

Approach to 'Sense-making the Narrative' of Hypothesis-led Reports on the Planning and Appraisal of the Channel Tunnel Rail Link, UK

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Overall Research Questions & Hypotheses

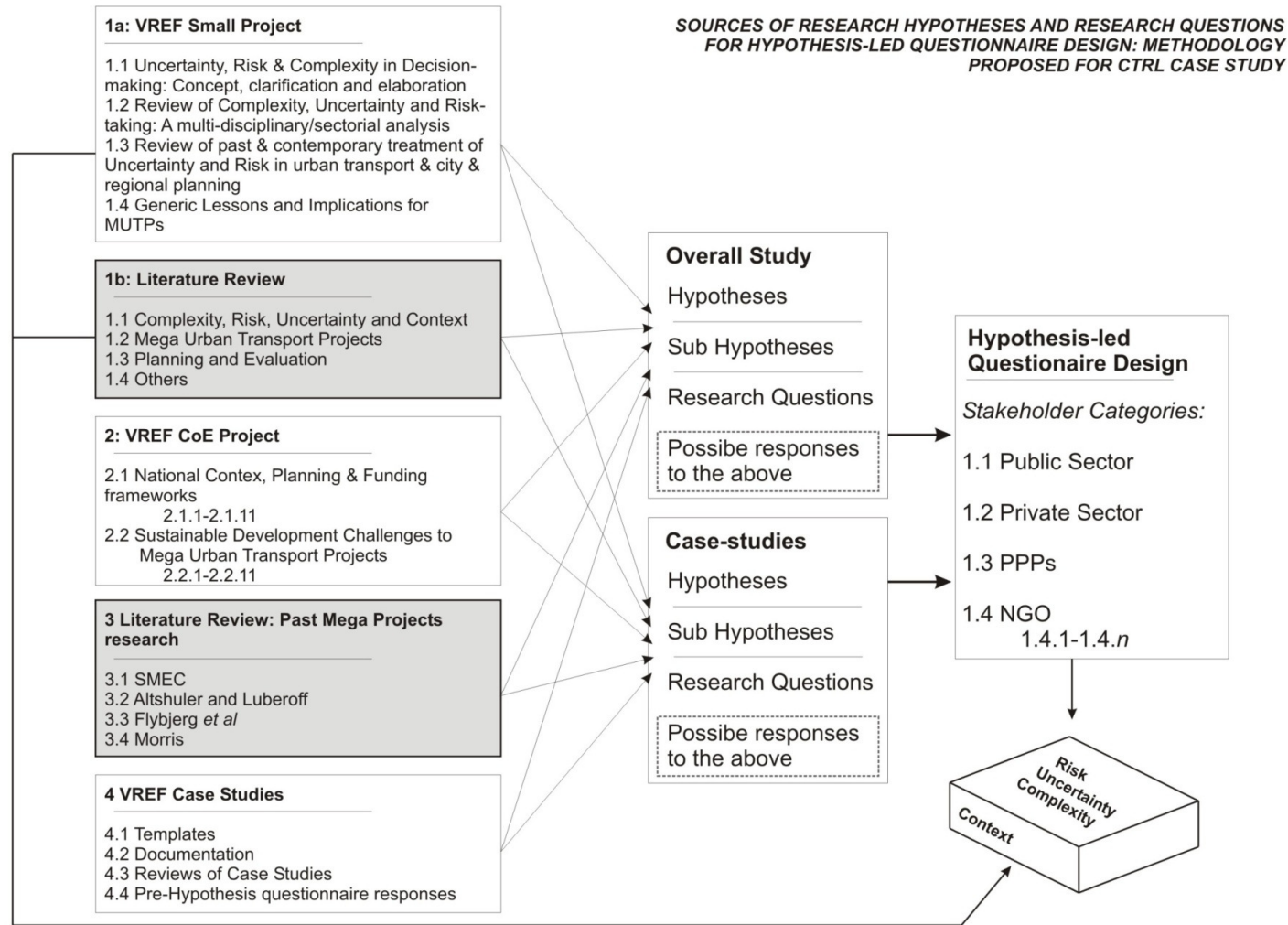
Overall Research Questions:

- What constitutes a '**successful**' mega urban transport project (MUTP) in the 21st Century?
- How well has **risk, uncertainty and complexity** been treated in the planning, appraisal and evaluation of such projects?
- How important is **context** in making judgements regarding the above questions?

Overall Research Hypotheses:

- Traditional criteria relating to cost overruns, completion dates, generation of travel time savings for users and rates of returns to investors are inadequate measures of success in the 21st Century as sustainable development concerns become increasingly critical both globally and locally.
- The new emerging international and local agenda related to vision(s) of sustainable development is multi-dimensional and goes beyond notions of environmental sustainability, as critical as this may be, in that it also concerns inter-related concepts of economic sustainability, social sustainability and institutional sustainability.
- The level of competence in decision-making and planning in today's fast-changing world is best assessed by the adequacy of the treatment of risk, uncertainty and complexity and sensitivity to context – all of which are important demands on Strategic Planning.

Sources of Hypothesis-Led Questions



Stakeholders

Key Stakeholders are defined as those:

- who's actions/decisions were **critical to the success/failure** of the project as a whole (or a component part thereof) in terms of its planning, appraisal, evaluation, implementation, operation and impacts, and/or;
- who possess **first hand knowledge** of/involvement in the planning, appraisal, evaluation, implementation, operation or impact of the project (or a component part thereof) or are experienced observers thereof, and/or;
- who **share information and knowledge** about the project (or a component part thereof) so as to **influence** project outcomes or opinions about project outcomes.

CTRL Stakeholder Interviews

- Target - as broad a range of stakeholders as possible so as to obtain multiple perspectives on the different stages, facets and processes associated with the CTRL
- Stakeholders identified from Project Timeline and other secondary research, background knowledge of Team Members, recommendations from interviewees
- Emphasis on eliciting important insights from key stakeholders who contributed to shaping the project (especially decision-makers) rather than having a stratified sample
- 20 hypothesis-led interviews for CTRL – typically 10 for other Case Studies
- Written-responses sought from a further 20 key stakeholders
- Interviewees included senior central and local government politicians (including 2 former Deputy Prime Ministers); leading consultants; central and local government planners and advisors; community group leaders; senior infrastructure managers; developers; lobbyists, and; leading project commentators.
- Most interviews took 2-3 hours and yielded many valuable insights

Hypothesis-Led Questionnaire

Three-part questionnaire:

- **Part 1** – generic and context-related **Key Research Questions** which are used in *all* OMEGA Case Studies concerning six major topics/themes directly related to the Overall Research Questions and Hypotheses:
 - o Project Success
 - o Project Appraisal and Evaluation
 - o 'Sustainability' Considerations
 - o Project Decision-making Processes
 - o Project Risk, Uncertainty and Complexity
 - o Project Context

Part 1 Questions

PART 1: Overarching Research Questions

The questions below are posed to help ascertain what constitutes a 'successful' MUTP in the 21st Century in generic terms and in respect of the [Case Study] project.

Question 1: Project Success

- Q1a. In generic terms, what in your view constitutes a 'successful' MUTP?
- Q1b. Do you consider that this [Case Study] project has been a successful MUTP? If so, why? If not, why not?
- Q1c. What constitutes a MUTP - what are their main defining features and characteristics?

Question 2: Project Appraisal and Evaluation

- Q2a. In generic terms, what are the most important appraisal and evaluation criteria for MUTPs?
- Q2b. What were the most important appraisal and evaluation criteria for this [Case Study] project?
 - which criteria proved adequate and which inadequate? Why/why not?
 - did concerns about sustainable development influence the appraisal or evaluation process? If so, how? And to what effect?
- Q2c. What value do 'traditional' appraisal and evaluation criteria (project cost overruns, completion dates, travel time savings and rates of returns etc.) have as measures of the 'success' of MUTPs in the 21st Century as sustainable development concerns become increasingly critical both globally and locally?

Question 3: 'Sustainability' Considerations

- Q3a. What do you consider to be the main sustainability considerations in the context of MUTPs? Do you consider that 'sustainability' considerations should play a major part in the planning and delivery of MUTPs? If so, why and how? If not, why not?
- Q3b. Did 'sustainability' considerations play a major part in the planning and delivery processes of this [Case Study] project? If so, how? If not, why was this?
- Q3c. Do new/emerging visions of sustainable development offer a better framework for judging success?
- Q3d. Do you consider that it is possible to introduce 'retrofit' strategies that would enable MUTPs in general, and this [Case Study] project in particular, to achieve more sustainable outcomes?

Part 1 Questions

Question 4: Project Decision-making Processes

- Q4a. What do you consider to be the most important factors and actors that determine the outcome of decision-making process in the planning and delivery of MUTPs?
- Q4b. What were the most important factors determining the outcome of the decision-making process in the planning and delivery of this [Case Study] project?
- Which actors had most influence on the decision-making process?
 - And which factors and influences worked positively and which negatively with respect to the key appraisal and evaluation criteria that you identified in response to question 2?
- Q4c. What influences are generated by (other) specific factors and actors (e.g. political power, rationality of technocrats, lobbying from business, community/environmental activism, influence of mega events etc.)?

Question 5: Project Risk, Uncertainty and Complexity

- Q5a. What do you consider to be the main generic sources of risk, uncertainty and complexity in the planning and delivery of MUTPs?
- Q5b. What were the main sources of risk, uncertainty and complexity faced by this [Case Study] project?
- How have these issues been treated in the decision-making process?
 - What worked well and what failed in this respect?

Question 6: Project Context

- Q6a. What aspects of 'context' do you consider to be the most influential generically in the planning and delivery of MUTPs? Why is this?
- Q6b. What aspects of 'context' were the most influential in the planning and delivery of this [Case Study] project? Why was this? What aspects of context were not adequately assessed?
- Q6c. What was the impact of Mega Events on this [Case Study] project (if appropriate and if not covered by response to Question 4)

Hypothesis-Led Questionnaire Cont'd

- **Part 2 - Hypotheses and Hypothesis-related Questions** specific to each Case Study conducted by the OMEGA Network.
- CTRL hypotheses:
 - **Economic Rationalism** - the belief that the CTRL was treated essentially as a 'closed system' and a commodity for which demand and supply could be predicted with reasonable accuracy;
 - **New Regionalism** - public sector support for the CTRL was seen as an essential means to service the forces of globalisation by enhancing London's accessibility and competitive position and that this represented a form of policy intervention that overrides models of economic rationalism;
 - **Muddling Through** - there was no clear or consistent vision for the CTRL at the outset and the subsequent introduction of objectives associated with growth management and regeneration was undertaken on an *ad hoc* basis in response to emergent agendas that arose over time;
 - **Smoke Filled Rooms** - the role of real estate development as a means to financially support the CTRL and the rather difficult 'bargaining' circumstances this introduces in terms of maximising community benefits;
 - **Context is Everything** - CTRL project outcomes can best be explained by the forces and influences that were at work at the time (and place) of planning and constructing the project, and that the failure to fully appreciate these contributes to much of the misunderstanding about what an MUTP is expected to, and can, deliver.

Sample Part 2 Questions

HYPOTHESIS 1 – 'Economic Rationalism'

The hypothesis posed here is that the financing and economic rationale for the planning, appraisal and evaluation of the CTRL is “ostensibly” based on an *economic cum financial rationalist* model that treats the ‘line haul’ as a discrete ‘closed system’, for which supply and demand can be forecast with reasonable accuracy - as a basis for forecasting whether sufficient revenues can be generated from the operation of the link to pay for its construction. This relies on travel forecasting methods that pay explicit attention to the economics of travel time savings and some implicit but less precise attention to spin-off benefits generated by the new infrastructure and its services with new transport links increasingly seen more as ‘commodities’ rather than a ‘public services’.

Question 7: CTRL - a closed system?

Was the financing rationale for the planning, appraisal of the CTRL based on the belief that the ‘line haul’ could be treated a discrete ‘closed system’, for which supply and demand can be forecast with reasonable accuracy as a basis for accurately forecasting whether future revenues would be sufficient to pay for its construction?

Question 8: flawed appraisal models?

Were the appraisal and travel demand models used to forecast potential CTRL revenues fundamentally flawed and if so, why and how? Or, were they manipulated so as to generate levels of revenue that were acceptable politically in the face of new/emerging imperatives?

Question 9: CTRL - a commodity or a service?

Was the CTRL treated more as delivering a ‘commodity’ in direct competition with other modes of transport rather than a ‘public service’ to the region and its urban areas, despite the considerable aspirations and rhetoric associated with the urban regeneration agenda that this new transport investment will spawn in east London and the Thames Gateway?

Hypothesis-Led Questionnaire Cont'd

- **Part 3** - a set of common **Concluding Questions** about generic lessons that can be learned from the Case Study:
 - o how and by whom MUTP objectives should be set
 - o the role of community engagement, consultation and participation
 - o the need for national planning frameworks.
- **Indexes** – information about stakeholders and questions about the respondent's views on treatment of:
 - o Risk, Uncertainty and Complexity
 - o Context
 - o Sustainable Development Challenges

Part 3 Questions

PART 3: Concluding Questions

On the basis of the preceding questions and responses by interviewees to these, the following questions seek to identify generic lessons that can be extracted from the case study experiences and other similar projects and applied elsewhere.

Instructions to interviewer for above questions:

The following questions are to be used as a 'prompt' to elicit interviewees' thoughts on generic lessons that may be derived from the [Case Study] project. Interviewees, therefore have a free choice of which questions to address. Again the questions are based on the UK case study purely for illustrative purposes.

Question 26: MUTP objectives?

On the basis of the case study experience, how should MUTP objectives be set – by whom, in what forum, and how should they be appraised, evaluated and monitored?

Question 27: engagement, consultation and participation?

What generic lessons, if any, are there to be had from the case study regarding community involvement (engagement, consultation and participation) in MUTP planning, appraisal and delivery – along the line-haul route and around major transport hubs?

Question 28: national planning frameworks for MUTPs?

Do you consider it essential that MUTPs such as the case study should only be promoted and delivered against the background of a planning framework which puts forward rational development proposals expressing agreed economic, social and environmental (and other) objectives and priorities?

Question 29: other generic lessons?

What other generic lessons do the case study experiences offer?

Sample Index – ‘Your Views on the Case Study’

Your Views on the Case Study

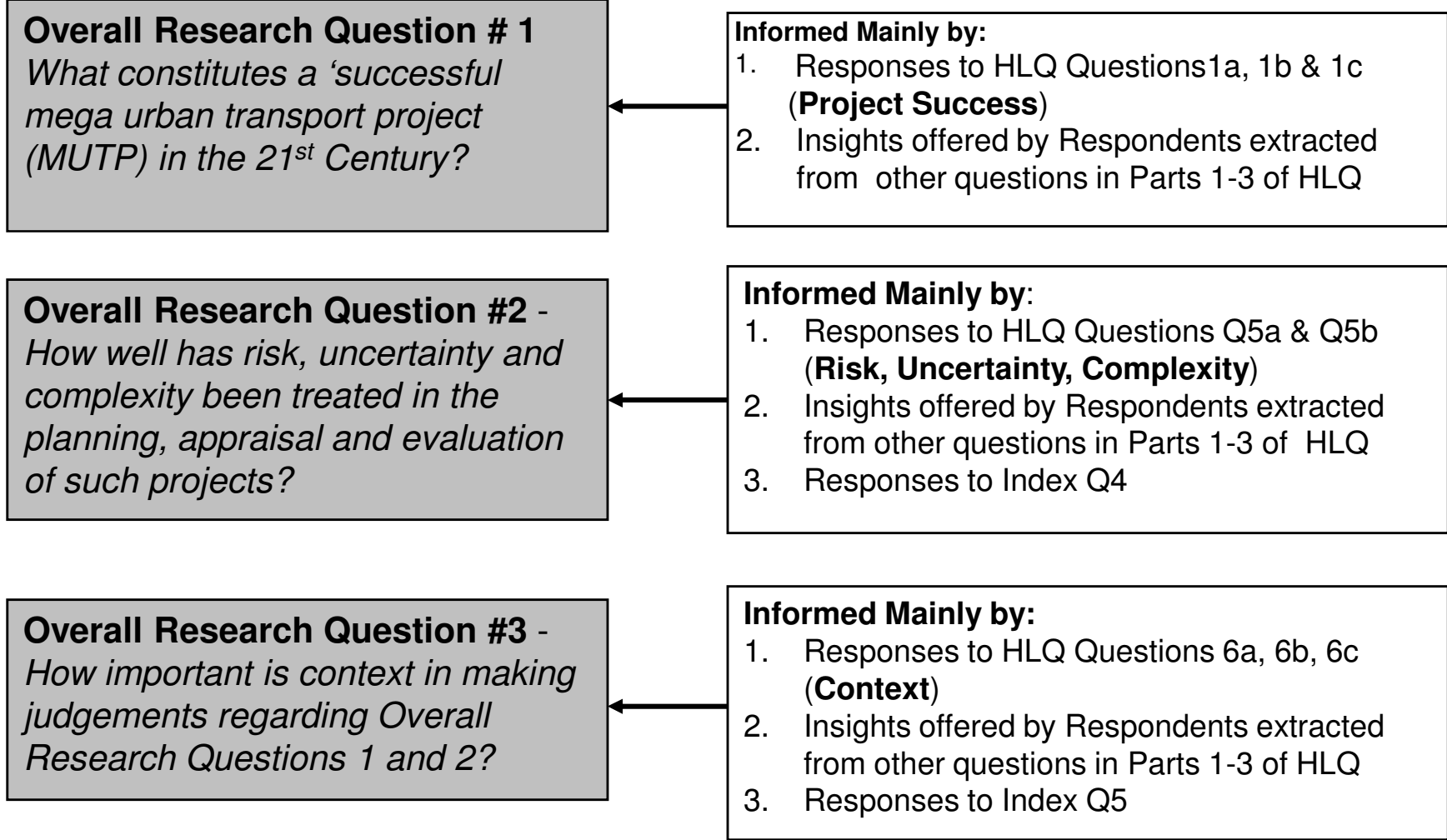
4. Your views on the treatment of risk, uncertainty and complexity in decision making for CTRL (please mark the appropriate boxes):

	Risk: the degree to which future uncertainties and unexpected events may not be manageable within allocated resources	Uncertainty: where imperfect knowledge makes it impossible to describe an existing state or future outcome with accuracy, and where lack of knowledge could have significant consequences	Complexity: where many independent factors interact in multiple and unforeseen/unforeseeable ways to generate unexpected outcomes
The circumstances (context) in which this project were planned and implemented were:	Very risky Not at all risky <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Completely uncertain Totally certain <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Extremely complex Very straight-forward <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
The degree of control exerted over the planning and implementation of this project was:	Greatly affected by risk Not affected by risk <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Greatly affected by uncertainty Not affected by uncertainty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Greatly affected by its complexity Not affected by its complexity <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
How did this project compare with the Channel Tunnel project?	Much more risky Much less risky <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Much more uncertain Much less uncertain <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Much more complex Much more straight-forward <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

5. Which of the following types of context do you consider most important in the planning of the case study (please rank each one out of ten in terms of importance, where one represents the highest priority and ten the lowest):

Types of context	1	2	3	4	5	6	7	8	9	10
National background, policy, planning and funding frameworks?										
Sustainability visions to be serviced?										
Geographical, special and location considerations?										
Cultural contexts?										
Temporal contexts?										
Others? (please specify)										

Overall OMEGA Research Questions – Relationship with HLQ Questions



Overall OMEGA Research *Hypotheses* – Relationship with HLQ Questions

Overall Research Hypothesis #1

Traditional criteria relating to cost overruns, completion dates, generation of travel time savings for users and rates of returns to investors are inadequate measures of success in the 21st Century as sustainable development concerns become increasingly critical both globally and locally.

Informed Mainly by:

1. Responses to HLQ Questions 2a, 2b, 2c (**Appraisal & Evaluation**)
2. Insights offered by Respondents extracted from other questions in Parts 1-3 of HLQ

Overall Research Hypothesis #2

The new emerging international and local agenda related to vision(s) of sustainable development is multi-dimensional and goes beyond notions of environmental sustainability, as critical as this may be, in that it also concerns inter-related concepts of economic sustainability, social sustainability and institutional sustainability.

Informed Mainly by:

1. Responses to HLQ Questions 3a, 3b, 3c, 3d (**Sustainability**)
2. Insights offered by Respondents extracted from other questions in Parts 1-3 of HLQ
3. Responses to Index Question 6

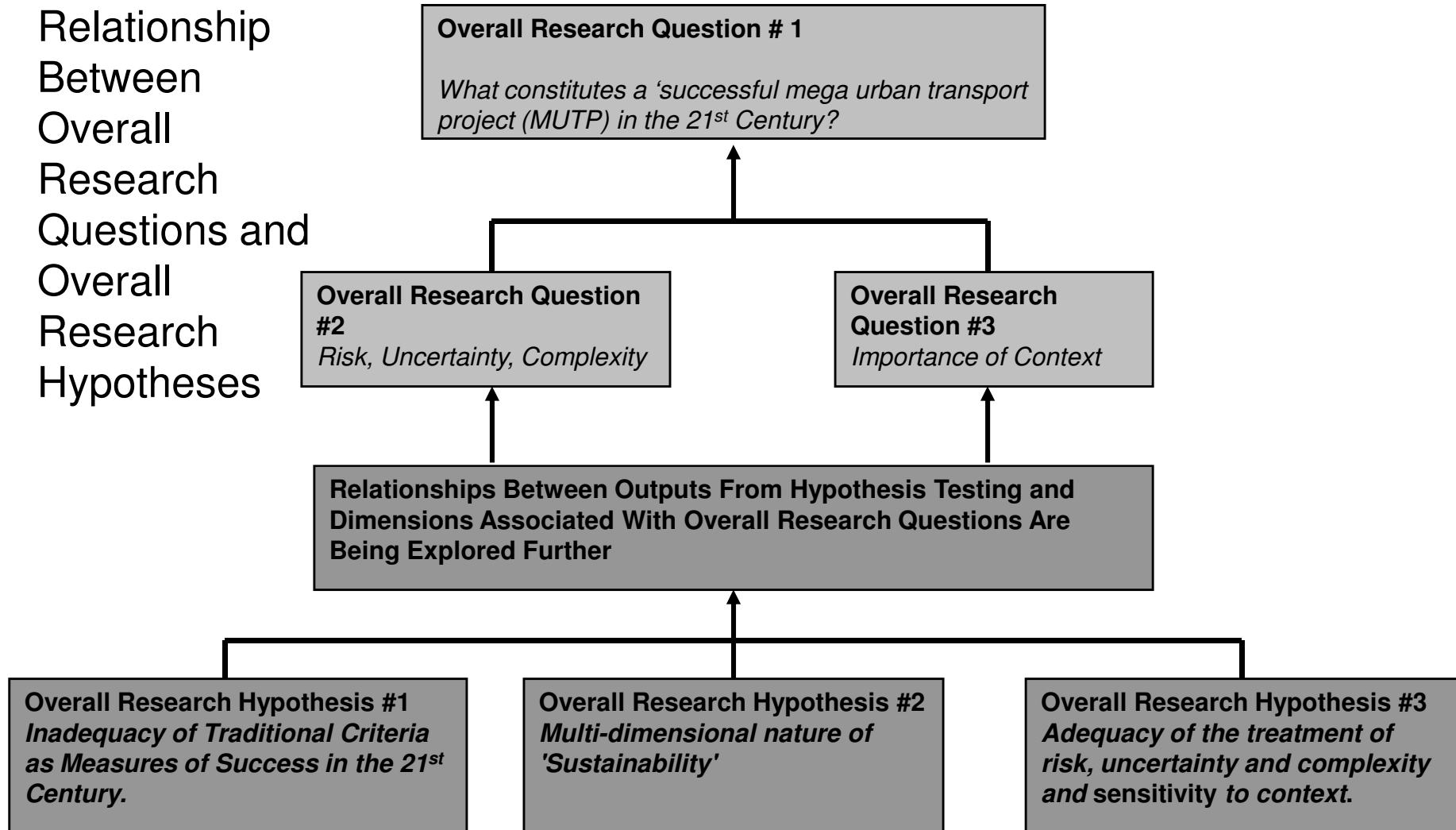
Overall Research Hypothesis #3

The level of competence in decision-making and planning in today's fast-changing world is best assessed by the adequacy of the treatment of risk, uncertainty and complexity and sensitivity to context – all of which are important demands on Strategic Planning.

Informed Mainly by:

1. Responses to HLQ Questions 4a, 4b, 4c (**Decision Making**)
2. Insights offered by Respondents extracted from other questions in Parts 1-3 of HLQ
3. Responses to Index Question 4

Relationship
Between
Overall
Research
Questions and
Overall
Research
Hypotheses



Data Extract Frame

HYPOTHESIS 1 'Economic Rationalism'				
Stakeholder Type	Hypothesis	Question	Transcript Extract	Gist (explanatory note)
Question 7: CTRL - a closed system?				
Politician	1	9	<p>"Yes, it is, because that's the way things have always been done. We've always had a link-based approach to any economic appraisal. We've never been able to master a network approach. <i>Are you lamenting that?</i>"</p> <p>"Yes, absolutely, yes. I think it's a problem with roads as much as it is with rail, but a particular problem with rail. The interesting thing with the CTRL was of course that because it didn't stack up on that basis, the wider economic benefits, regional benefits to Kent etc, were sort of tacked on without any real analysis or justification.....I think it was entirely flawed, entirely spurious. I think it was wrong."</p>	<ul style="list-style-type: none"> • gist of key points • for 'direct' yes/no type question - identify and record whether response supports parent hypothesis: <ul style="list-style-type: none"> ○ if yes, record why; ○ if no, record why; ○ if neither yes nor no, record why. and identify and record broad patterns of generic and/or context-specific knowledge emanating from response, by stakeholder type. • for 'indirect' question - identify and record extent to which response reflects support for parent hypothesis, negates parent hypothesis or offers neither support nor disagreement • identify and record whether response also informs other Hypotheses in Part 2, Part1 questions and hypotheses and Part 3 generic lessons. • identify and record 'unprompted insights' that inform other Hypotheses in Part 2, Part1 questions and hypotheses and Part 3 generic lessons - and/or may lead to new hypotheses, lessons and guidelines.
Consultant/ Advisor	1	9	<p>"I'm not an expert. My personal view of this question is there had to be a degree of 'closedness' in order to reach a base case to push through the system, in terms of the economics. It doesn't sound right to me with my planning hat on, 'closed system' sends all the wrong signals. The complicated fare structure, which I know exists and is the premise for the Eurostar franchise as one that must relate to this and I think closed can't, be right. I like the term economic rationalism, but as a basis for accurately forecasting revenues, you need a fundamental set of resilient assumptions, or you have false premises."</p>	
Central Govt Employee	1	9	<p>"What you described is what happened at BR and DfT. They took an eyes down, calculator appraisal and no doubt there was a powerful case along those lines. I don't dismiss it but those calculations never stand the test of time. Basically you can prove whatever you like, a lot of those are judgemental and determined by those that are looking for a certain solution. I am prepared to believe there was a rationale case, it just lacked any vision."</p>	

Data Quantification Approach

- Quantification of hypothesis-led data seeks:
 - to provide **evidence for the analysis and synthesis** stages of the project;
 - to provide **'headline' statistics** for the study outputs.
- Quantification represents a 'bolt on' to the qualitative analysis phase
- Main approach - Boolean type, to capture 'yes/no' responses or score the responses against a series of typologies.
- Enables generation of comparative metrics (e.g. '80% of all respondents thought context was a key issue in the planning, appraisal and evaluation of MUTPs')

Data Quantification Approach Cont'd

- For many questions, where no direct yes/no response can be recorded, a typology is required to enable quantification of qualitative data (transcripts), again in Boolean form (e.g. Question 2a in the HLQ asks *'In generic terms, what are the most important appraisal and evaluation criteria for MUTPs?'*)
- Quantitative Data can also be derived from the HLQ responses by creating a typology of appraisal criteria and recording the instances in which they are found within transcripts.
- This approach raises a number of key issues:
 - o an initial typology must be constructed which is applicable to all datasets;
 - o the scheme of quantification must allow for **emergent criteria** to be captured and indexed;
 - o the resulting process needs to be **iterative** - capturing emergent criteria will require previously analysed texts to be compared against the new criteria.