



## Coastal management and stakeholder engagement around nuclear new build in the UK

**EPSRC**

**Jenny Armstrong**



Supervisors: Prof. R. L. Wilby (Loughborough University)  
and Prof. R. J. Nicholls (University of Southampton)

[J.Armstrong@Lboro.ac.uk](mailto:J.Armstrong@Lboro.ac.uk)

# Aims...

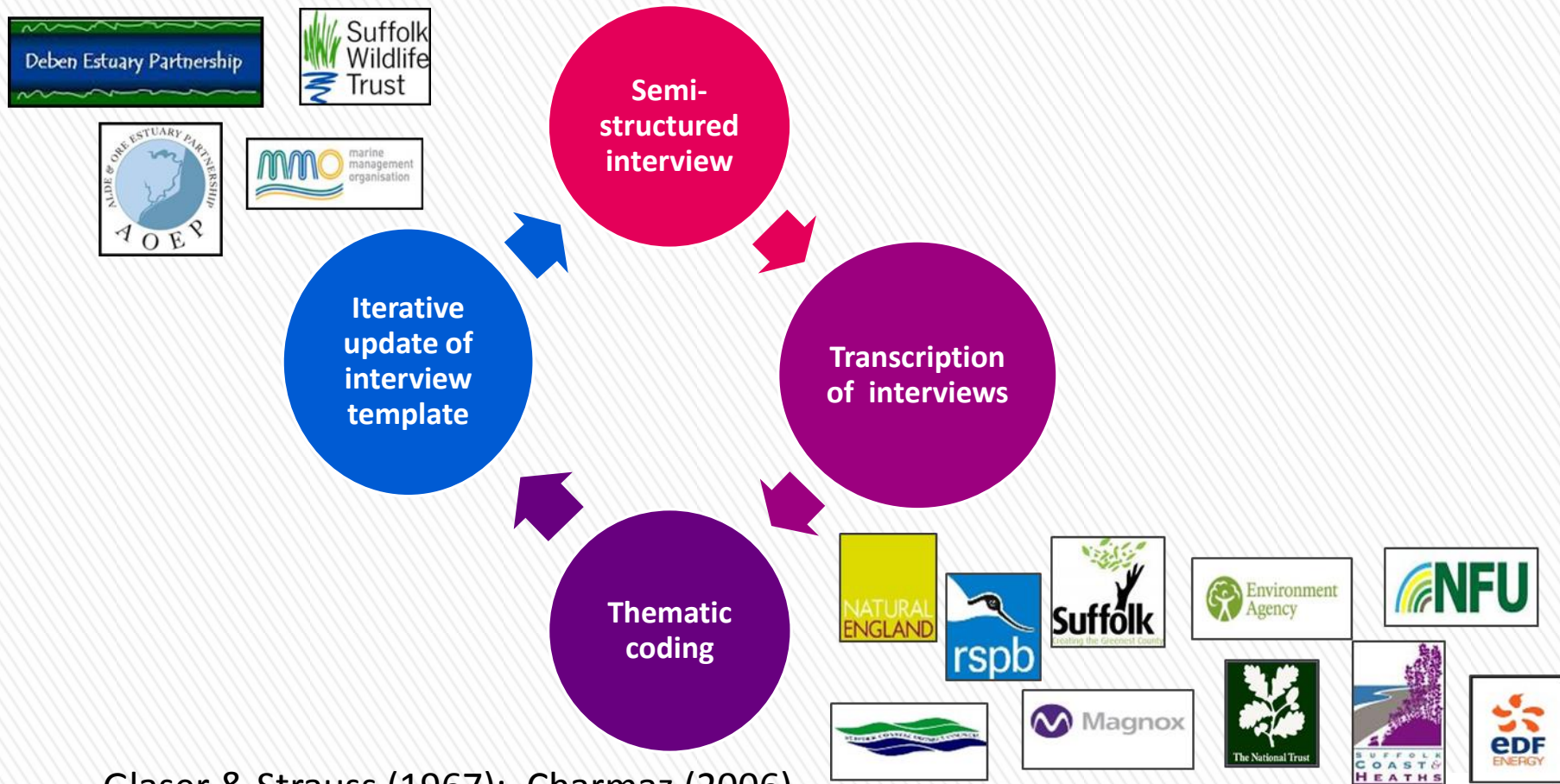
- » Research questions
- » Methodological approach
- » Key findings and the role of uncertainty
- » Feedback

# Research questions

- How has the coastline been managed historically?
- What are the primary threats/levels of risk posed by climate change?
- Who are the key stakeholders/what role do they have?
- How are coastal management decisions currently made?
- What factors govern the success of coastal management and climate change adaptation?

# Methods...

## Grounded Theory Methodology (GTM)



Glaser & Strauss (1967); Charmaz (2006)

# Results...

## Key Themes

- **Decision timescales**  
(Operational to aspirational/strategic)
- **Evolution of partnership working**  
(Silo to collaboration)
- **Levels of governance**  
(Coastal Cell to national frameworks)
- **Perceived responsibility for climate change adaptation**  
(Ownership of the issue)
- **Knowledge flows**  
(Open/permeable or closed)
- **Reactions to climate shocks**  
(Business as usual to regime change)

# Stakeholder groups...

- » Statutory agencies (competent authorities)
- » Non-statutory agencies (NGO's)
- » Local government
- » National government
- » Commercial entities
- » Community groups

# The 'Uncertainty Monster'...

» Part of the 'Wicked' problem of climate change

- Scientific
- Social
- Political
- Economic

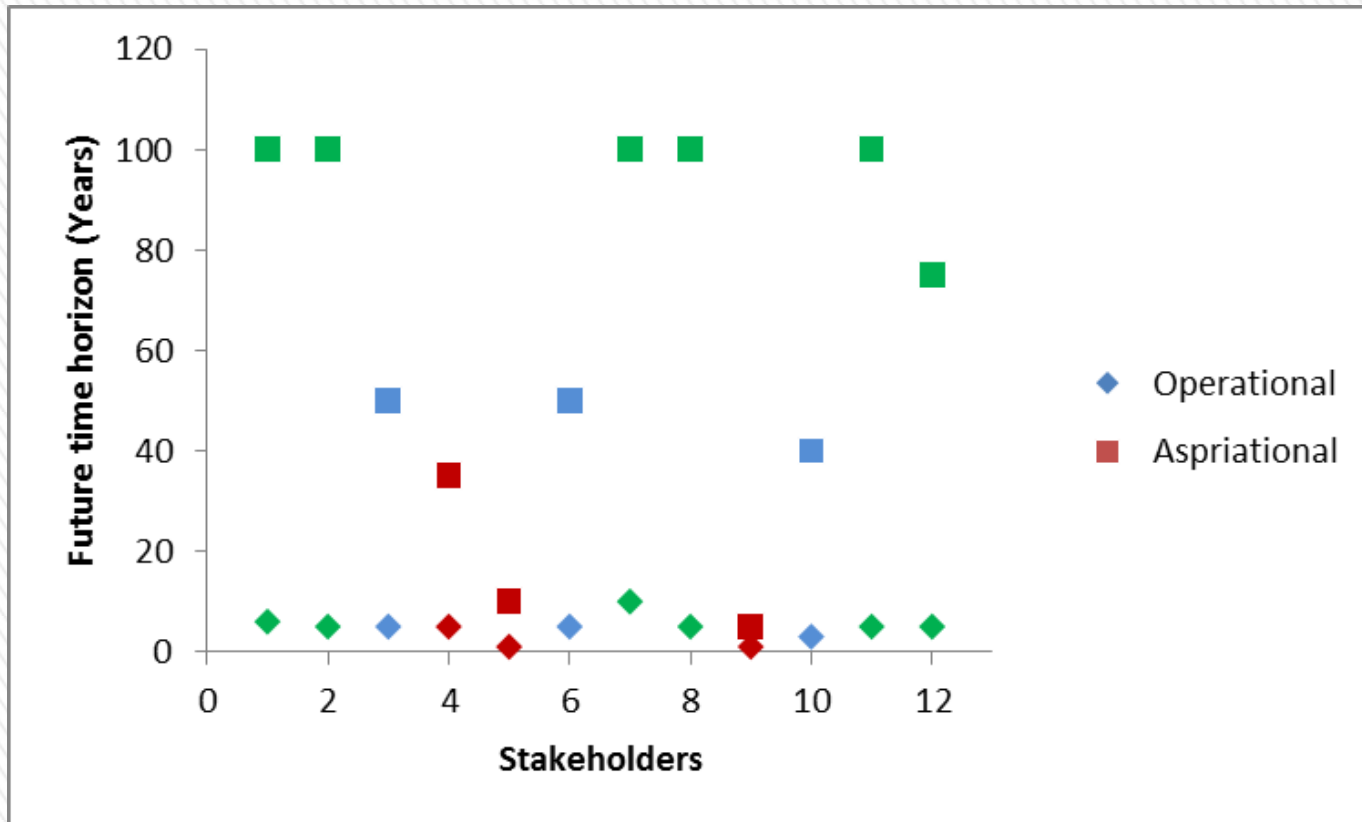
» Interlaced throughout each key theme

» Understanding uncertainty

(Curry & Webster 2011)



# Decision Timescales...



Statutory Agency, National Government, Commercial entity.

Non-statutory agencies, Local Government

Community groups

- Varied aspirational decision timescales
- Linked to knowledge flows



‘RSPB has got long term ambitions thinking in terms of **50, 70, 100+** [years]. The **only other party** that thinks in these timescales is us [EDF]. We both think in the same timescales but evolutionary path can be quite different ... driven by a certain large degree by UK policy’  
(EDF)

‘It is very difficult when a plan is created and **everybody is agreed** this is what we are going to do for the **next 5 or 10 years** and then suddenly after 6 months something like the government changes or something else and we are on a different track and I think that that just **confuses people and process sometimes.**’  
(National Trust)

# Evolution of partnership working...



Driven by...

- Change in approaches by statutory agencies (more consultative)
- Economic uncertainties driving collaborations

# Levels of governance...

- Most effective/appropriate scale?



- Sediment cell vs national/international frameworks – Scientific certainty
- Decentralisation/localism vs international – Politics

# Knowledge Flows...



- » Confidence in intellectual capital
- » Recognition and comprehension of uncertainty between stakeholders
- » Closely linked with perceived responsibility

# Perceived responsibility...

## Positionality

‘The National Trust as an **organisation that has responsibilities**. I would like to see us lead by example and show best practice, accept mistakes and generally does the right thing... I mean that is part of the role we are **there to be shot** at but I would like to think that we are a major land owner and we have the **ability to look at it in a different way** to private land owners or individuals.’

(National Trust)

‘People who are exactly the same age take completely **polarised views** about the future. I have got **grandchildren** so it is easy for me I can see 50 years hence easily because I look at those girls and I think they'll be 60 in a jiffy. 50 years from now I will be long dead but they will only be 60 they will be younger than I am now and yet some people think that 50 years is a long time.’

(SCAR)

# Reactions to climate shocks...

Business  
as usual



Regime  
change

- » Willingness for regime change but uncertainty can undermine
- » Legacy of an extreme event
- » Uncertainty of return periods

In response to the storm surge of 2013/2014...

‘This **young people** in their 40’s, the two sets of parents with younger children. They have **stepped up to take over** the resident’s association and it is because of the surge’

(SCAR)

‘If you cannot defend it all then what are we going to do? We need a different approach and that is about adaptation so I think that for me it is that whole idea that suddenly adaptation has become better understood. **At least the need for it not actually how we do it!**’

(National Trust)

# Questions/comments/experiences...



Thank you for listening



## References...

Charmaz, K. (2006) *Constructing Grounded Theory: A practical guide through qualitative Analysis*. London: SAGE

Curry, J. A., & Webster, P. J. (2011). Climate science and the uncertainty monster. *Bulletin of the American Meteorological Society*, 92(12), 1667.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Chicago: Aldine.