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Talking to sceptics about climate change: discourses, deliberation and the curious case of 1598

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What was this project about?

Building on pilot study (2002-2003) funded by the ESRC: resulted in 'Rapid Climate Change and Society: Assessing Responses and Thresholds', Risk Analysis 25(6): 1443-1456

Basic premise is that public responses to climate change matter

Public responses can facilitate adaptation

- e.g. willingness to reduce water usage
- or willingness to vote in favour of/accept adaptive measures

Responses can also be maladaptive

- e.g. increased water use on parched gardens
- This can undermine ability of governments to act

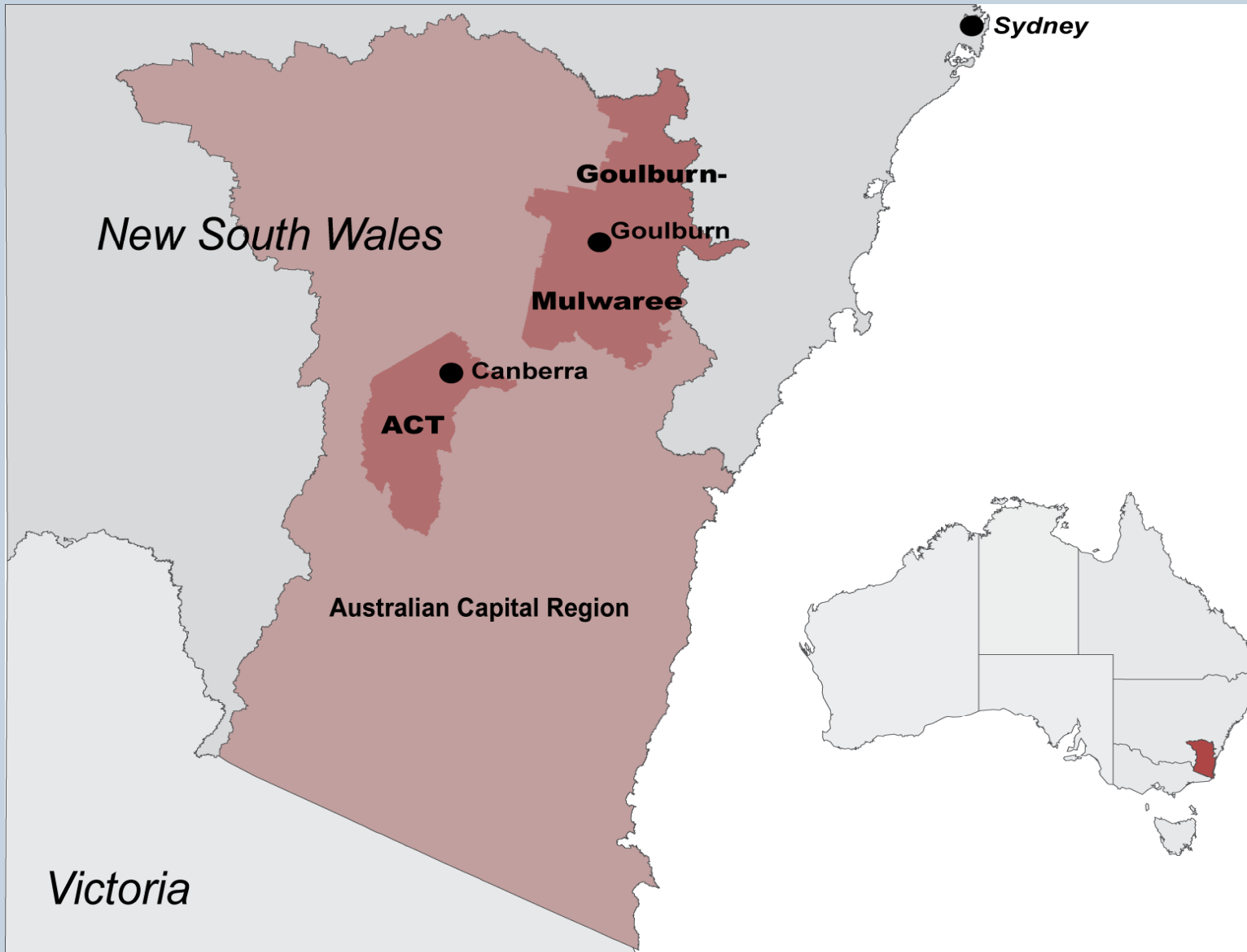
**Type of response will vary with impact type and intensity:
as well as political context/recent events**

But how do you gauge potential responses?

‘To make sense of the significance of climate change and its potential effects, some view needs to be taken about the types of societies and economies that they will have impacts upon. While the long view may come naturally to climate modellers, it throws up perplexing challenges for social scientists. A century may seem like a plausible time horizon for a climate scenario but, to take one example, most economic forecasts stretch little further than 3-5 years.’ Berkhout and Hertin 2000: 165.

SO...we can ask people what they think they would do: we can look at past reactions to events; and/or we can explore reactions from individuals when information about projected future climate is provided.

We decided to try the latter...



1. Development of climate scenarios

Two case study areas: ACT & Goulburn-Mulwaree

- Three Emissions Trajectories:

- Low: 450 ppm CO₂ equiv concentration by 2100
- MEDIUM: SRES A1B
- HIGH: SRES A1FI

- Scenarios based on 2050, but timeslices provided for:

- 2020
- **2050**
- 2070
- **2100**

This process took 18 months: was an interesting experience in multi-disciplinary communication and compromise...but that's another story

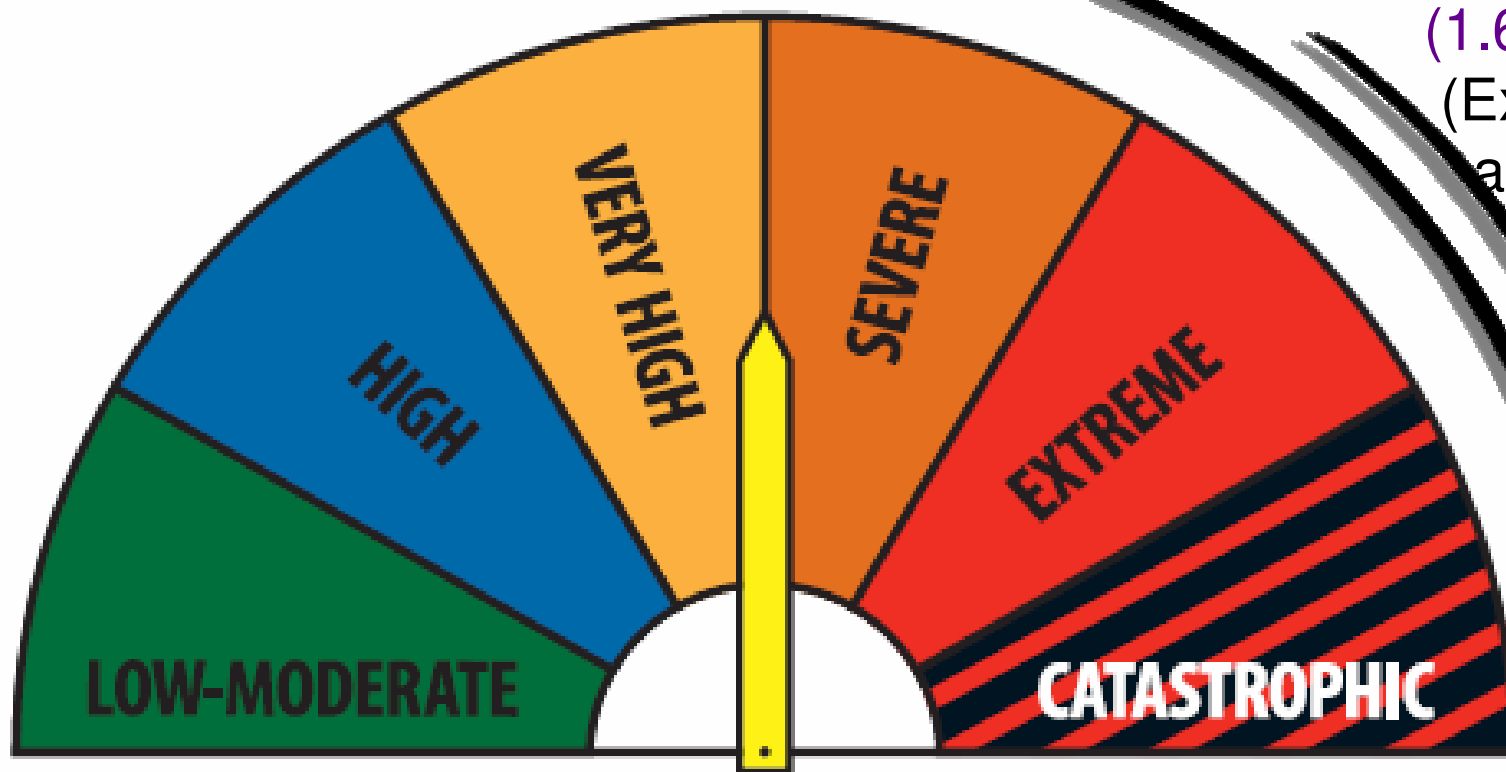
Fire Risk: High Emissions Scenario Scenario in 2050

Frequency of Fire Events <small>(average number of years between)</small>		
	Extreme Events	Catastrophic Events
Baseline	One every 6.5 Years	>33 Years
2050	One every 1.2 Years	8 Years

Baseline

34 days/Year (17)
(very high risk and greater)

5 days/Year (1.6)
(Extreme risk and greater)



2. Scenario Based interviews

So how do people react when they see these scenarios of their region?

Recruitment

Sent out 2300 letters to ACR households selected randomly from the electoral roll: also appearances on local radio and a stall in Goulburn

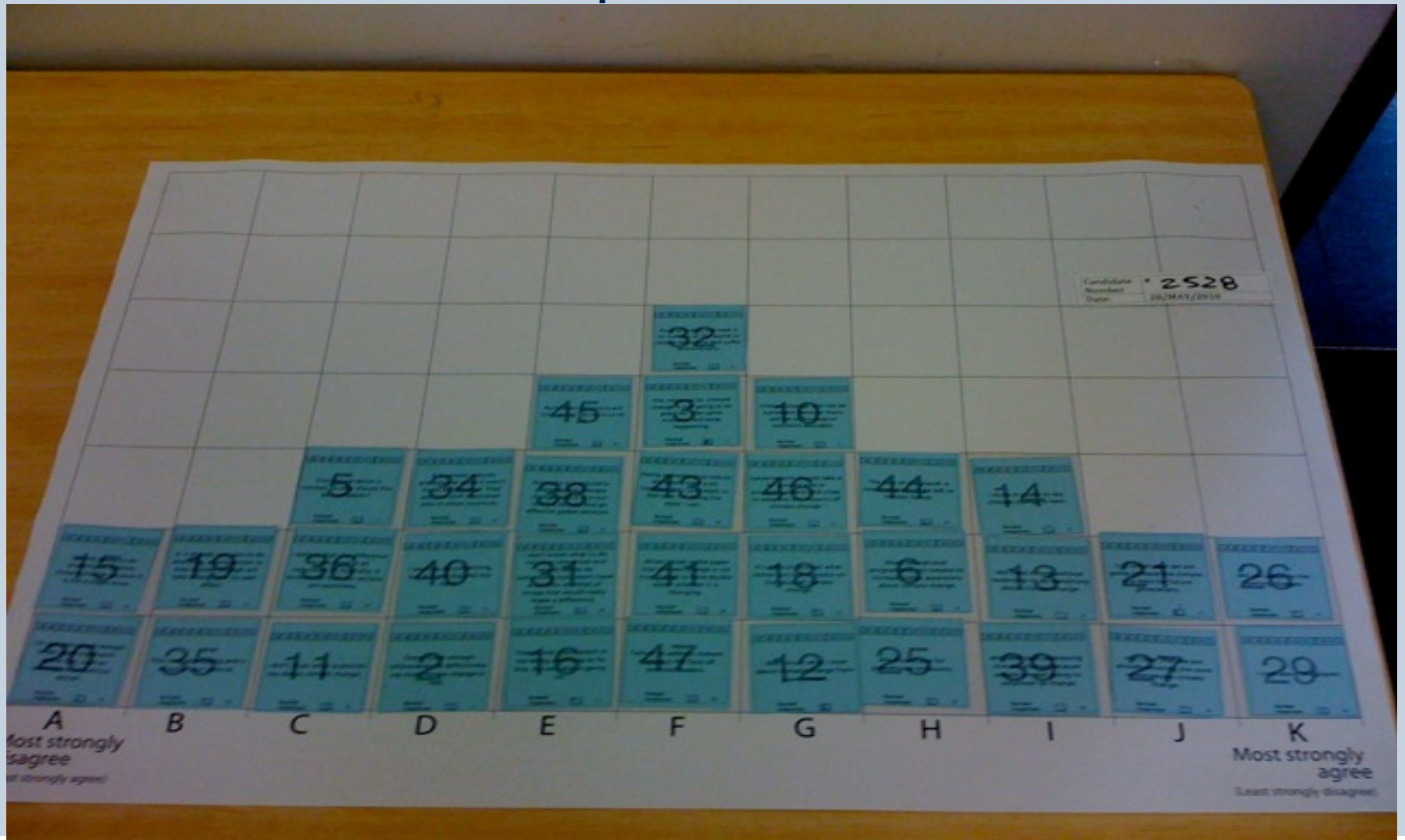
A total of 262 people responded and registered an interest in participating (188 from the ACT, 74 from the GMS).

Interviews

103 individual interviews were completed, each lasted 2 hrs +. As well as qualitative data (recorded), collected data on changes in response between scenarios.

- Baseline survey using Q methodology; Policy Preferences; Willingness to Pay;
- Show Low Emissions scenario: repeat Q method and policy preferences;
- Show Medium then test as above: show High then test as above;
- Final qualitative responses then WTP exercise again.

This is what a completed Q sort looks like



3. Four Day Deliberative Process

Simon is a political scientist: spent over a decade working on ideas of 'deliberative democracy': wanted to test difference between impact of interviews and impact of deliberation.

Aimed at participants (20 from each case study); got 35 in total.

- Did Q sort and policy preference exercise at the start of day 1;
- 2 days of presentations and deliberations on the issues behind the scenarios;
- 1 day of deliberation & developing policy recommendations for their region (ACT & GMS separate).

Analysis of Process

- Inverted factor analysis
 - Discourses reveal 'typical' responses
 - Provides a 'map' of positions
 - Qualitative data analysis

Why the interest in sceptics? From a social science perspective

“What sceptics believe is an important question, because their voices are heard in governments, editors’ offices, boardrooms, and - most importantly - the street.” (Black, 2007: 1)

- Pervasive e.g. 10% of Australians and 25% of Brits do not believe climate is changing in a significant way.

Appears in the literature, explored as:

- an individual disposition and varied reaction to the confronting realities of climate change (Norgaard 2006);
- a discursive trope that has waxed and waned in the public sphere (e.g. see Boykoff 2007);
- an organized social movement, particularly in the USA (see Jacques 2006).

Why the interest in sceptics? From a social science perspective (2)

“From my perspective, treated like a cognitive aberration, with articles on how to get rid of it e.g. “a non-trivial modicum of doubt and scepticism linger in various sectors of society.” (Moser 2010: 32)

So what is wrong with being a sceptic?

- Developing “intelligent doubts about one's own beliefs and ways of thinking” (Hetherington 2009: 39) has been a cornerstone of centuries-old ontological and epistemological debates.
- Now, another way of saying ‘don't believe/not convinced’: and often used inter-changeably with denial/denier

Why the interest in sceptics? From a policy perspective...

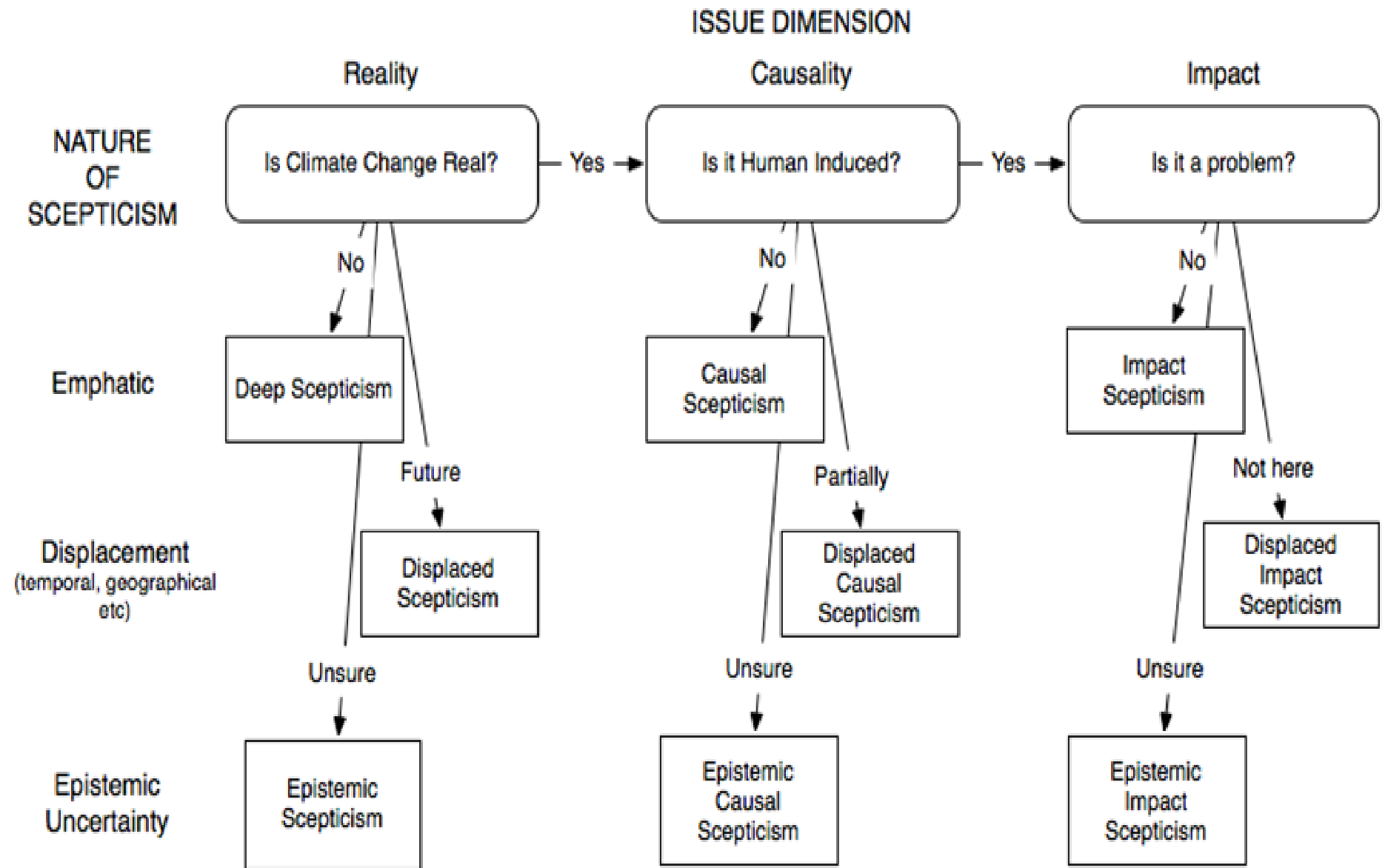
Stoll-Kleemann et al (2001: 115) argue that:

“both a coherence and a rationality to dissonance and denial [that] will not make it easy for democracies to gain early consent for tough climate change mitigation measures. Indeed, this analysis suggests a level of sophistication and cohesion in socio-psychological reactions that will prove difficult to alter, unless very wide-ranging policy responses are integrated over a prolonged period of time.” (Own brackets)

Why the interest in sceptics? From our project perspective...

- Was not just the 'usual suspects' that agreed to be involved
- Sent out an initial questionnaire with recruitment letter and there was a wide variety of people who were unsure/said they did not know/did not believe etc
- 10 people identified themselves as a 'climate sceptic': 4 said it is not happening and never will.

But 44/103 sat somewhere on the following diagram...



This isn't quite enough though, in terms of talking about 'what sceptics believe'

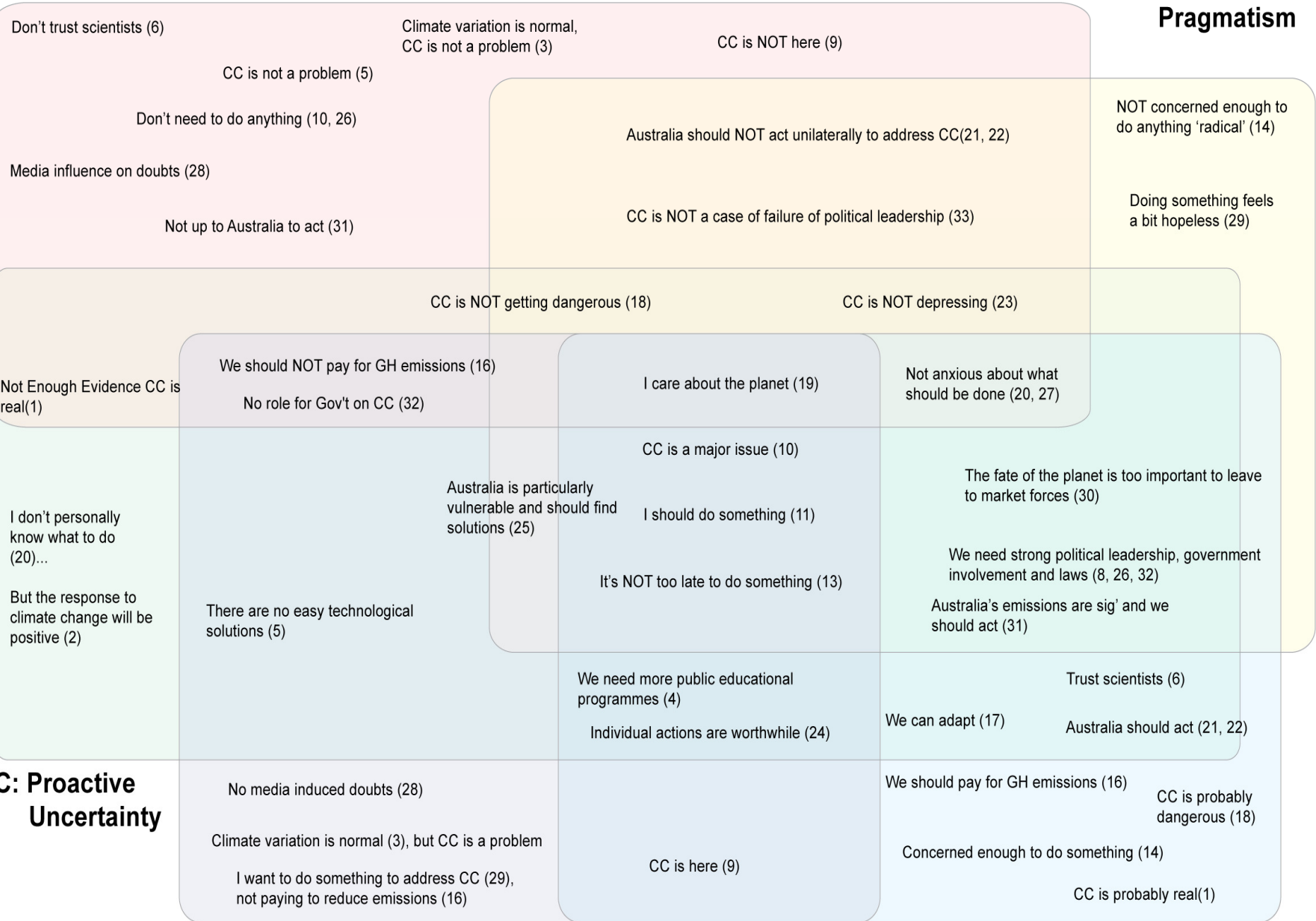
Analysis of Q sorts followed established Q methodology approach i.e. performing an inverted factor analysis (Principle Components, followed by Varimax rotation) on Baseline Q sorts of the 44 sceptical individuals identified.

The resulting five discourses are:

- A: Emphatic Negation
- B: Unperturbed Pragmatism
- C: Proactive Uncertainty
- D: Earnest Acclimatisation
- E: Noncommittal Consent

A: Emphatic Negation

B: Unperturbed Pragmatism



C: Proactive Uncertainty

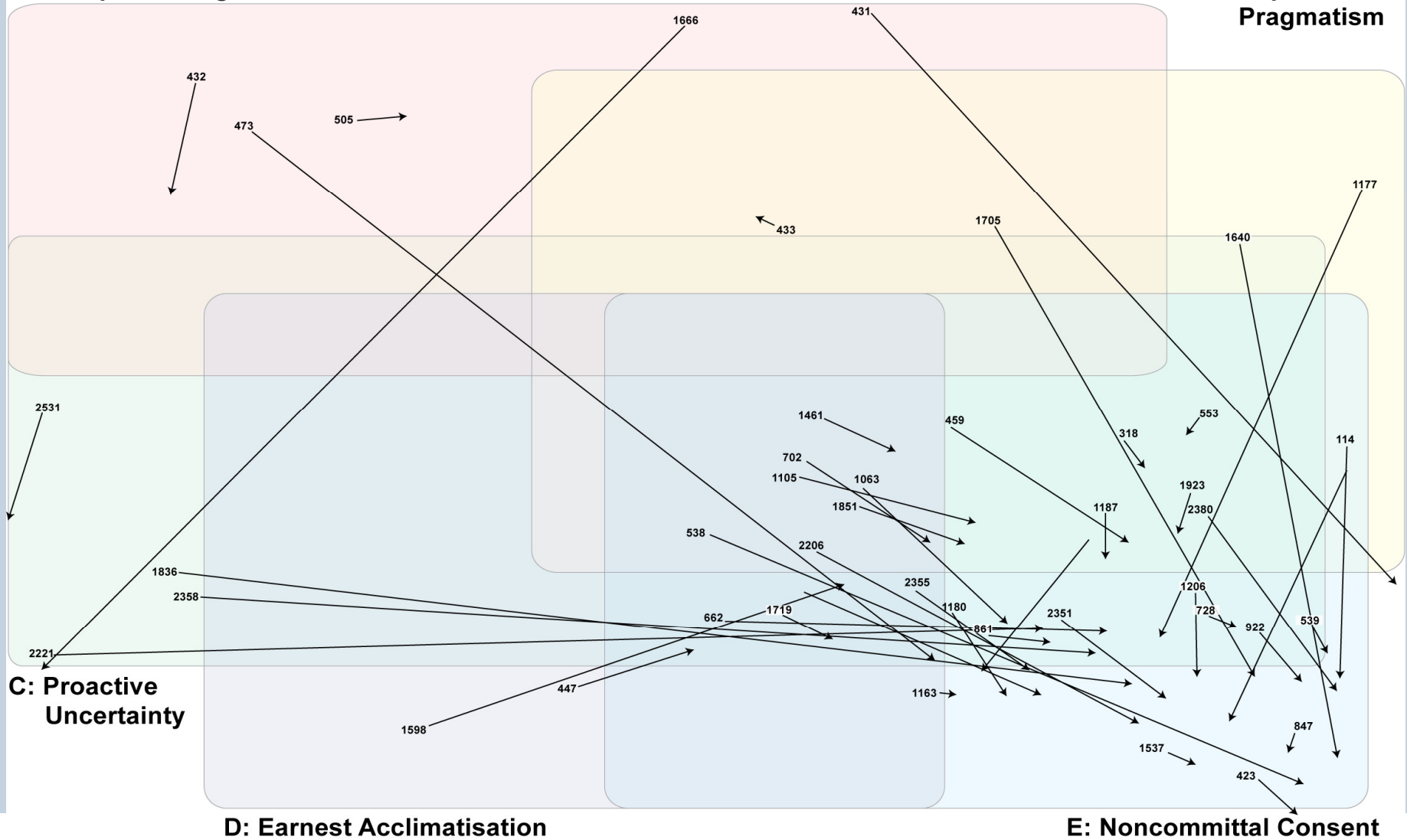
D: Earnest Acclimatisation

E: Noncommittal Consent

Impact of scenario interviews on sceptics

A: Emphatic Negation

B: Unperturbed Pragmatism



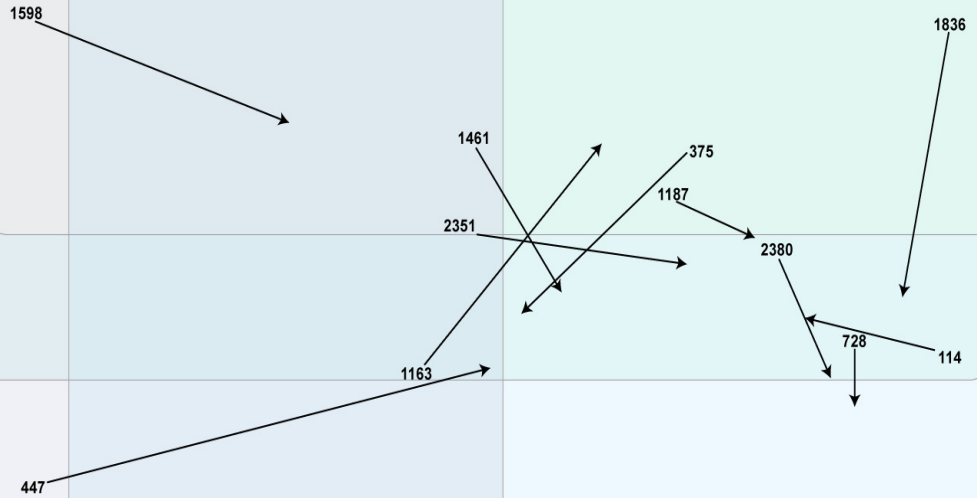
A: Emphatic Negation

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E: Noncommittal Consent



Some became more prone to uncertainty (e.g. 1631)

“With the flexibility of the models...I think that sort of creates some of the uncertainty because there is so much room to shift around in there. I think it makes it very hard for people to collectively say ‘bang, that's what's happening.’”

Others had aspects of their scepticism challenged e.g.

- 447 moved from Earnest Acclimatisation towards Noncommittal consent. She stated at the end of the process:

“I'm one that has had reasonable doubts, but he [one of the speakers] put foolproof arguments, so more or less a lot of doubts have gone.”

- 1187 moved towards discourse E and become more committed to the need to educate others about the issues:

“I'd like to see that the education system starts to pick this up and starts teaching it within the school system so that the generation that is going to come already understands exactly what is going to happen.”

What about the ‘Emphatic Negators’?

The last Figure does not show of the 13 ‘sceptics’ who started the forum, only 11 finished. By the end of day 1, the 2 individuals uniquely loaded onto discourse A had left.

WHY?

Did not come along to deliberate and learn!!

Emphatic Sceptic: “*What is the ideal global temperature?*”

Other Participant: “*That’s a tricky question.*”

Emphatic Sceptic: “*It’s an impossible question: it’s meant to be.*”

- The forum was set-up so groups fed questions back to speakers: this meant their voices were marginalised.
- There were ‘rules of conduct’ they did not agree with.
- Felt very confronted by people willing to challenge them.

‘The curious case of 1598’

- Female; late 50s; husband involved in online climate sceptics forums.
- Moved from discourses B and D to C and E post-deliberation.
- Used some standard (but incorrect) climate sceptics arguments to explain her position.

“Has anyone heard of the Argo Buoys? Now they seem to indicate a cooling in the temperature of the ocean as opposed a warming and also the graph that he [one of the forum presenters] showed, of the ice to 2007, since then the satellites have shown that the ice has increased quite a bit. I'm not saying that there isn't climate change, I totally believe there's climate change. I guess I question what percentage of is anthropogenic CO₂, manmade.”

- At the end of day 3, gave a speech about how she appreciated people listening to ‘a climate sceptic’, stating that she still was one and that she had not changed.

So what can we take from all of this?

- From a deliberative democracy perspective, lot of focus on including ‘diversity and difference’ into deliberation: but are there limits to how different participants can be?
- Definite questions over arguments that regionally-focused scenarios engage with people in a way that makes climate change more real, and with lasting impacts.
- From a research perspective, more question arise e.g.
 - Do the 5 discourses suggest some ways of tailoring climate change communications to particular groups?
 - If so, how would one identify these groups amongst the population at large: and how would one test the various treatments?
 - Do these discourses appear in other settings within and outside Australia?
 - What happens to those people who take part in deliberative forum, once the formal process is over?

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