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Making sense of climate change adaptation

Climate Adaptation National Research Flagship

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National Research
FLAGSHIPS
Climate Adaptation



The Captain of the Concordia:

Was a rascal and should have gone down with the ship?

OR

Did the very best he could under the circumstances?

Outline

- Background to “sensemaking”
- Data collection and analysis processes
- Making sense of the survey
- Insights, blind spots and implications

Sensemaking

- Reduce complexity and create order
- Orients us to the world and to action
- Gives rise to frames and framing
- Social and interactive process
- Precursor to action

- Captain of the Concordia

In two... Dual process theory

- **Common sense** processes
- **Theory in use (?)**
- One fast, frugal and subconscious to a high degree

Logical discourse

word expertise
s, rational

Espoused theory (?)

man 2011 Thinking fast and slow

Social change requires coordinated collective action

- Markets
- Regulations
- Beliefs / Culture

Just because you can't see it, doesn't mean it isn't there



Cynefin framework

Requires a multiple perspectives approach



UNORDERED

ORDERED



Snowden and Boone, 2007

The survey

- A familiar social setting (discussion in a lift)
- Narrative entry



Respondent role	Count	%
Scientist / Academic	182	20%
Government	258	28%
Public	351	38%
Other	137	15%
TOTAL	928	100%

Instrument overview

1. Free listing	Word associations, social representations
2. Narrative setting	Narrative, what they said
3. Moderators	Respondent interpretation, meaning
4. <i>General research questions</i>	<i>Associated relationships</i>
5. Socio-demographics	Associated relationships

The data – Level 1

Different perspectives

The
speaker

Who?
Where?
What do they do?

Age
Gender
Location

What they
said

Word association
Narrative

Deeply held beliefs
Every day discourse

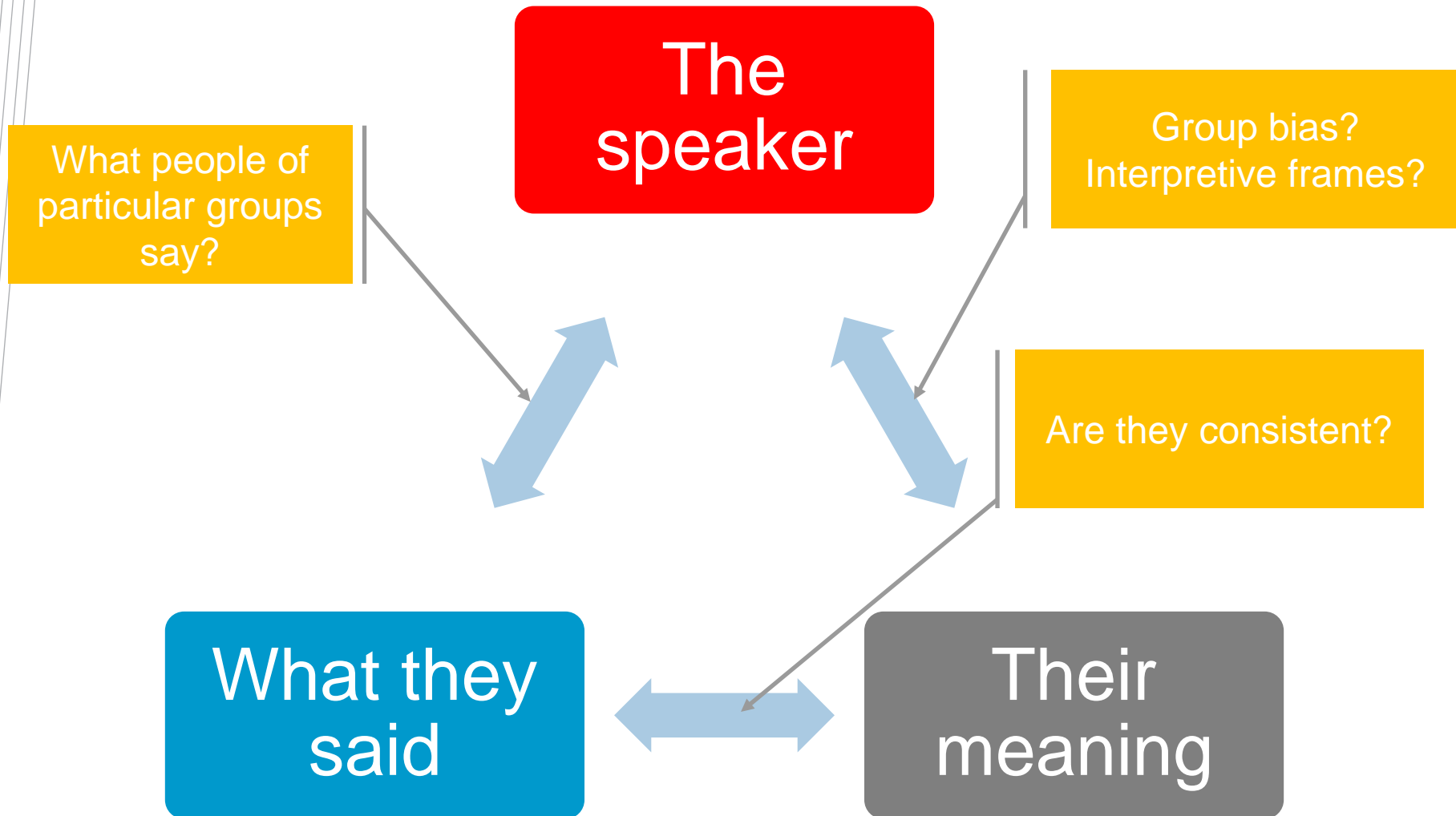
Their
meaning

Emotion
Roles and players
Interpretations

How were you feeling?
What was important?
Who was doing it?



The data – Level 2 Interactions

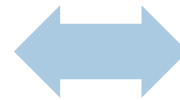
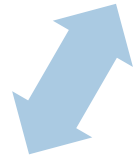


What they said

The
speaker

What they
said

Their
meaning



Naïve analysis

How people were defining and contextualizing climate change?

OIL

Climate change by country (n=630) WORD ASSOCIATION

**Energy, flooding,
sea-level rise, polar
ice, adaptation**

**Tax, carbon,
ozone,
disasters,
hotter**

23%

CANADA

AUSTRALIA

2

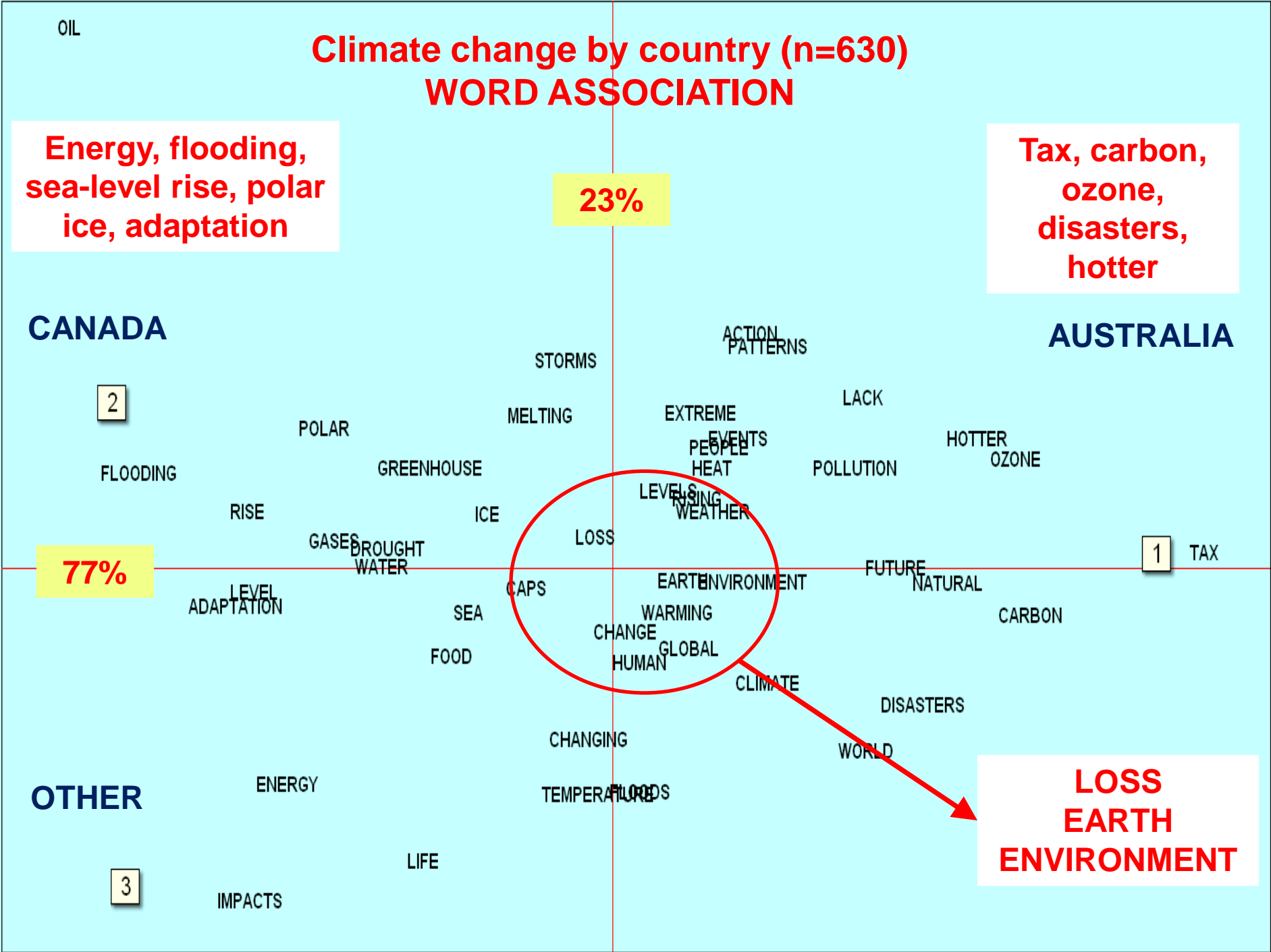
1

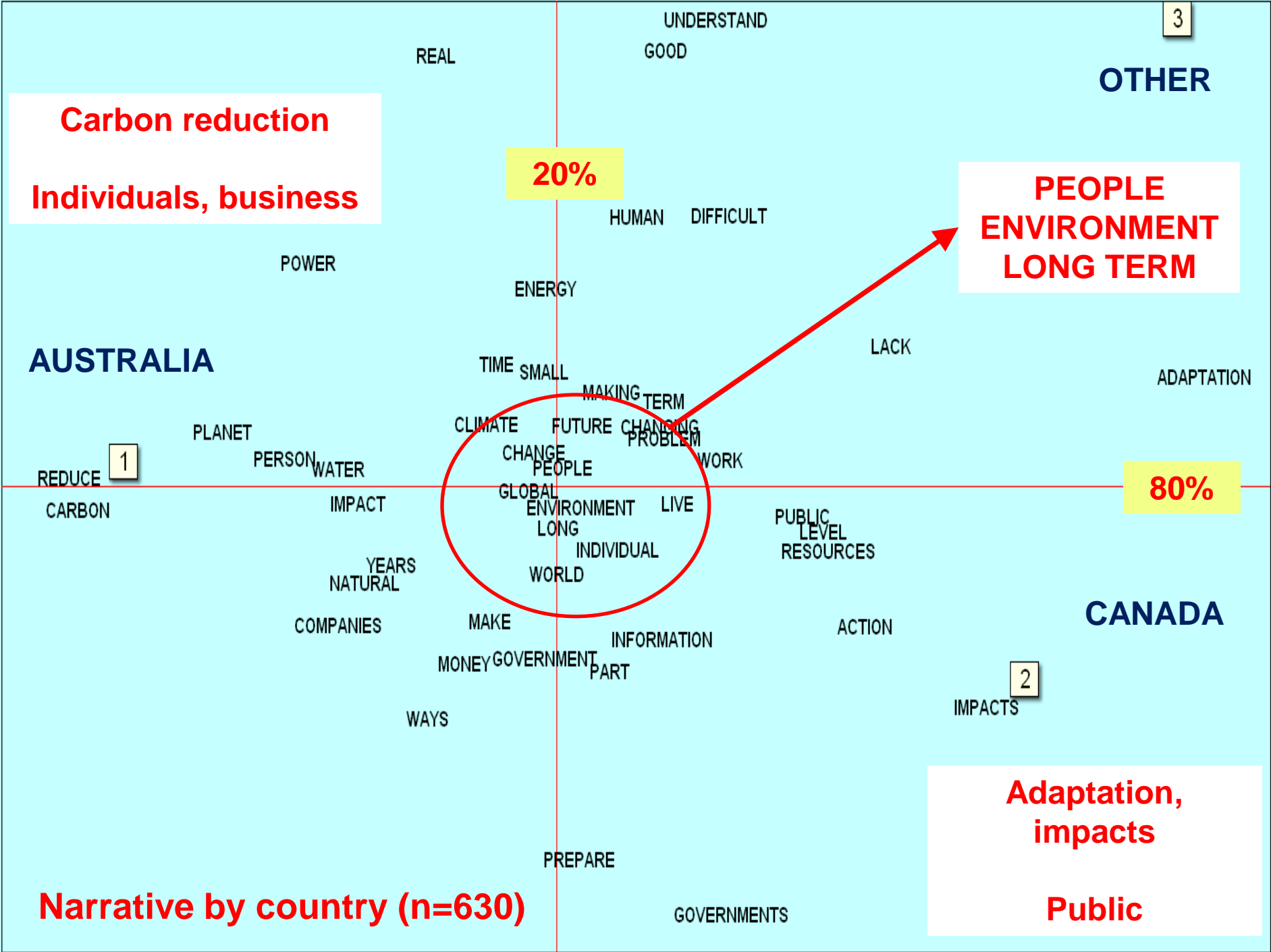
77%

OTHER

3

**LOSS
EARTH
ENVIRONMENT**





3

OTHER

Carbon reduction

Individuals, business

20%

PEOPLE
ENVIRONMENT
LONG TERM

AUSTRALIA

1

80%

CLIMATE CHANGE PEOPLE GLOBAL ENVIRONMENT LONG INDIVIDUAL WORLD

CANADA

2

Adaptation,
impacts
Public

Narrative by country (n=630)

GOVERNMENTS

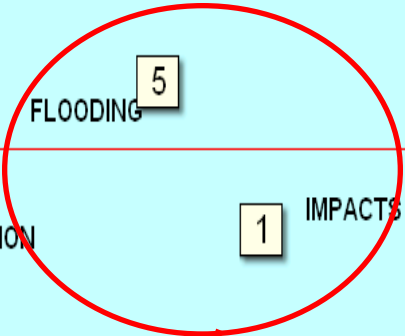
Respondent role – climate change WORD ASSOCIATION

- 1 = Govt
- 2 = Gen public
- 3 = Rural res
- 4 = Urban
- 5 = Scientist
- 6 = Other
- 7 = Community
- 8 = NA

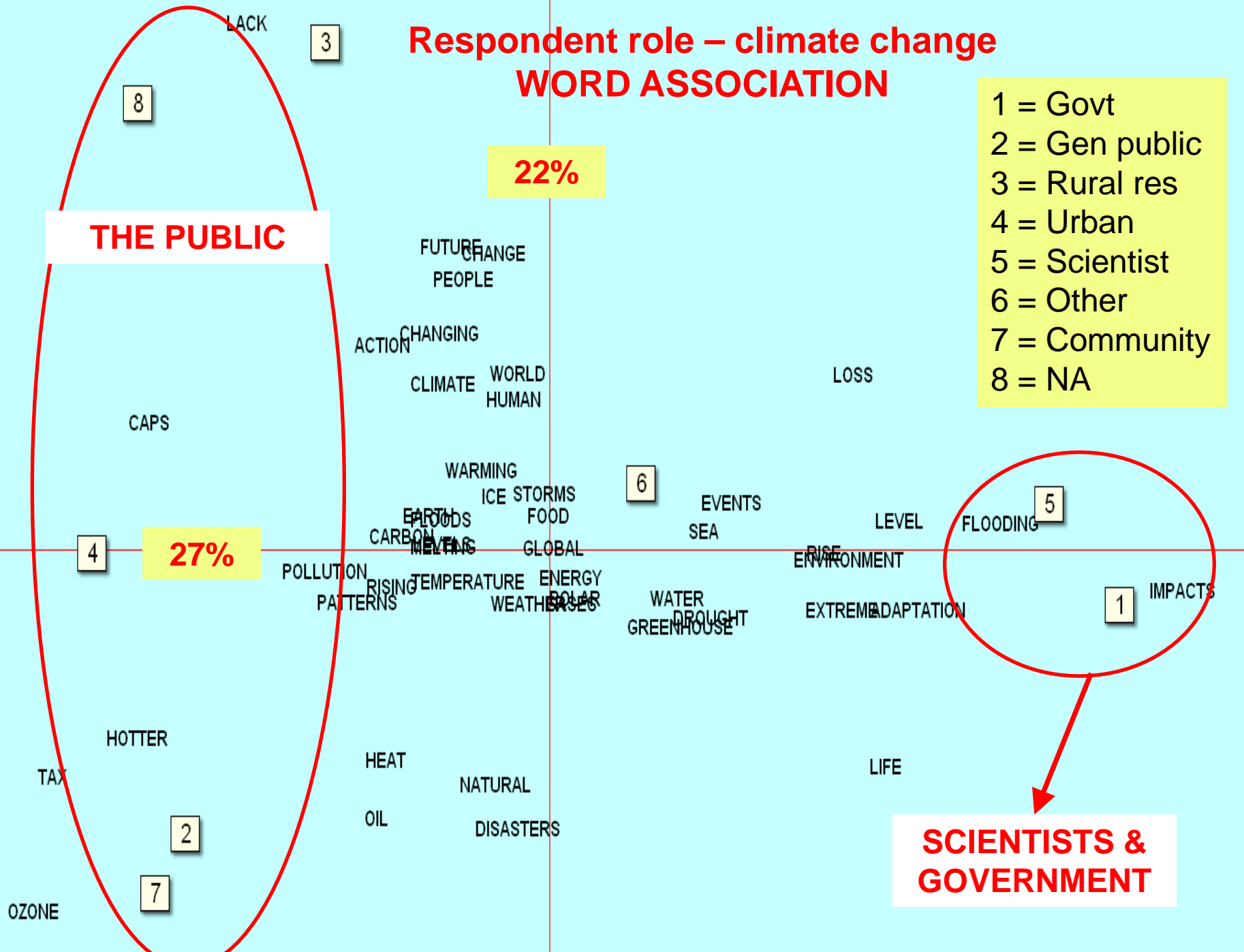
22%

THE PUBLIC

27%



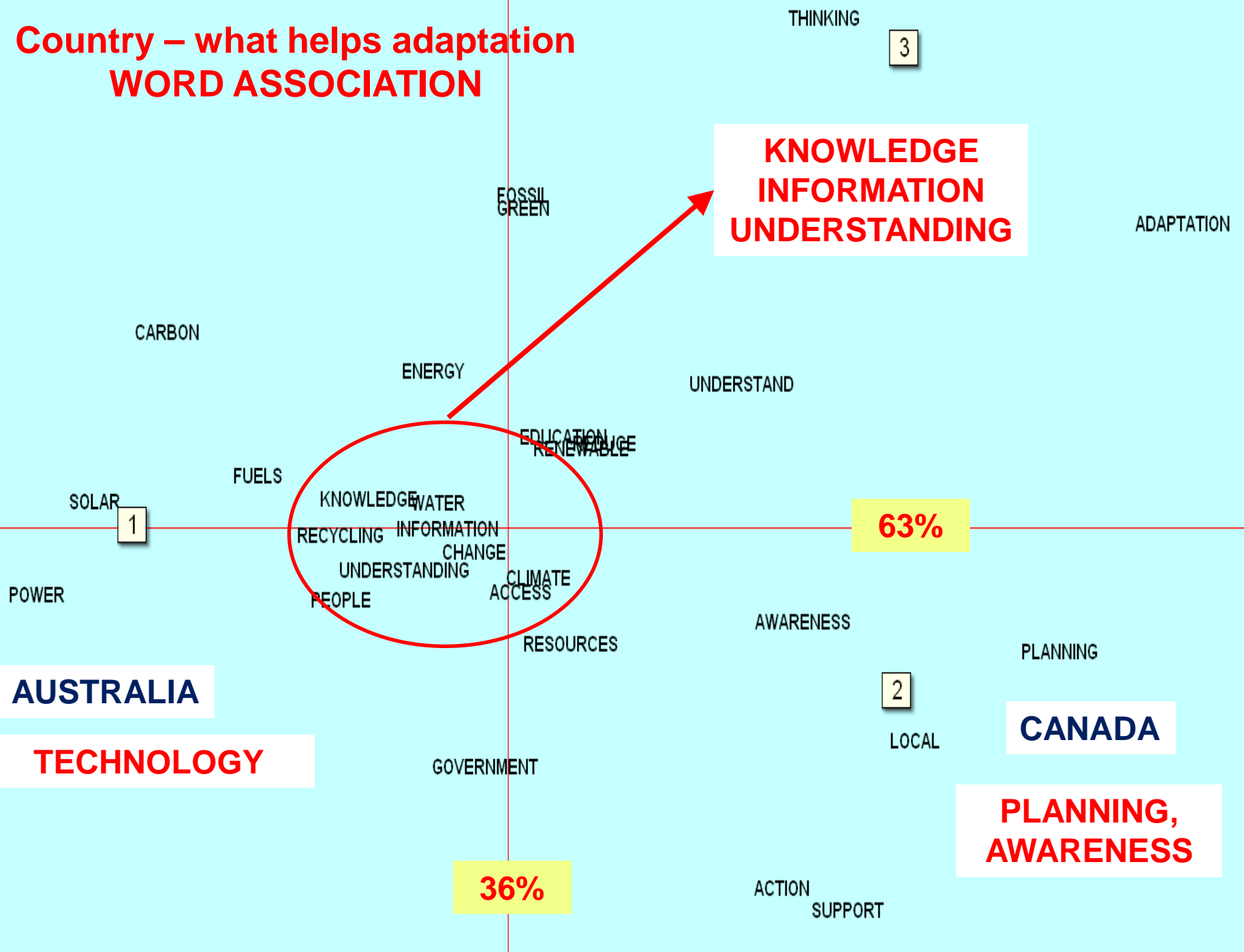
SCIENTISTS &
GOVERNMENT



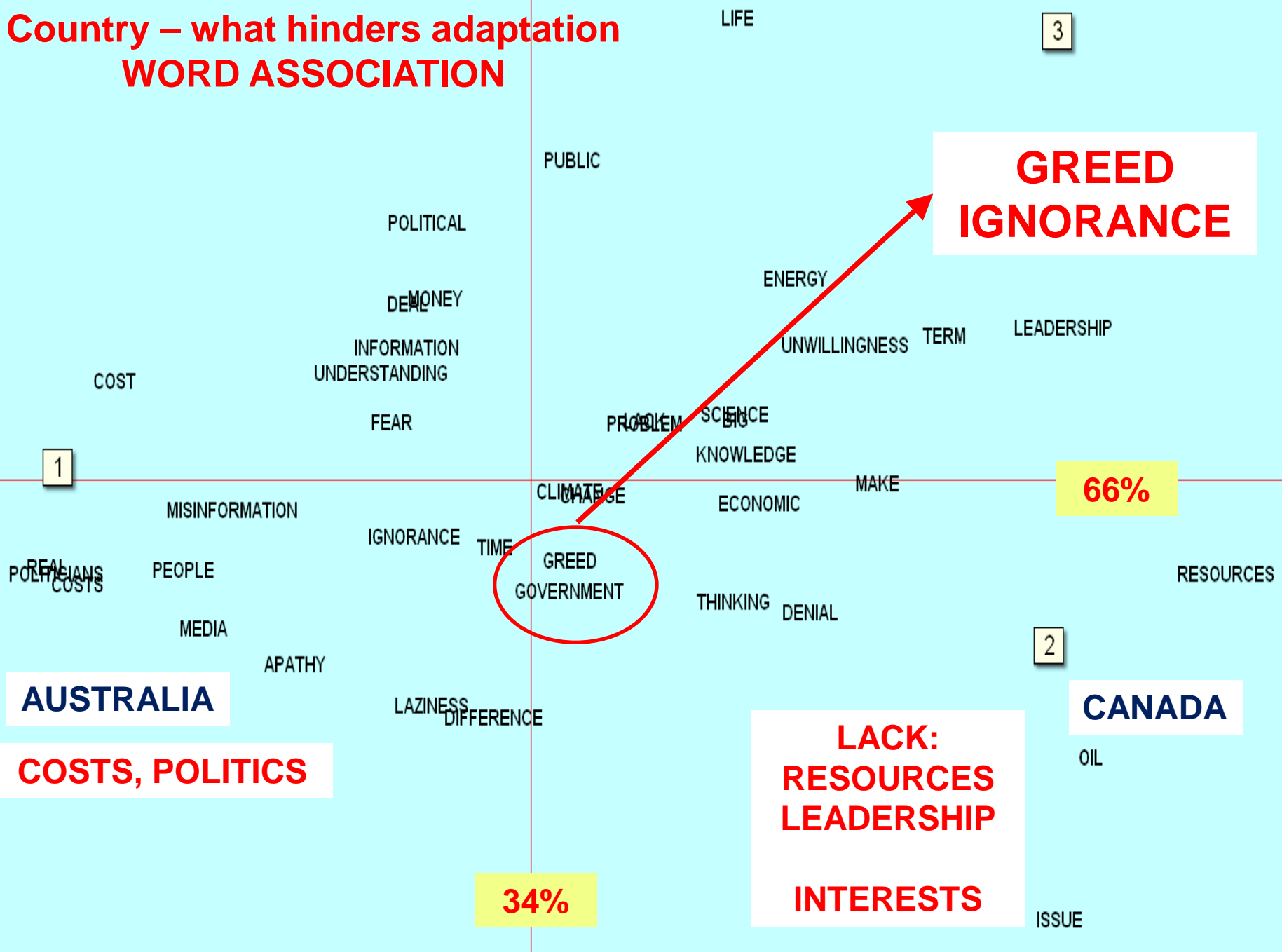
Naïve analysis

What practitioners or the public think are the main barriers and enablers of climate adaptation?

Country – what helps adaptation WORD ASSOCIATION



Country – what hinders adaptation WORD ASSOCIATION



IF AT FIRST
YOU DON'T SUCCEED
- CALL AN AIRSTRIKE

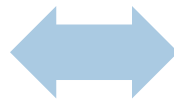


The data

The
speaker



What they
said



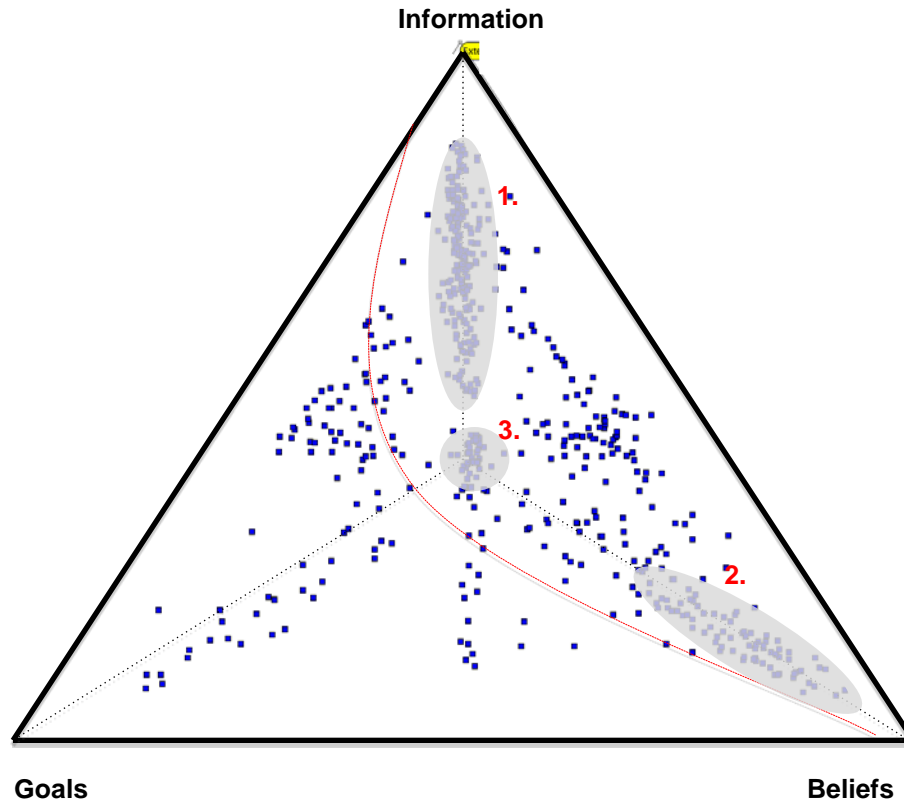
Their
meaning



Polarity impact dashboard



In your response to what extent did the following play a role

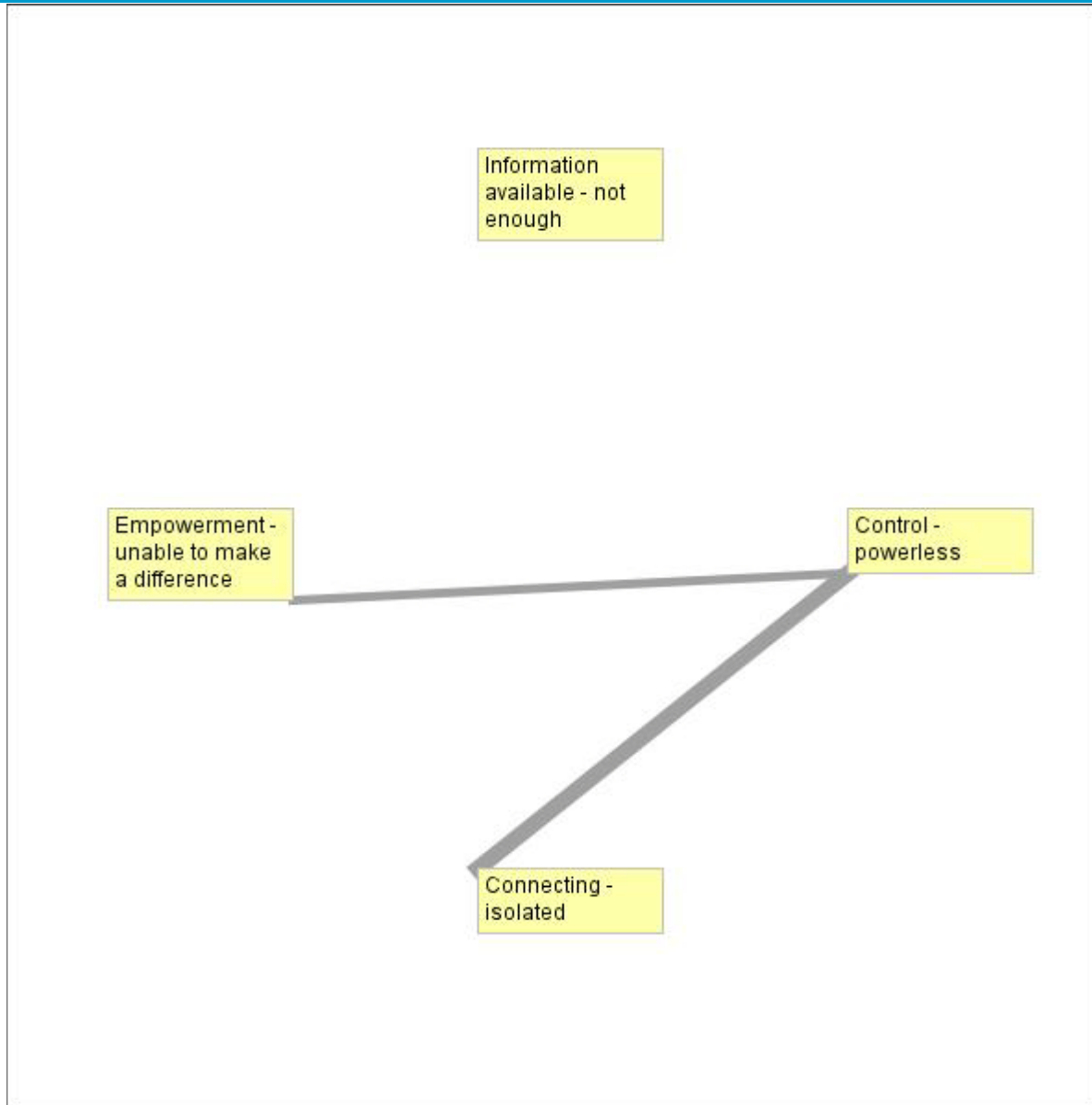
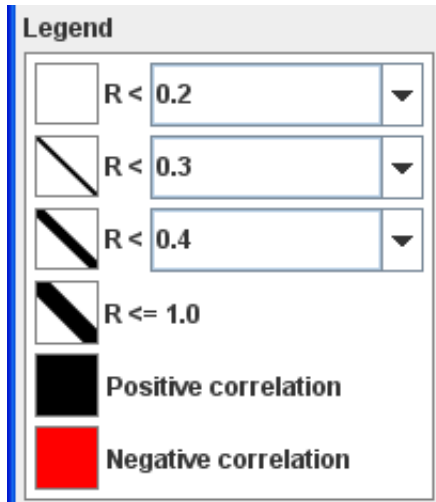


Clusters:

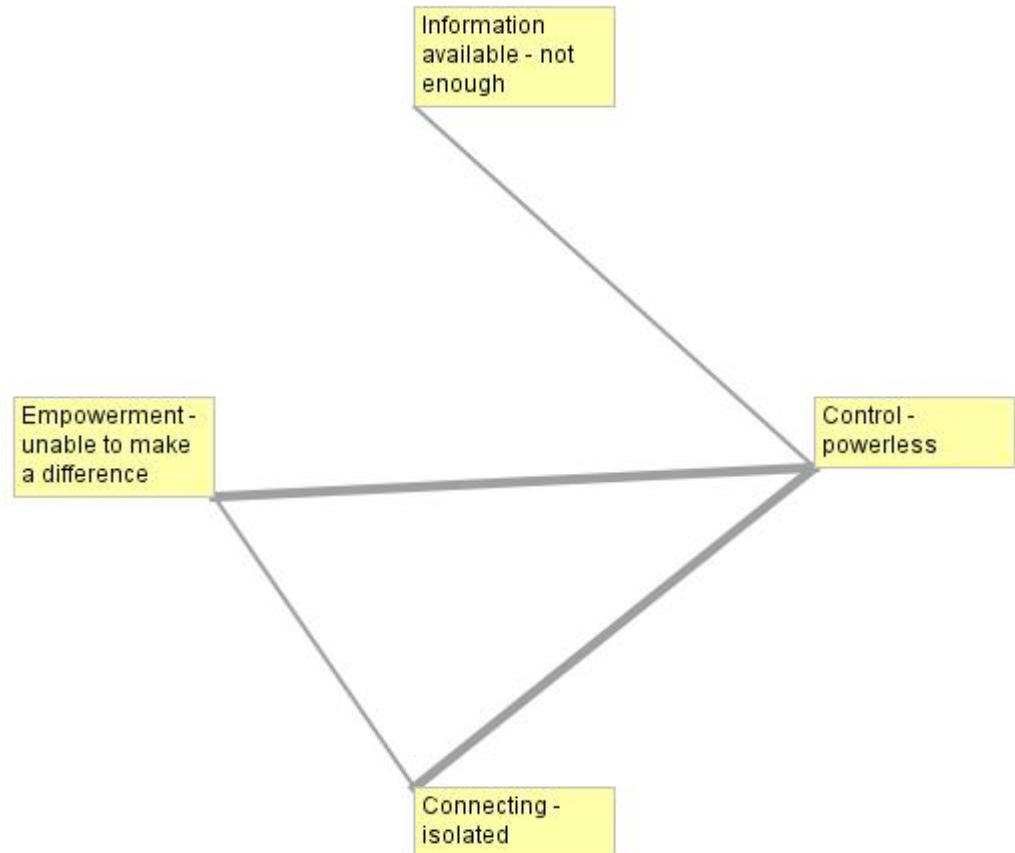
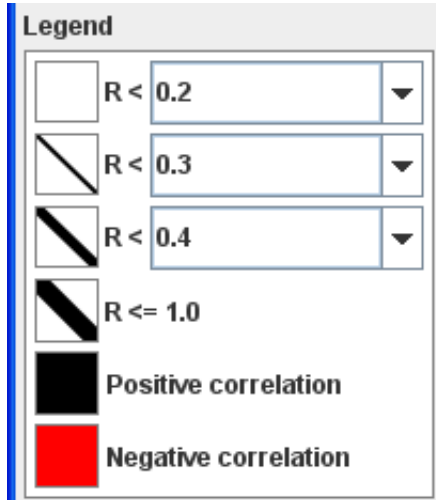
- 1 – Information dominated
- 2 – Beliefs dominated
- 3 – All factors important

All respondents n = 587

Public getting ready for change









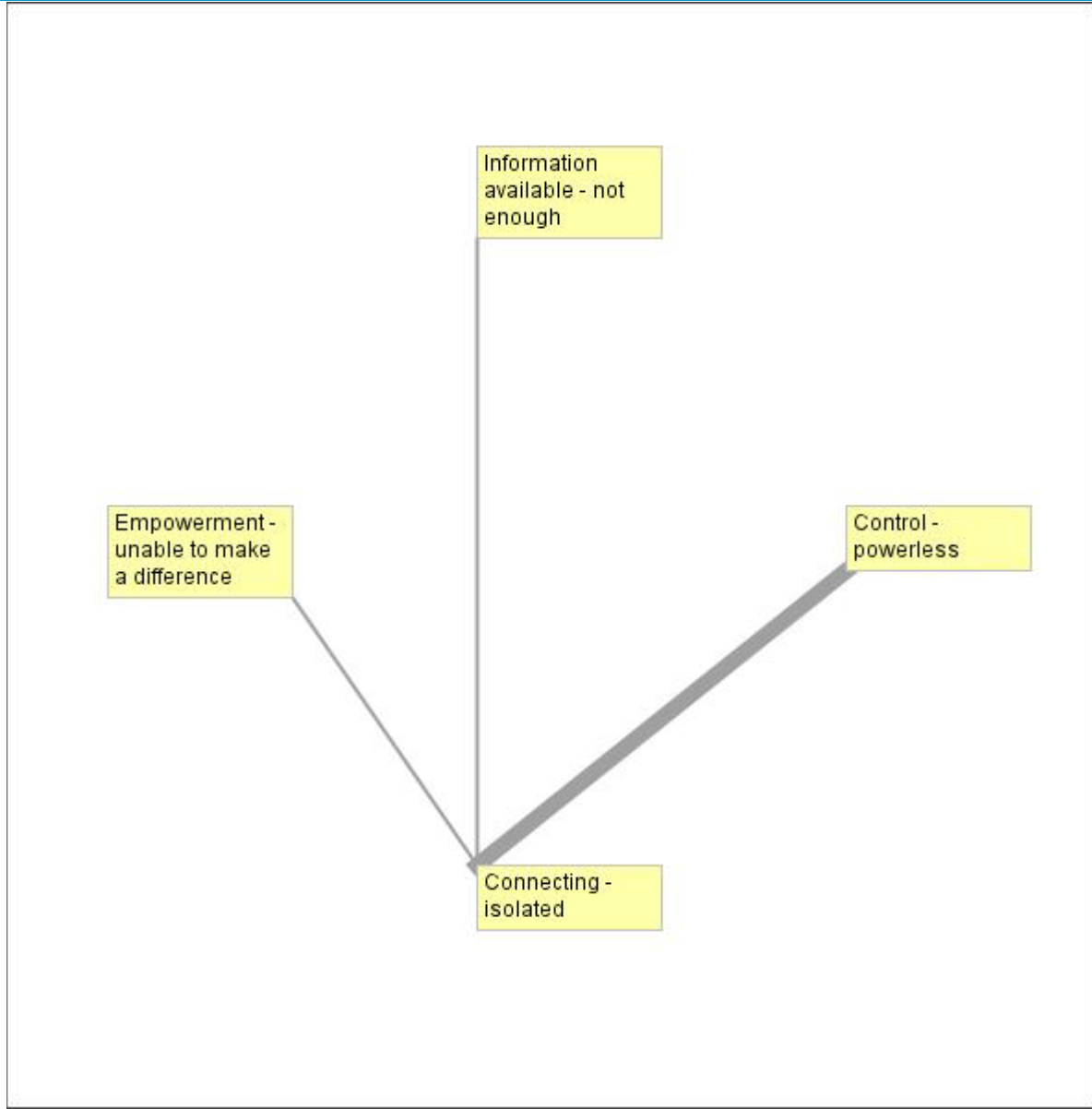
Government - getting ready for change



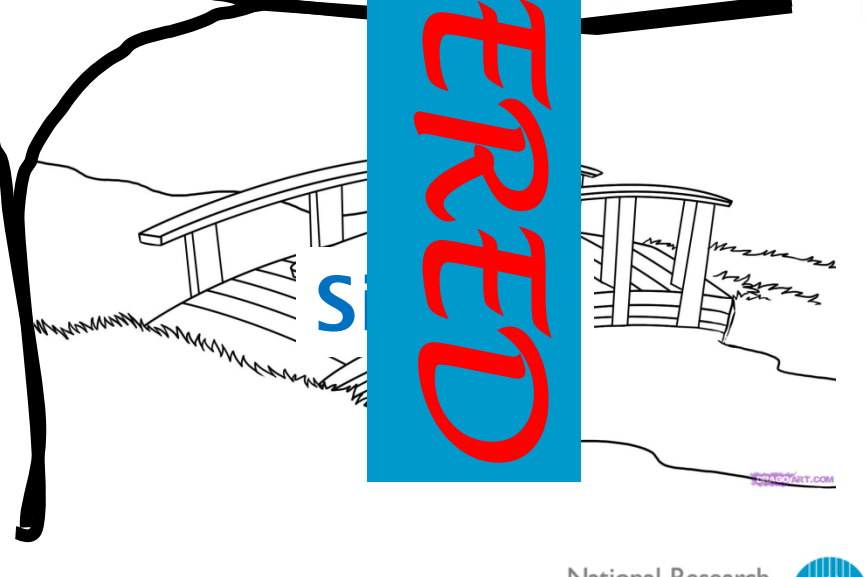
Academics / researchers - getting ready for change

Legend

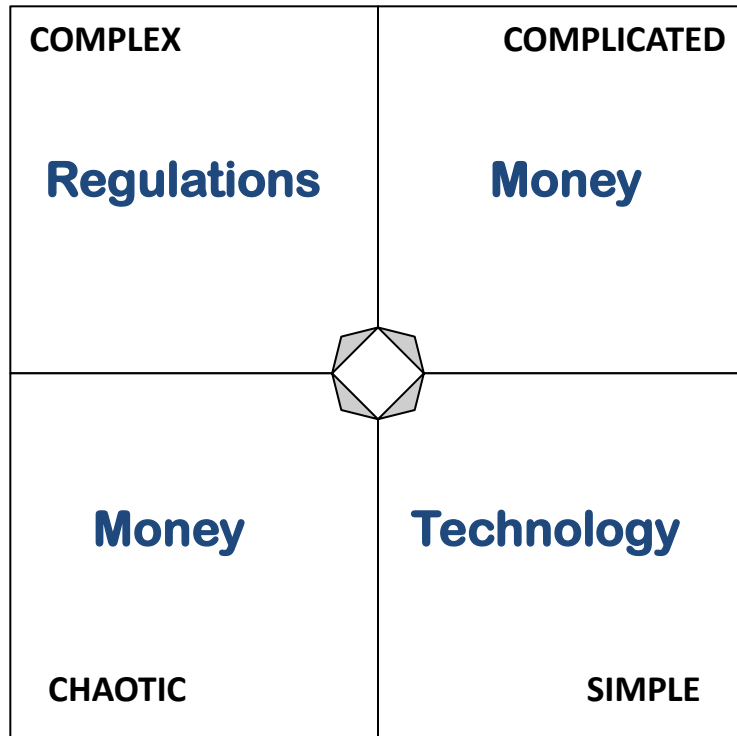
	R < 0.2
	R < 0.3
	R < 0.4
	R <= 1.0
	Positive correlation
	Negative correlation



Narratives coded to CYNEFIN

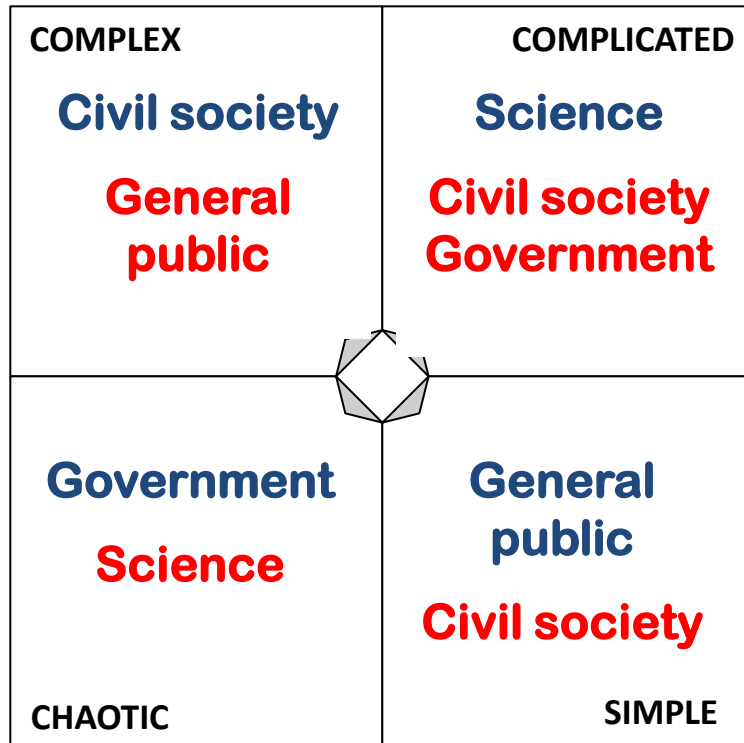


What helped people to adapt?



Worldviews appear to orient people towards particular solutions.

Who features and who not?

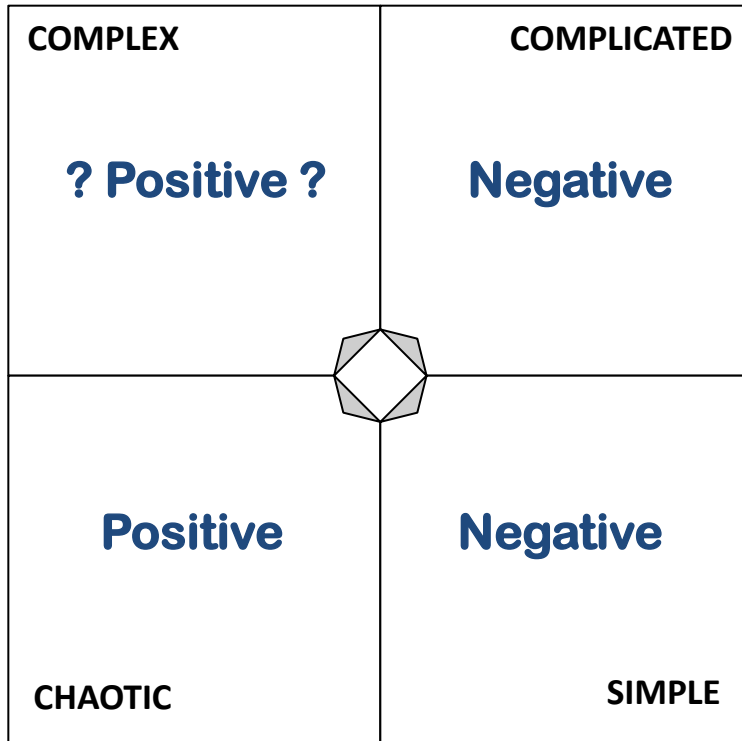


Worldviews appear to orient people towards and away from particular social groups.

What motivated them?

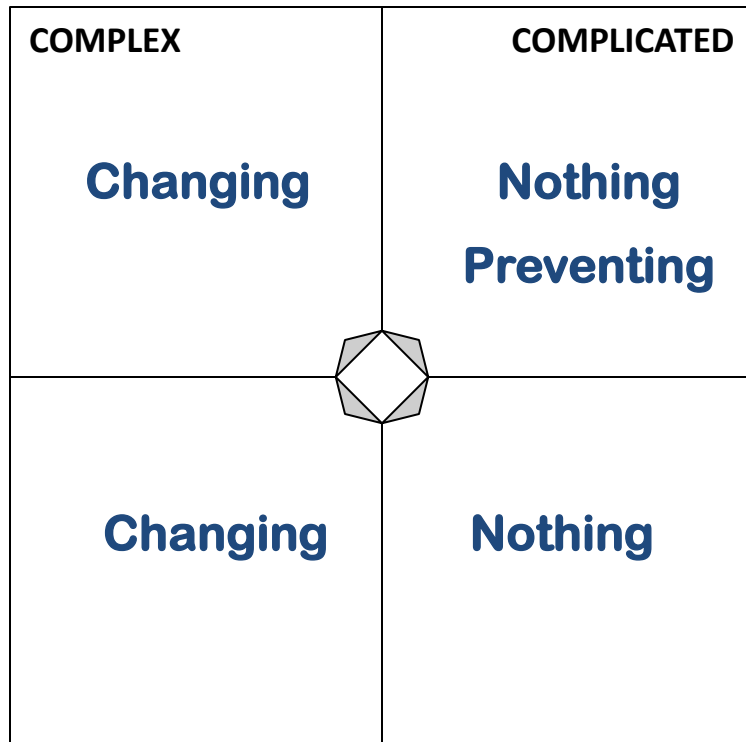
UNORDERED

ORDERED



Ordered worldviews were associated with negative motivations, unordered with positive.

What were they doing?



Worldviews appear to orient people towards action or inaction.

**Insights and
blind spots from
a multiple
perspectives
approach**



ZAKU

Multiple perspectives challenges:

- Greater uncertainty
 - Causal
 - Relationships
- Discomfort
 - Science
 - Policy
 - Vested interests
- Difficult leadership

Multiple perspectives provides:

- Ability to identify groups
 - Experiences
 - Framing
 - Language
- Ability to communicate with these groups
 - Language
 - Framing
- Ability to detect weak or negative relationships
- Understanding of what motivates and inhibits action
- Ability to identify actions to improve likelihood of effective adaptation

Multiple perspectives requires:

- Openness to
 - Alternative perspectives
 - The new and unexpected
- Willingness to suspend accepted conceptualisation
- Acceptance that tacit knowledge resides in peoples' lived experiences

How we find meaning.....make sense...

- Worldviews
- Social representations
- Frames of reference



**Has great
importance for
how we act!**

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Thank you

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