### **1ST INTERNATIONAL SPACE SYNTAX SYMPOSIUM**

### UCL. LONDON, APRIL 1997

### PROCEEDINGS

# VOLUME I

#### SPACE SYNTAX TODAY

- The Reasoning Art: or, The Need for an Analytical Theory of Architecture (Professor Bill Hillier and Dr Julienne Hanson University College London, England)
- 02
- Space Syntax and the Dutch City (Dr Stephen Read Delft University, The Netherlands) 03 Making Space: The Use of Space Syntax in Design (Tim Stonor - Space Syntax Laboratory, England)
- Berlin in Transition: Analysing the Relationship between Land Use, Land Value and Urban Morphology (Jake Desyllas University College 04 London. England)

## COMPARATIVE CITIES

- Urban Configurational Complexity: Definition And Measurement (Romulo Krafta Universidade Federal Rio Grande do Sul, Brazil) 05
- 06 The Spatial Logic of Organic Cities in Iran and the United Kingdom (Kayvan Karimi - University College London, England)
- 07 Urban Redevelopment and City Centre Growth (Min Ye and Håkan Josefsson - Chalmers University of Technology, Sweden)
- Towards a Typology of Urban Spatial Layout: The Case of Brasilia (Frederico de Holanda Universidade de Brasilia, Brazil) 08
- Building the American City (Mark David Major University College London, England) 09
- Marginal Integration as a Survival Strategy: Two Cases in Rio, Brazil (Dr Claudia Fernanda de Magalhães Instituto Superior Técnico, 10 Portugal)
- 11 Experiments With Settlement Aggregation Models (Bill Erickson and Tony Lloyd-Jones, University of Westminster, England)

## COMPLEX BUILDINGS

- The Space of Innovation: Interaction and Communication in the Work Environment (Alan Penn, Jake Desvllas and Laura Vaughan University 12 College London, England)
- Socio-spatial Analysis of Four University Campuses in Santiago (Margarita Greene Pontificia Universidad Católica de Chile, Chile; Alan 13 Penn, University College London, England)
- 14 The Spatial Dimensions of Control in Restrictive Settings (Dr Frieda Peatross - Embry-Riddle Aeronautical University, United States)
- Enhancing Communication in Lab-based Organisations (Dr Jean Wineman Georgia Institute of Technology, United States; Margaret Serrato 15 - Georgia Institute of Technology, United States/Lord, Aeck, Sargent, Architects)
- 16 The Morphology of Exploration and Encounter in Museum Layouts (Dr Yoon Kyung Choi - Chungang University, South Korea)
- 17 Revisiting John Portman's Peachtree Center Complex in Atlanta (Mahbub Rashid Georgia Institute of Technology, United States)

## VOLUME II DOMESTIC SPACE

- The Sectors' Paradigm: Understanding Modern Functionalism in Domestic Space (Luiz Amorim Universidade Federal de Pernambuco, 18 **Brazil**)
- 19 The Dinner Procession Goes to the Kitchen (Dr Edja B F Trigueiro - Universidade Federal do Rio Grande do Norte, Brazil)
- Activity Analysis in Houses of Recife, Brazil (Dr Circe Gama Monteiro Universidade Federal de Pernambuco, Brazil) 20

#### ARCHAEOLOGY

- 21 Fingerprints on the Landscape: Cultural Evolution in the North Rio Grande (Dr Jason Shapiro Penn State University, United States)
- 22 Comparative Analysis of Chacoan Great Houses (Dr Laurel Cooper - Arizona Archaeological and Historical Society, United States)
- 23 Space, Evolution and Function in the Houses of Chaco Canyon (Dr Wendy Bustard - NPS/Chaco Museum Collection, United States)

### URBAN THEMES

- 24 The Urban 'Ghetto': The Spatial Distribution of Ethnic Minorities (Laura Vaughan - University College London, England)
- 25 Crime in the Urban Environment (Dr Michael A Jones & Mamoun Fanek - Texas Institute of Technology, United States)
- Strategic Space: Patterns of Use in Public Squares of the City of London (Maria Beatriz de Arruda Campos University College London, 26 England)
- Effects of Street Grid Configuration on Kerbside Concentrations of Vehicular Emissions (Alan Penn & Dr Ben Croxford University College 27 London, England)
- Spatial Properties of Urban Barriers: Analytical Tool for a Virtual Community (Professor Björn Klarqvist Chalmers University of Technology, 28 Sweden)
- 29 A High Speed Train is Coming to Town (Wenche Ramfloy - Heriot-Watt University, Scotland)

## METHODOLOGY

- Intelligent Architecture: New Tools for the Three Dimensional Analysis of Space and Built Form (Alan Penn, Ruth Conroy, Nick Dalton, Laura 30 Dekker, Chiron Mottram and Alasdair Turner - University College London, England)
- 31 Integrated Multi-level Circulation Systems (IMCS) in Dense Urban Areas (Dongkuk Chang - University College London, England)
- Geometry and Space in the Architecture of Le Corbusier and Mario Botta (Sophia Psarra University College London, England) 32
- 33 On the Characterisation of Axial Maps (Teresa V Heitor, Jorge Orestes Cerdeira and Raul Cordovil - Instituto Superior Técnico, Portugal)
- 34 Geometries of Architectural Description: Shape and Spatial Configuration (Dr John Peponis - Georgia Institute of Technology, United States)
- Therefore the Grid: The Need for a Theory of Order (Professor Bill Hillier University College London, England) 35

## VOLUME III

- Welcome to UCL (Professor Patrick O'Sullivan University College London, England) xiii
- Welcome to the Symposium and Introduction (Richard Burdett London School of Economics, England) xiv
- Opening Address (Sir Norman Foster Foster and Partners) xvii
- xxiii Closing Address (Professor Philip Steadman - The Open University, England)
- 09 Are American Cities Different; if so, how do they differ? (Mark David Maior - University College London, England)
- 35 The Hidden Geometry of Deformed Grids (Professor Bill Hillier - University College London, England)
- Space Syntax and the Dutch City The Supergrid (Dr Stephen Read Delft University, The Netherlands) 36
- Proposal For A Methodical Use Of Space Syntax Analysis In Development and Land Use Plans (Dr Guido Stegan Bureau d'Architects, 37 Belgium)
- Comparative Analysis of Chacoan Great Houses (Dr Laurel Cooper Arizona Archaeological and Historical Society, United States) 39
- On the Description of Shape and Spatial Configuration Inside Buildings (Dr John Peponis, Dr Jean Wineman, Mahbub Rashid, S Kim and 40 Sonit Bafna - Georgia Institute of Technology, United States)
- On the Generation of Linear Representation of Spatial Configuration (Dr John Peponis, Dr Jean Wineman, Mahbub Rashid, S Kim and Sonit 41 Bafna - Georgia Institute of Technology, United States)
- 42 The Question Does Compute (Mark David Major, Alan Penn and Professor Bill Hillier - University College London, England