer (Sud-Est tunisien) 2 Social Paradigms for Education and Sustainable Development: A Study of Aligarh District in Uttar Pradesh (India) 3 Change in the pattern of Bodee Putsyainunt Khon Kaen University in Mathematical Study of Aligarh District of Bodee Putsyainunt Results of Sciences Humaines Sciences Humaines Sfax, Tunisia  New Delhi, India  Resulté des Lettres Sciences Humaines Sfax, Tunisia  New Delhi, India  Resulté des Lettres Sciences Humaines Sfax, Tunisia  New Delhi, India	• • • •	A1		v CC:1: · · · C
Tourisme, patrimoine et développement dans la chaîne de Matmata-Demmer (Sud-Est tunisien)  Social Paradigms for Education and Sustainable Development: A Study of Aligarh District in Uttar Pradesh (India)  Change in the pattern of community economy: Case study Nong Meg Village Moo 3, Non Somboon Sub-district Ban Had  Zayed HAMMAMI  Faculté des Lettres Sciences Humaines Sfax, Tunisia  New Delhi, India  New Delhi, India  Khon Kaen Univers NongKhai Campus, Thailand	Nº	Abstract Litle	Name of	Affiliations of
développement dans la chaîne de Matmata-Demmer (Sud-Est tunisien)  Sciences Humaines Sfax, Tunisia  Sfax, Tunisia  Arti Sharma New Delhi, India  New Delhi, India  Arti Sharma Study of Aligarh District in Uttar Pradesh (India)  Change in the pattern of community economy: Case study Nong Meg Village Moo 3, Non Somboon Sub-district Ban Had			Presenting Author	Presenting Author
Matmata-Demmer (Sud-Est tunisien)  2 Social Paradigms for Education and Sustainable Development: A Study of Aligarh District in Uttar Pradesh (India)  3 Change in the pattern of community economy: Case study Nong Meg Village Moo 3, Non Somboon Sub-district Ban Had  Sfax, Tunisia  New Delhi, India  Rhon Kaen University NongKhai Campus, Thailand	1	Tourisme, patrimoine et	Zayed HAMMAMI	Faculté des Lettres et
tunisien)  2 Social Paradigms for Education and Sustainable Development: A Study of Aligarh District in Uttar Pradesh (India)  3 Change in the pattern of community economy: Case study Nong Meg Village Moo 3, Non Somboon Sub-district Ban Had  Arti Sharma  New Delhi, India  Rhon Kaen University NongKhai Campus, Thailand		développement dans la chaîne de		Sciences Humaines-
2 Social Paradigms for Education and Sustainable Development: A Study of Aligarh District in Uttar Pradesh (India)  3 Change in the pattern of community economy: Case study Nong Meg Village Moo 3, Non Somboon Sub-district Ban Had  Arti Sharma  New Delhi, India  Rhon Kaen University NongKhai Campus, Thailand		Matmata-Demmer (Sud-Est		Sfax, Tunisia
and Sustainable Development: A Study of Aligarh District in Uttar Pradesh (India)  3 Change in the pattern of community economy: Case study Nong Meg Village Moo 3, Non Somboon Sub-district Ban Had  Bodee Putsyainunt Khon Kaen Univers NongKhai Campus, Thailand		tunisien)		
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Pradesh (India)  3 Change in the pattern of community economy: Case study Nong Meg Village Moo 3, Non Somboon Sub-district Ban Had  Bodee Putsyainunt Khon Kaen Univers NongKhai Campus, Thailand		and Sustainable Development: A		
3 Change in the pattern of community economy: Case study Nong Meg Village Moo 3, Non Somboon Sub-district Ban Had  Bodee Putsyainunt Khon Kaen Univers NongKhai Campus, Thailand		Study of Aligarh District in Uttar		
community economy: Case study Nong Meg Village Moo 3, Non Somboon Sub-district Ban Had  NongKhai Campus, Thailand		Pradesh (India)		
Nong Meg Village Moo 3, Non Somboon Sub-district Ban Had  Thailand	3	Change in the pattern of	Bodee Putsyainunt	Khon Kaen University
Somboon Sub-district Ban Had		community economy: Case study		NongKhai Campus,
		Nong Meg Village Moo 3, Non		Thailand
District Khon Kaen Province		Somboon Sub-district Ban Had		
		District Khon Kaen Province		
4 AGRO-INDUSTRIAL AND Rishika Singh University of	4	AGRO-INDUSTRIAL AND	Rishika Singh	University of
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5	5			

Session 3 - Inequality and Migration
Chair - Maria Lucinda Fonseca

Nº	Abstract Title	Name of	Affiliations of
		Presenting Author	Presenting Author
1	REGIONAL DISPARITIES IN THE ECONOMICAL DEVELOPMENT OF CHINA	Ksenia Mironenko	Lomonosow Moscow State University, Faculty of Geography, RF
2	A Geospatial Analysis of Multi- scalar Regional Inequality in China	Hui Lin	The Chinese University of Hong Kong
3	The economic crisis and the internal geographical mobility patterns of the immigrant population in Portugal	Maria Lucinda Fonseca	Institute of Geography and Spatial Planning, University of Lisbon, Portugal
4	Does Male Migration Help to Improve the Quality of Reproductive Health in India evidence from NFHS-3	Jitendra Gupta	IIPS, Mumbai, India

## Session 4 – Managerial Issues in Regional Development Chair – Ekaterina Nelidova

Nº	Abstract Title	Name of	Affiliations of
		Presenting Author	Presenting Author
1	Creative industries in regional development and regional diagnostics	Ekaterina Nelidova	Council for the Study of Productive Forces, RF
2	STRATEGIES FOR MANAGEMENT OF WASTELAND IN A PLATEAU REGION OF INDIA: A MODEL STUDY	MANJARI SARKAR (BASU)	Kandra R K Mahavidyalaya(Degr ee College under BURDWAN UNIVERSITY, India
3	A New Method for Allocating Thailand Postcode	CHARATDAO KONGMUANG	NARESUAN UNIVERSITY, Thailand
4	Geoexpertology –New Direction of Modern Geography	Ekaterina Pozachenyuk	Tavrida Academy of Crimean Federal V.I.Vernadsky University, RF
5	The (geo) graphys of brazilian school cartography: Who lived, what tells us?	Daniel Luiz Poio Roberti	College, Brazil

# Session 5 – Spatial Urban Development Chair – Andrey Murashov

Nº	Abstract Title	Name of	Affiliations of
		Presenting Author	Presenting Author
1	Industrial Spatial Agglomeration	WENZHONG ZHANG	IGSNRR,CAS, China
	Using a Distance-based Approach		(Beijing)
	in Beijing Metropolitan Area		
2	EVOLUTION OF THE URBAN	Andrey Murashov	Novgorod State
	SYSTEM: THE CASE OF THE		University, RF
	MOSCOW – ST PETERSBURG		
	TRANSPORT CORRIDOR		
3	Trend and Effects of Residential	Debasish Kundu	School, India
	Real Estate Development in India:		
	A Case Study from Kolkata		
	Metropolitan Area		
4	Between pillages and failures,	Nicole BERNEX	Pontifical Catholic
	Loreto, a reflect of the		University of Peru
	Amazonian globalization		

## 2.7 Rhodes, May 2016

The programme for the 1<sup>st</sup> meeting of 2016 has now been finalized. Again we have delegates from all around the World, participating in the theme of 'Big data in geography and planning'. This is very topical and should produce another edited collection in due course. The programme is:

# Sunday May 8th

11.00 Coffee and registration

12.30 Lunch

#### 13.50 Welcome and introduction

Graham Clarke, University of Leeds

### 14.00 BIG DATA AND STRATEGIC PLANNING (1)

Chair: John Lombard (Old Dominion University)

Evaluation and mapping of scenic roads in Israel

Dor Friedman and Eliahu Stern (Ben-Gurion University of the Negev, Israel)

Big data analytics for geographical analysis of island economies

Dimitris Kavroudakis (University of the Aegean)

Exploring land use and urban structure in Southern Brazil using accessibility and centrality measures

Marcus Saraiva and Joana Barros (Birkbeck, University of London)

15.30 Tea/Coffee

#### 16.00 BIG DATA, RETAIL GEOGRAPHY AND GEODEMOGRAPHICS

Chair: Martin Clarke (University of Leeds)

Refining spatial interaction models to incorporate time-of-day in the grocery sector using observed consumer trading for West Yorkshire, UK.

Tom Waddington, Graham Clarke, Martin Clarke, Andy Newing (University of Leeds)

Spatial Vulnerability of Retail Centres to Online Consumption through a Framework of e-Resilience

Les Dolega (University of Liverpool)

Using loyalty card data to find the best store location techniques for the convenience market

Nick Hood, Graham Clarke, Martin Clarke (University of Leeds)

Developing a small-area classification of built environment characteristics:

relationships with socio-economic classifications

Alexandros Alexiou, Alexander Singleton (University of Liverpool)

17.30 End

# Monday May 9th

#### 0930 BIG DATA AND STRATEGIC PLANNING (2)

Chair: Eli Stern (Ben-Gurion University of the Negev, Israel)

Between the Mediterranean Sea and the Jordan River: Strategic Plan 2050 Shlomo Hasson, Department of Geography and the Shasha Center for Strategic Studies, the Hebrew University of Jerusalem

Spatial Analysis of Hajj Tweets, 2015

Ramze A. Elzahrany <sup>1</sup>, Ibrahim A. Alkhaldy <sup>2\*</sup>, Khaled S. Alqahtani<sup>3</sup>

(1)Geography Department, College of Social Sciences & The Custodian of the Two Holy Mosques Institute For Hajj and Umrah Research, Umm Al-Qura University. Makkah, Saudi Arabia. (2) The Custodian of the Two Holy Mosques Institute For Hajj and Umrah Research, Umm Al-Qura University. Makkah, Saudi Arabia.(3)Transportation and Crowd Management Center of Research Excellence, Umm Al-Qura University. Makkah, Saudi Arabia.

Spatial overlap of economic development policy of US states and sub-regions: conflict, coordination or coopertition?

Jon Lombard (Old Dominion University)

11.00 Tea/coffee

#### 11.30 BIG DATA AND METHODOLOGICAL ISSUES

Chair Lex Comber (University of Leeds)

Modelling Spatial Heterogeneity with Big Data
Martin Charlton and Chris Brunsdon (National University Ireland, Maynooth)

### 12.15 IGU APPLIED GEOGRAPHY AGM (ALL WELCOME)

12.45 Lunch

14.00 Afternoon excursion followed by dinner (free for those with full conference package)

# Tuesday May 10th

## 0930 BIG DATA AND TRANSPORT (1)

Chair: Robert Stimson (University of Melbourne)

Prediction of Individual Socio-Economic Attribute Combinations From Mobile Phone Data

Andrew Bwambale, Charisma F. Choudhury, Stephane Hess (Institute for Transport Studies, University of Leeds)

How far do internal migrants really move? A new method for the estimation of migration distance

John Stillwell (University of Leeds) and Michael Thomas (University of Groningen) Unveiling Important Spatio-Temporal Transit Pathways using a Graph-based Trajectory Approach.

Jon Corcoran, Jiwon Kim and Marty Papamanolis (University of Queensland)

#### 11.00 Tea/coffee

#### 11.30 BIG DATA AND TRANSPORT GEOGRAPHY (2)

Chair Jon Corcoran (University of Brisbane)

Developing Trip Generation Models Using Mobile Phone Data

Charisma Choudhury, Institute for Transport Studies, University of Leeds, UK, Md. Shahadat Iqbal, Department of Civil Engineering, Florida International University, USA

Imputation of Urban Movement Patterns with Big Data

Eusebio Odiari, Mark Birkin, Susan Grant-Muller and Nick Malleson (University of Leeds)

Evaluating Public Transport Data Processing and Analysis: Smart Card Trip Data for South-East Queensland, Australia

John Tasker, Yan Liu (University of Brisbane)

13.00 Lunch

## 14.00 BIG DATA and health geography

Chair: Graham Clarke (University of Leeds)

Using big health data to explore transport accessibility to hospital appointments Charlotte Kelly, Graham Clarke, Claire Hulme and Tracey Farragher (University of Leeds)

Modelling optimal location and potential demand for a retirement village development

Robert Stimson and T-K Shyy (University of Melbourne)

Analysis of spatial inequalities in public health prescriptions and anti-biotic resistance risk: current trends and future projections

Alexis Comber, Michelle Morris, Mark Birkin and Paul Norman (University of Leeds)

Exploring the geography of happiness and well-being in Europe amid times of austerity

Ilias Thanis (University of Macedonia), Dimitris Ballas (University of Sheffield and University of the Aegean) and Lois Labrianidis (University of Macedonia)

#### 15.30 Tea/coffee

### 16.00 Big data, energy and the environment

Chair: Mike Mann (Columbian College of Arts & Sciences, Washington)

The Earthquake Impact on Telecommunications Infrastructure in Nepal: A Preliminary Spatial Assessment,

Jitendra Parajuli and Kingsley E. Haynes (George Mason University)

Detecting beaches and popularities based on Flickr and Openstreetmap, a datadriven approach based on Spark
Xiaolu Zhou, (Georgia Southern University)
The use of Visible Infrared Imaging Radiometer Suite (VIIRS) to estimate the frequency of electricity outages for Maharashtra India for 2015
Mike Mann (Columbian College of Arts & Sciences, Washington)

17.30 End

19.30 Conference dinner (free for those with full conference package)

# 2.8 Beijing 2016

The main theme for our contribution to the Beijing meeting is "Applied Cultural and Social Geography" dealing with applied studies concerning cultural issues, cultural diversity, and topics of well-being (around applied social geography). At the time of writing we are mid-way through a call for papers.

# 3. Networking and communication

Ways your Commission has collaborated with other IGU Commissions in the period 2012-2016. —

We have organized joint conferences and workshops with the following IGU commissions:

- Leeds 2013 on Applied GIS and spatial modelling, with the Commissions of Dynamics and Economic Spaces and GIScience and Modelling Geographical Systems.
- 2. The Kyoto IGU meeting was held in collaboration with the IGU Commission on Health and the Environment
- 3. Moscow 2015, on Applied local and regional development, was held in collaboration with the IGU Commission of Local & Regional Development.

Collaboration with other international, intergovernmental, and inter- and multi-disciplinary if relevant –

- 1. The Leeds meeting was held in collaboration with the Centre for Spatial analysis and Policy at the University of Leeds.
- 2. Wejoined the North America Regional Science Association in their conference in Washington D.C in November 2014.

## 4. Publications

During the 4 year period the Commission has published one new book on 'Applied Geography and Spatial Analysis: Addressing Real World Issues' edited by the outgoing officers Bob Stimson and Kingsley Haynes. The book was published by Edward Elgar. The details of the book appear below.

Editors: Robert J. Stimson, Kingsley E. Haynes

#### Chapters:

1. Applied geography: Relevance and approaches *Robert J. Stimson, Kingsley E. Haynes* 

2. A geographic perspective on demographic evolution in Europe: The C.E.G. participation in the ESPON 1.1.4 project

Diogo de Abreu

3. A national transport policy: The case of Pakistan *Roger Stough* 

4. Spatial modelling, GIS and network analysis for improving sustainability of transporting aggregates in the UK

Chengchao Zou, Mark Birkin, Graham Clarke, Fiona McEcoy, Andrew Bloodworth

5. SMILE - An applied spatial micro-simulation model for Ireland Karyn Morrissey, Cathal O'Donoghue, Graham Clarke, Dimitris Ballas, Stephen Hynes

6. Using GIS and spatial modelling to support school network planning in Estonia

Edgar Sepp, Jüri Roosaare

7. Spatial optimisation: Expanding emergency services to address regional growth and development

Alan T. Murray, Daoqin Tong, Tony H. Grubesic

8. Urban growth in the Brisbane-South East Queensland region and its implications for emergency services provision: A Geographical Information Systems-based approach

Jonathan Corcoran, Robert J. Stimson, Prem Chhetri, David Rohde, Angela Higginson

9. Geographical dimensions of federal investment in small business development

Kingsley E. Haynes, Haifeng Qain, Sidney C. Turner

10. Geographic modelling, public policy, and informing the 'store wars' sovereignty debate in Australia

Robert G. V. Baker, Stephen N. Wood

- 11. Defending territory: Automobile dealership customer and site analysis *John Lombard*
- 12. West Midlands (UK) regional planning (1999-2012), functioning economic geography and the E<sup>3</sup>I belt: Coping with uncomfortable truths *Michael Taylor, John R. Bryson*
- 13. Technopoles: Governance and networking *Haddad Ismail*

14. Economics of space: Estimating the economic significance of a NASA testing facility

Michael C. Carroll, Will M. Burns

- 15. Using input-output and GIS to assess the economic, fiscal and development impacts of toll roads in the Dallas: A 40 year perspective *Bernard L. Weinstein, Terry L. Clower*
- 16. Helping community groups to address urban planning issues in a gipsy deprived neighbourhod: Geographical experiences from Perpignan in a post-riot context

David Giband

17. Designing, implementing, monitoring and evaluating an urban community development program in Portugal

Maria Lucinda Fonseca, Alina Esteves

18. A Local master plan for biospheric conservation and development: Concept, methodology, and application

Eliahu Stern

19. Assessing responses responses to National Weather Service warnings: The case of a Tornado

Burrell E. Montz

20. Managing environmental hazards of outdoor falls among the elderly population of Hong Kong

Poh-chin Lai, Wong Wing-Cheung, Chan Ming-Houng, Low Chien-Tat, Wong Kin Chung Martin

21. Hydropower in the Chilean Patagonia: Evaluating socio-economic conditions for resettlement and/or compensation of rural inhabitants

Frederico Arenas, Pablo Osses McIntyre

We have a second book in print edited by the current officers, with papers selected from the last two years of Commission meetings. The content of this book are as follows:

# 'Applied Spatial Modelling and Planning'

To be published by: Routledge Limited.

#### 1. Introduction

#### **Overview**

2. Sir Alan Wilson, Applied Spatial Modelling: 'Big Science' and 'Best Practice' Challenges.

### **Dynamics of Economic Space**

- 3. Jitendra Parajuli and Kingsley E, Haynes, **An exploratory analysis of new firm formation in New England.**
- 4. Jonathan Corcoran, Francisco Rowe, Alessandra Faggian, and Robert Stimson, The Impacts of Policy Change on Overseas Human Captial in Australia: The Implementation of the 485 Graduate Visa.

5. Robert Baker, On the three 'laws' of spatial interaction and a string theory finale: perspectives from social physics with examples in the digital and retail economy

## **Housing and Settlements**

- 6. Yan Liu, David Wadley, and Jonathan Corcoran, **Spatial typology of the private** rental housing market at neighbourhood scale: the case of South East Oueensland, Australia
- 7. Paul Bidanset and John R. Lombard, **Optimal Kernel and Bandwidth Specifications for Geographically Weighted Regression: An Evaluation Using Automated Valuation Models for Mass Real Estate Appraisal.**
- 8. Eliahu Stern, Spatial search: New settlements for Israel's ultra-orthodox population.
- 9. Daniel Felsenstein and Yair Grinberger, A Tale of Two Earthquakes: Dynamic Agent-Based Simulation of Urban Resilience.

### **Population Movements and Ageing**

- 10. P.Rees, P.Wohland, P.Norman, The United Kingdom's Multi Ethnic Future: How Fast Is It Arriving?
- 11. Leslie Mayhew and David Smith, **Decomposition of Life Expectancy at Older Ages and Prospects for Ageing Populations**
- 12. Nick Addis (University of Leeds) **Using Agent-Based Modelling to understand Crime Phenomena**

#### **Health Care Management and Planning**

- 13. Holly Shulman, Graham Clarke, Mark Birkin (University of Leeds) **Modelling** the impact of new community hospitals on access to health care
- 14. Melanie Tomintz, Victor M. Garcia-Barros (GeoHealth Laboratory, Department of Geography, University of Canterbury, New Zealand and Galileo University, Institute Von Newmann, simSALUD Towards a Health Decision Support System for Regional Planning
- 15. Mike Bithell (Cambridge University) **Small scale agent-based modelling of infectious disease transmission: An example in a primary school.**

- 16. Michelle Morris, G. Clarke, K.Edwards, C. Hulme, J.Cade (University of Leeds) Exploring small area geographies of obesity in the UK: evidence from the UK Women's Cohort Study
- 17. Karyn Morrissey, Peter Kinderman, Eleanor Pontin, (University of Liverpool) Sara Tai, (University of Manchester) Matthias Schwannauer (University of Edinburgh) **Examining the Socio-spatial determinants of Depression in the UK**

## **Managing the Environment**

- 18. Robert Fligg, Joana Barros (Natural Resources Canada, Birkbeck University of London), A Case Study of Flooding in the Limpopo River Basin, Xai-Xai, Mozambique
- 19. Tal Svoray (Ben Guirion Univerity of the Negev). A computational framework for mitigating land degradation: a synergy of knowledge from physical geography and geoinformatics

## 5. Archival Contributions

We will send copies of all publications to the IGU archives and Dr. Bruno Schelhaas, Leibniz Institute for Regional Geography, Archiv für Geographie, Schongauerstr. 9, 04328 Leipzig, Germany (<a href="https://www.ifl-leipzig.de">www.ifl-leipzig.de</a>).

#### 6. Continuation

Assuming you and your colleagues in commission wish to continue your work, the final section of your report should include a proposal that specifically addresses:

A. The name of the Commission/Task Force, or new name if it is the view of your steering committee that it is to be changed.

B. A concise (100-200 words) statement of the mission of the Commission/Task Force.

C. A list of the individuals who will comprise the steering committee from 2016-2020. Provide complete contact information for all proposed steering committee members. Please note that the Statutes indicate that the maximum period of time that any steering committee member may serve is 12 years (that would include a maximum four years as Chair).

D. A summary of the work plan for the Commission/Task Force for the 2016-2020 period. Note that: The continuation (or otherwise) of existing Commissions and Task Forces is a decision made by the General Assembly; it is clear that the information presented in the 2012-15 report will be crucial in making that decision.

- a) CO8.01: IGU Applied Geography Commission
- b) The International Geographical Union's Applied Geography Commission focuses on improving understandings of the basic research/applied research interface and the needs of geographers based in universities, government, business, and non-governmental organizations for the services provided by professional organizations. It also considers the ways that the IGU and other existing geography organizations might better serve the enormous population of geographers in business, government, and NGOs.
- c) We hope to elect the steering committee at our meeting in Rhodes in May.

#### However, the new president is likely to be

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and the new Secretary

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https://www.gpem.uq.edu.au/jonathan-corcoran

d) At this point it is difficult to be precise about events in 2017. However, the new secretariat are committed to 2 meetings per year over the next 4 years, including the Applied Commission's early summer meetings, and participation at future IGU regional events in August.