

3.1 INTRODUCTION

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Part Three comprises a review of the contemporary use of concepts of *complexity*, *uncertainty* and *risk-taking* in urban transport infrastructure investment and planning, and city and regional policy-making and planning. This Working Paper represents the output of Part 3 of the Project It brings together six commissioned papers from leading academics and practitioners in the fields of urban transport infrastructure investment and planning, and city and regional policy making and planning and associated disciplines.

Each of the contributions is a chapter in Working Paper #3. Overall findings are summarised in a final chapter prepared by the UCL research team.

The purpose of commissioning these contributions is to explore and review the contemporary treatment (use and misuse) of the concepts of RUC in the fields of city development, strategic urban and regional planning, transport planning and policy-making, mega project planning, project management and property development. We explore the parameters of context, and the characteristics of the contexts described and from this, seek to identify both generic and context-specific lessons that may be of value to planning exercises for mega urban transport projects (MUTPs) which is the focus of the VREF Centre of Excellence research programme conducted by the OMEGA Centre at UCL.

This set of papers is deliberately an eclectic mix, in the same spirit as Working Paper 2. The papers are presented in a sequence that moves from macro perceptions and treatment of risk, uncertainty and complexity, at the city scale through to micro perceptions and treatment of RCU at the project level. In common with the papers comprising Working Paper 2, we do not offer these contributions as representative of the field overall. We have chosen authoritative contributors who offer through their writing insights into the spectrum of an extensive subject area the variety of approaches and range of experience in that domain. This Working Paper is therefore a consciously speculative and exploratory exercise. It enables us to build a picture of the contemporary treatment of RUC by decision makers within infrastructure planning and spatial planning that we are able to compare and contrast with the findings elaborated in Working Paper #2 in order to derive generic lessons applicable to MUTP planning and policy-making.

Professor Michael Batty discusses complexity theory, the field of complexity science, and significance for a contemporary paradigm for change in cities and ways in which new models simulating change can inform understanding and radical changes to the planning process. Professors Dimitriou and Thompson offer a wide ranging review of strategic planning within and outside the urban and regional sphere with particular emphasis on the importance of context in shaping strategies. Professor John Adams, the author of one of the seminal books on risk, contributes his perspective on the risks generated by ubiquitous mobility and its social, economic and environmental consequences. The distinguished planning commentator and academic Professor Sir Peter Hall, in an interview for this project, looks back on his view of 'great planning disasters' the subject of his book and an article in 1980, and reflects on the degree to which in the intervening years, lessons have been learned, and offers observations on more recent disasters and successes. Keith Perry brings us into the world of practising

property development, and reveals the extent and nature of risks and uncertainty that impinge on decision-making within the sector. John Kelsey takes us within projects themselves to construction itself. Consideration of risk has long had the attention of project managers in seeking to comply with the specified trinity of budget, schedule and quality. He discusses conventional methods, their shortcomings, and new, more sophisticated techniques to aid improved performance and delivery.

In the concluding contribution (Section 3.8) we synthesise the findings of the group of papers to carry forward to Working Paper #4.