

# Noah Raford

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*SUMMARY BIO, 2011*

Noah Raford is an experienced scenario practitioner who has worked extensively in international strategic planning and policy development. Noah has expertise in two main areas; scenario planning and strategy creation for city and regional development.

At GBN, Noah specialises in scenario planning for governments and nation-states. Prior to joining GBN, Noah was the co-founder of the strategy facilitation boutique *Sensitive Dynamics*, the former North American Director of the policy think-tank *Space Syntax Limited* and a Senior Research Advisor to Prince Charles' *Foundation for the Built Environment*. He is currently a Senior Research Fellow at the *London School of Economics Complexity Programme*, a fellow at the *Bartlett School of Architecture*, a fellow of the *International Futures Forum* and a visiting researcher at the *University of Oxford, Institute for Science, Innovation and Society*.

Some of Noah's recent projects include:

- Creation of a scenario planning & foresight unit for the General Secretariat of the Executive Council, Abu Dhabi, UAE
- Bizkaia 2030, a regional futures exercise for Bilbao and the Basque Country;
- Scenario-based executive simulations for UN Food Agriculture Organization;
- The Future of Cities, a University of Oxford project with the Institute for Science, Innovation and Society and the Saïd Business School;
- Planning for Climate Change Impacts, with UK Foresight and the Department of Environment, Food and Rural Affairs;
- Scenario development for the Economic Community of West Africa States;
- Slum upgrading and new town development strategies in Jeddah, Saudi Arabia.

Noah graduated from Brown University with a degree in Sociospatial Analysis and Design, received his masters at the Bartlett School of Architecture, University College London. He is currently pursuing his PhD at the Massachusetts Institute of Technology (MIT), where he focuses on the use of large scale participatory approaches to online scenario planning.

## EXPERTISE

- Applied scenario planning for governments and large institutions
- Integrated policy analysis and decision-support
- Innovative facilitation & large-group engagement techniques (crowd-sourcing, experiential learning, etc.)

## EDUCATION

**PhD**, Massachusetts Institute of Technology, Cambridge, Massachusetts, 2006 to present (completion Sept., 2011)

**Masters of Science in the Built Environment, Honours**, University College London, London, England, 2004

**Bachelor of Arts, Honours**, Brown University, Providence, Rhode Island, May 2000

## PROFESSIONAL EXPERIENCE

**GBN / Monitor**, *Senior Manager*, London, England, July 2010 to present

International management consultancy specialising in economic development, scenario planning, strategy and policy-making. Specialist in scenario planning for governments engaged in long-term risk assessment and policy development.

**Sensitive Dynamics**, *Co-Founder*, London, England, September 2009 to July 2010

Boutique policy consultancy providing specialised facilitation and strategy services for international NGO's, development agencies and the UN. Serious games, executive simulation, and social simulation.

**Prince's Foundation for the Built Environment**, *Senior Research Advisor*, March 2008 to July 2010

Research-led strategies for Prince Charles' think-tank on sustainable infrastructure investment, policy development and strategy review.

**Humanitarian Futures Programme**, *Consultant*, London, England. July 2008 to present

Scenario planning, strategy development and policy research for the UK's leading crisis response think tank. Innovative techniques for crisis prevention and response in using crowd sourced scenario techniques.

**Space Syntax Limited**, *Director, North America*, London / Cambridge, MA. February 2004 to September 2009

Strategic think tank providing evidence-based decision support for public and private sector clients in urban development. Founded US office, managed a wide variety of teams on worldwide development projects.

**Oxford Future of Cities Programme**, *Scenario Planner*, London, England. April 2009 to September, 2009

Research, analysis, and scenario development for University of Oxford project on the Future of Cities, with the Institute for Science, Innovation and Society at the Saïd Business School.

**FutureBoston, MIT**, *Research Director*, Cambridge, MA, September 2006 to January 2008

Competitive analysis for the future of innovation in the Boston region. Pioneering use of web-based community participation tools and visualisation techniques for public engagement.

**University of California Traffic Safety Center**, *Planning Consultant*, Berkeley, California. April, 2003 to present

Practical risk assessment for local government planning, focusing on urban liveability, safety and quality of life.

**Urbitrans Associates, Inc**, *Urban Planner*, Oakland, California. April 2001 to April 2003

Planning, and design of small and medium public transportation franchises in the Western US market. Client relations, project management, and community facilitation workshops.

## ACADEMIC APPOINTMENTS

### **London School of Economics**

*Senior Research Associate, LSE Complexity Programme, February 2009 to present*

Complex adaptive systems research, systems theory, focusing on non-linear change and social “tipping points.”  
*Research Fellow, Cities Programme, January 2008 to January 2009*

Systemic implications of climate change; focus on decision-making scenarios under risk and uncertainty.

### **University of Oxford, Researcher, Said Business School, James Martin 21<sup>st</sup> Century School, March 2008 to present**

Catastrophic risk, systemic failure and supply chain vulnerabilities with Dr. Peter Taylor of the Future of Humanity Institute and Jerome Ravetz at the Institute for Science, Innovation and Society.

### **University College London, Honorary Faculty, Bartlett School of Architecture, September 2005 to present**

Design review, studio critic and research advisor for a variety of EPSRC funded research projects on urban governance, complexity, and social policy.

## RECENT PROJECTS

**Scenario Unit Development & Emirate-wide Scenario Pilot, “Abu Dhabi 2030”:** Created, designed and trained senior civil servants at the General Secretariat of the Executive Council, Abu Dhabi in basic and intermediate scenario approaches. Conducted Emirate-wide pilot project on “Abu Dhabi 2030: The Future of Human Capital”.

**Regional Futures for the Basque National Government:** Twenty year scenario planning and policy development project for the Basque Parliament.

**Impacts of Climate Change Impacts:** Systems mapping and scenario building for the UK the Foreign Office, Ministry of Defense, Department of Environmental, Food and Rural Affairs (DEFRA), with the International Futures Forum.

**Planning Healthcare Infrastructure (PHI):** Strategic estate planning and systems thinking for the UK Department of Health (DoH) and the National Health Service (NHS), with the Prince’s Foundation for the Built Environment.

**Scenario development for the Economic Community of West Africa States (ECOWAS):** Creation of water pollution crisis scenarios for the ECOWAS Secretariat, involving key informant interviews, analysis, synthesis, stake-holder workshops and scenario creation. With the Humanitarian Futures Programme.

**Climate change adaptation planning for South Florida:** Long term urban growth management and simulation services, using web-based and face-to-face scenario planning techniques to augment systems dynamics simulation modelling. With MIT, the United States Geologic Service, Florida Fish and Wildlife, and the University of Florida.

**Sustainable supply chains study:** Supply chain risk analysis and resiliency strategy, focusing on local social and economic benefits of sustainable building materials. With the Prince’s Foundation.

**Strategy facilitation for the UN Food Agriculture Organization’s (FAO) Food Crisis Management Unit:** Design and development of scenario-based executive simulations for FAO’s senior management and directorship, focused on testing new organisational structures for dealing with complex food chain crises.

**Global climate change impacts assessment:** Quantitative simulation development for Oxfam UK, using time series analysis to provide a range of estimates on global climate change impacts, with Humanitarian Futures Programme.

**London Olympic Legacy Master Plan advice:** Systems modelling and strategic advice for the London 2012 Olympics, with Space Syntax, Arup, EDAW, FletcherPriest, and Stanhope PLC and Westfield.

## PEER REVIEWED PUBLICATIONS

- Raford N and Hillier B, "Measurement and description in socio-spatial analysis", *The Sage Handbook of Measurement*, Oxford University Press, 2010
- Geyer J, Raford N, Pham T, "The Continuing Debate about Safety in Numbers—Data from Oakland, CA", *Proceedings of the 85<sup>th</sup> Annual Meeting, Transportation Research Board*, Washington, D.C., January, 2006
- Raford N, "Pedestrian Movement and the Urban Experience in Fractured Spatial Systems: The Case of Boston, Massachusetts", *World Architecture: Special Issue on Space Syntax*, Shanghai, China, November 2005
- Raford N, Hillier B, "Correlation Landscapes: A New Approach to Sub-Area Definition in Low Intelligibility Spatial Systems", *Fifth International Space Syntax Symposium*, Delft, Holland, June, 2005
- Raford N, Chiaradia A, Gil J, "Critical Mass: Emergent Cyclist Route Choice in Central London", *Fifth International Space Syntax Symposium*, Delft, Holland, June, 2005
- Raford N, Ragland R, "Space Syntax: An Innovative Pedestrian Volume Modeling Tool for Pedestrian Safety", *Proceedings of the 83<sup>rd</sup> Annual Meeting, Transportation Research Board*, Washington, D.C., January, 2004
- Raford N, "Looking Both Ways: Space Syntax for Pedestrian Exposure Forecasting and Collision Risk Analysis", *Proceedings of the Fourth International Space Syntax Symposium*, London, England, June, 2003
- Odeh D, Raford N, Jackson R, Pogue P, "A Model for Earthquake Risk in Statewide Mitigation Planning" *Proceedings of the 7<sup>th</sup> US National Conference on Earthquake Engineering*, Boston, Massachusetts, July 2002
- A Chiaradia, N Raford, "Alternative Tools for Accessibility Planning", Guest editorial, *Local Transport Today*, London, England, March, 2005
- N Raford, A Chiaradia, C Stutz, "Network Analysis of Multimodal Transport Systems", White paper, *17<sup>th</sup> Annual TRICS Conference: Understanding Transport Development, Achieving Sustainable Development*, London, England, November, 2005
- Stonor T, Stutz C, Raford N, Chiaradia A, "Towards Evidence-Based Urban Design", *Planning in London: the Journal of the London Planning and Development Forum*, October, 2004
- Raford N, "Making Neighborhoods More Friendly to Bicyclists and Pedestrians", contributing author in *Geographic Information Systems: Tools for Improving Community Liveability*, Local Government Commission, Sacramento, California, March, 2003

## RECENT LECTURES AND PRESENTATIONS

- "Strategy making in times of dynamic change" London School of Economics, 2010
- "Scenario planning for urban and regional development" Oxford University, 2010
- "The Future of Cities: Three Scenarios for Future Urbanism" Harvard University, 2010
- "Applied scenario planning for governments and regions" MIT, 2010
- "Phase transitions in complex social systems" London School of Economics, 2009
- "Scenario planning for social complexity" USGS working group on climate change, Miami, Florida, 2009
- "Complexity approaches to urban disaster management" Rome, Italy, 2009
- "Alternative futures modeling" Royal Technical University, Stockholm, Sweden, 2009
- "Scaling adaptation: urban climate change adaptation" Congress of the New Urbanism, Austin, Texas, 2008
- "Emerging technologies and evidence based approaches to place making" RUDI, London, 2008
- "Scenarios and simulation for climate change adaptation" London School of Economics, London, 2008
- "Post-climate change urbanism" Royal Technical University, Stockholm, Sweden, 2007
- "Form and consequence in urban development" Roma III University, Rome, Italy, 2007