BLAVATNIK SCHOOL OF GOVERNMENT

UNIVERSITY OF OXFORD

The Pitfalls in Decision-Making

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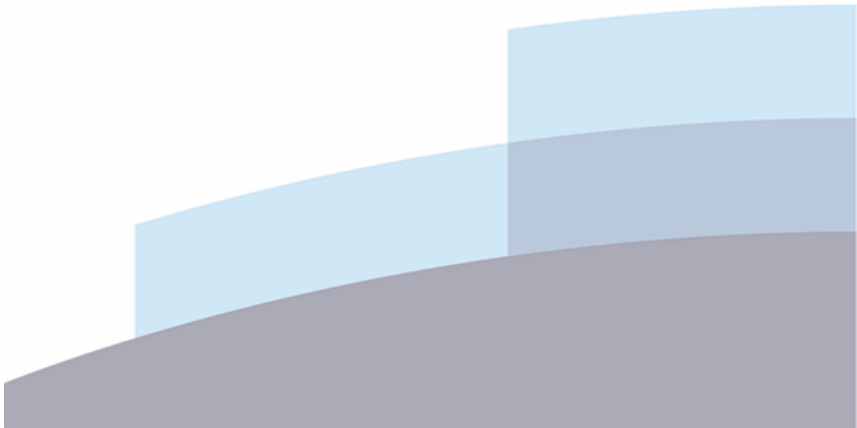
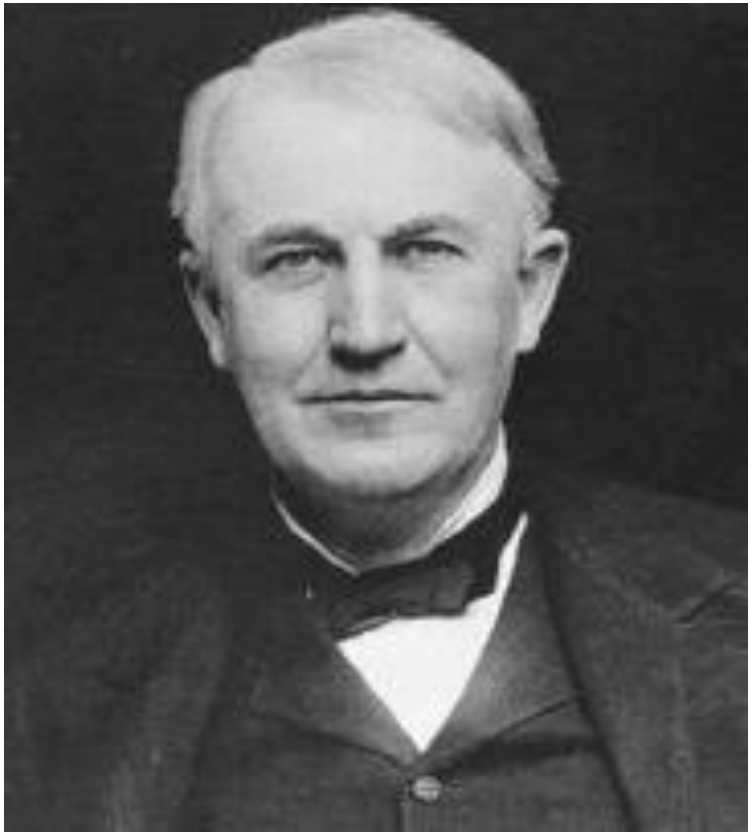
July 2022

Introduction



An interesting man…



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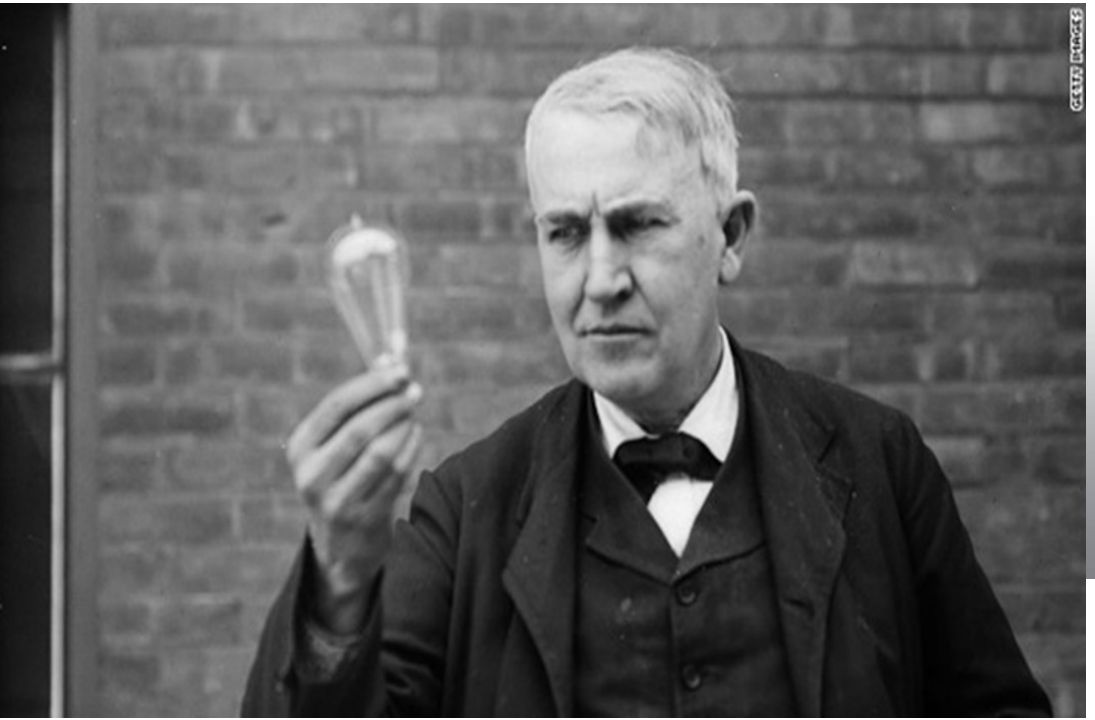
With an interesting interview technique…



Evidence based policy making?

‘Rational’ decision making – best policy or action to achieve objectives based on all evidence?

Can we use this ‘scientific approach’ in political and public policy environment?

"evidence-based decision making is hard as information limited…"

Information constraine… …ent – where is the information on 'profit', 'sales', 'share price' and other performance indicator?

The compelling case

- Have an idea that seems (politically) appealing
- Find the evidence [illegible]rt it
  - Examples in p[illegible]re
- To constru[illegible]ase"

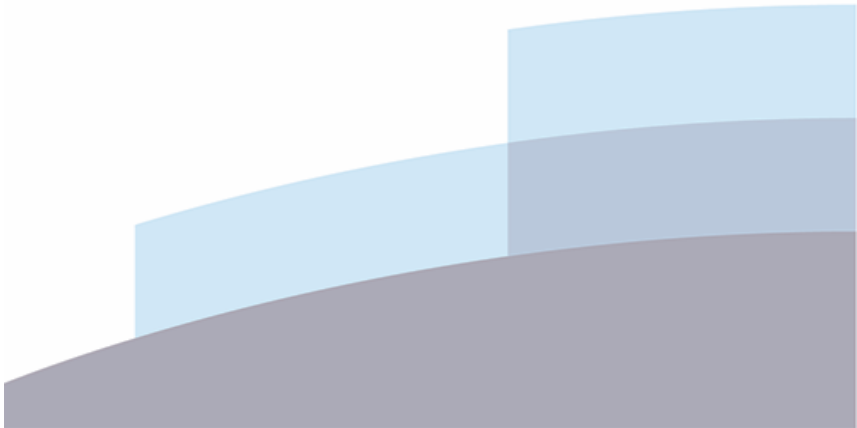
- Is this eviden[illegible]making?
- Or policy-base[illegible]ce making?

"evidence-based policy making in political environment is at best hard"

The source of protection

The Civil Service Code

- "As a civil servant, you … are expected to carry out your role with dedication and a commitment to the Civil Service and its core values: integrity, honesty, objectivity and impartiality."



The Civil Service Code (ctd.)

- The code also defines the civil service values as:
  - '**integrity**' is putting the obligations of public service above your own personal interests
  - '**honesty**' is being *truthful* and open
  - '**objectivity**' is *basing your advice and decisions on rigorous analysis of the evidence*
  - '**impartiality**' is *acting solely according to the merits of the case* and serving equally well governments of different political persuasions

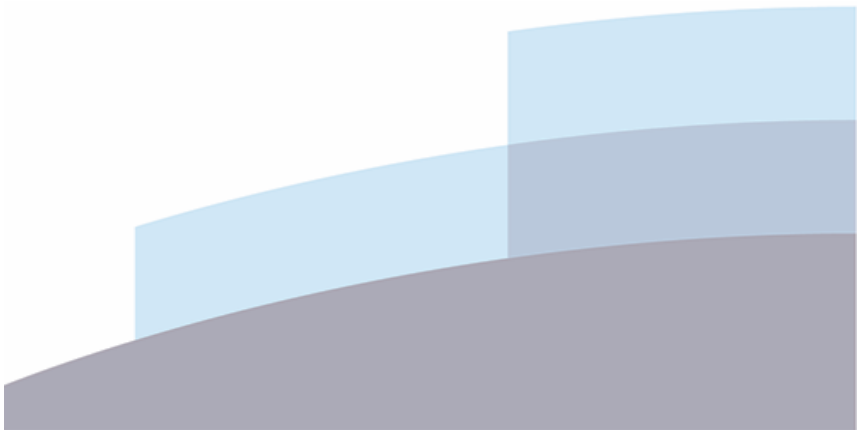
Behind my talk:

- Decisions should be based on *rigorous analysis of the evidence* and *acting solely according to the merits of the case*
- "Process" – analysis, meetings, discussion, etc.

Sources of 'bias' or 'noise' in bureaucratic mindsets

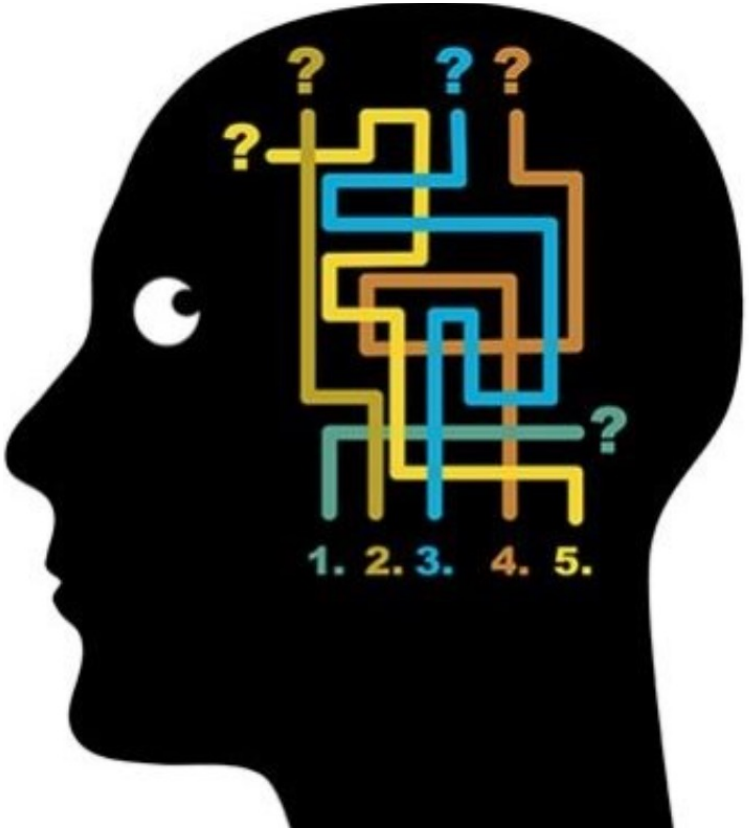
- The socio-political context ('the authorizing environment')
- The psychological context ('human imperfection')

Human Bias



Are we perfect decision-makers?

Many models of decision-making view humans as 'rational': performing a detailed cost-benefit analysis of all courses of action, choosing the optimal one



We are all imperfect decision-makers

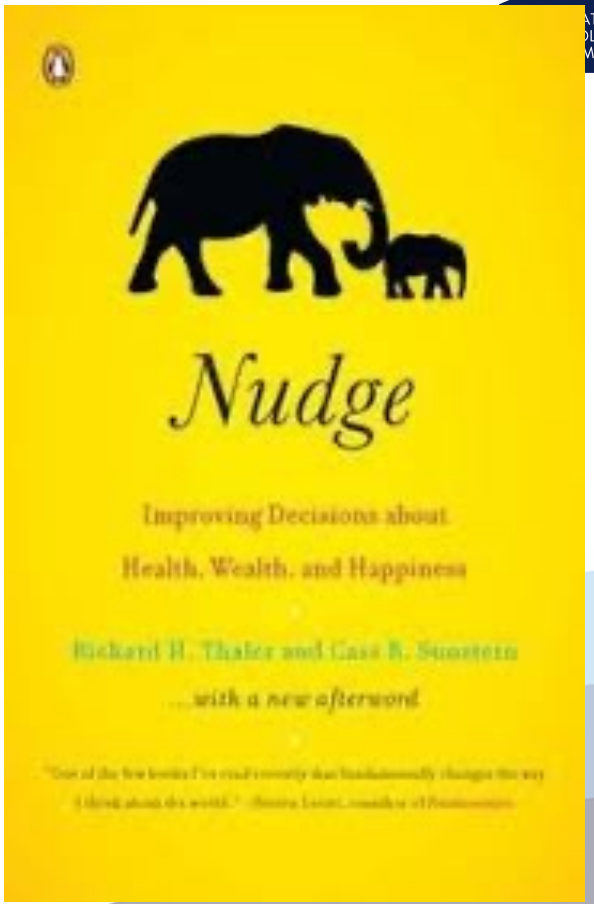
In fact, humans

- use **heuristics** and mental shortcuts
- base judgement on old habits or prior information
- have optimism bias

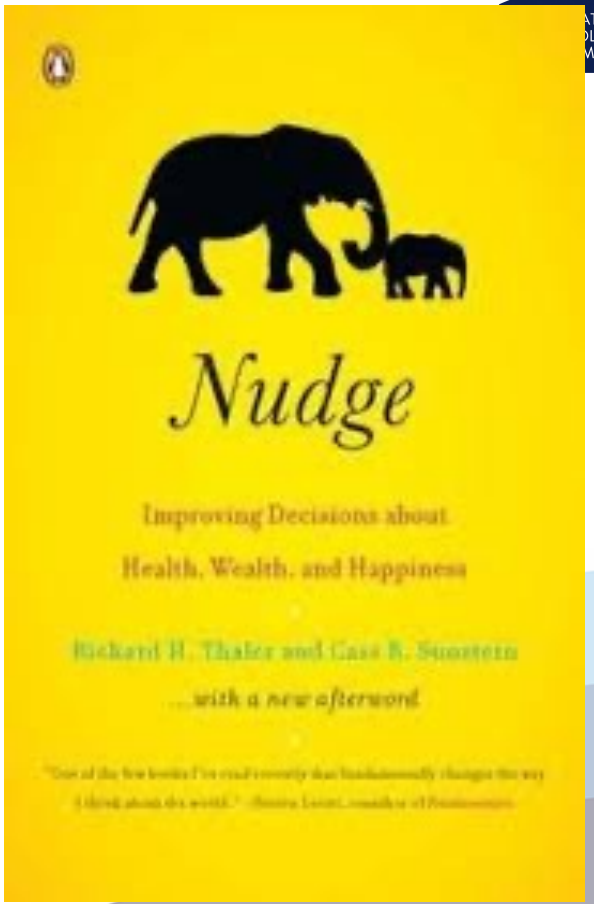
These can lead to less optimal outcomes

… suggesting a space for policy "nudging"

Status quo bias as explanation for limited pension savings
Pension roll-out for private employees.



Changing the default to automatic enrolment with opt-out rather than opt-in led to 9 million extra accounts since 2008 in UK



but we are **all** flawed…

"rational" **civil servants, other officials or leaders** doing cost-benefit analysis?

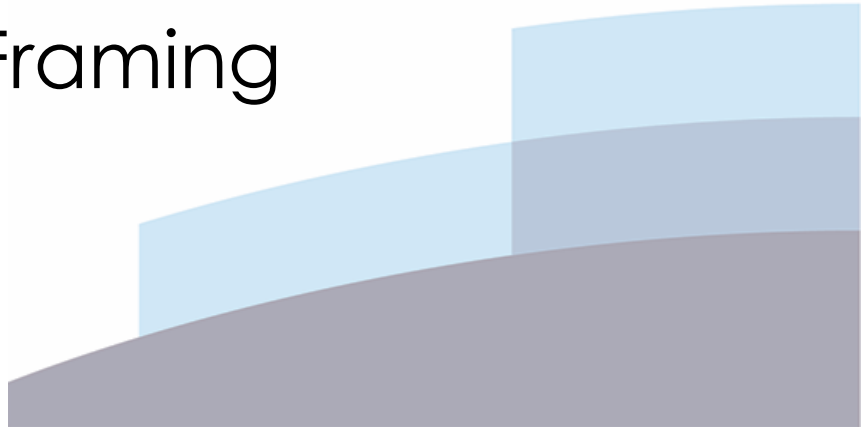
Versus

senior decision makers/politicians that are flawed

- Humans using heuristics, mental short cuts, habitual
- Full of optimism bias…

THAT is a problem….

Decision-making Flaws: Framing



Framing and loss aversion

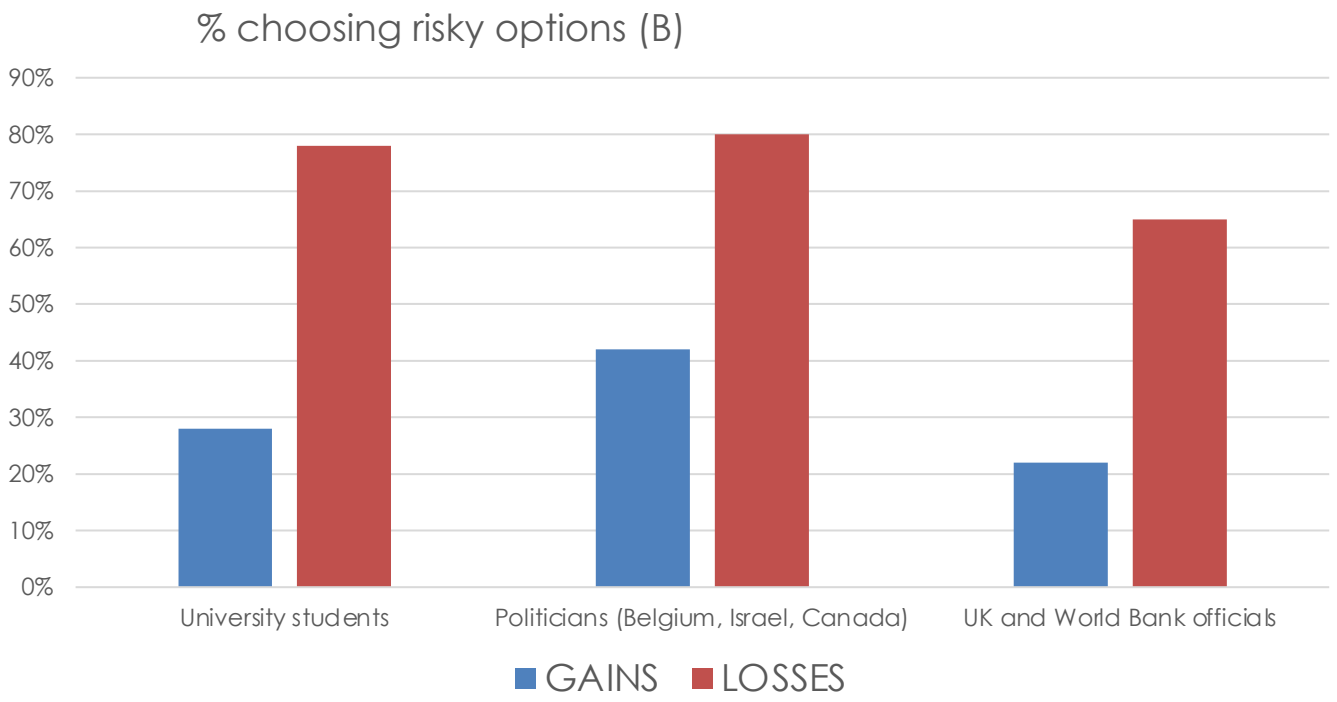
Frame 1: Lives saved	Frame 2: Lives lost
A: 4000 people will be saved	A: 8000 people will die
B: 1/3 chance 12,000 people saved and 2/3 chance no-one will be saved	B: 1/3 chance no-one will die and 2/3 chance 12,000 will die

An epidemic threatens a population. Suppose your country is preparing for a new disease that is expected to lethally infect 12,000 people.

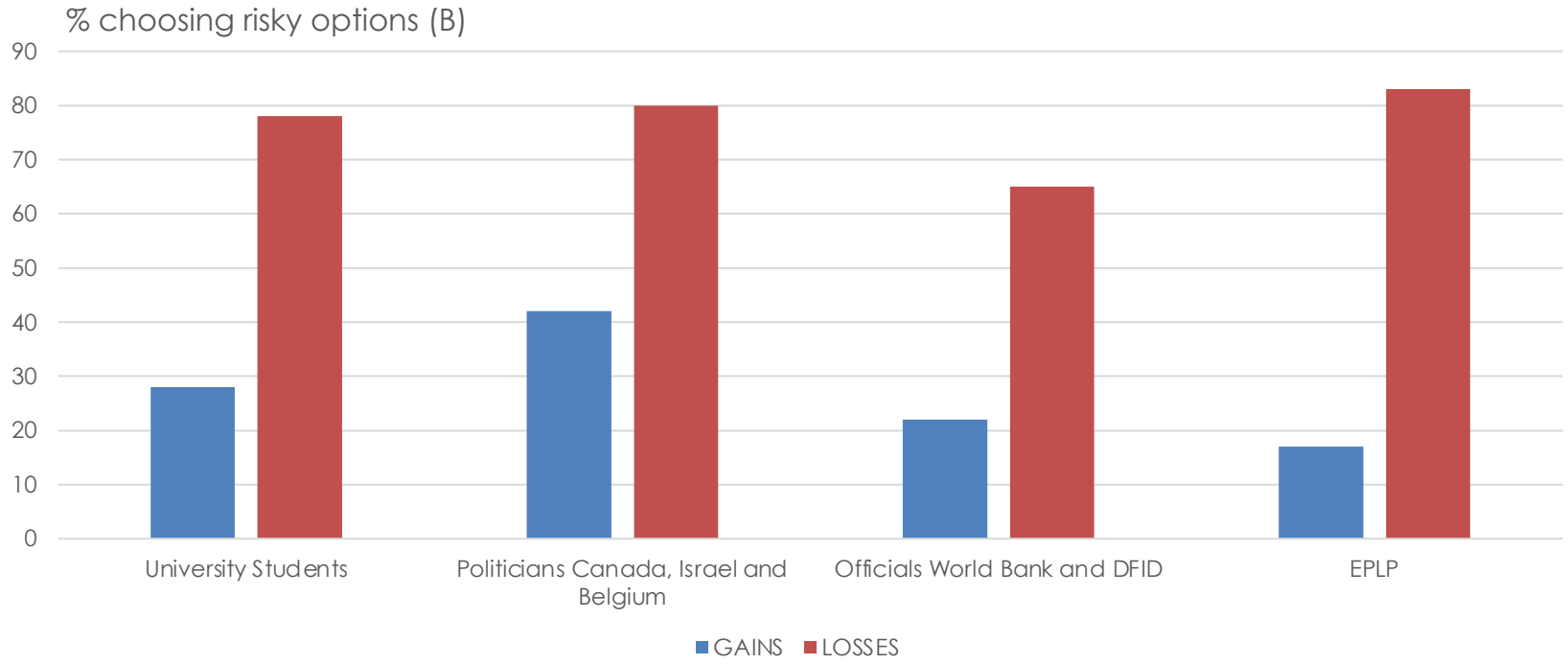
Scientists have come up with treatment options. We have scientific evidence on the effectiveness of the treatments.

What option would you advise to choose?

Some samples…

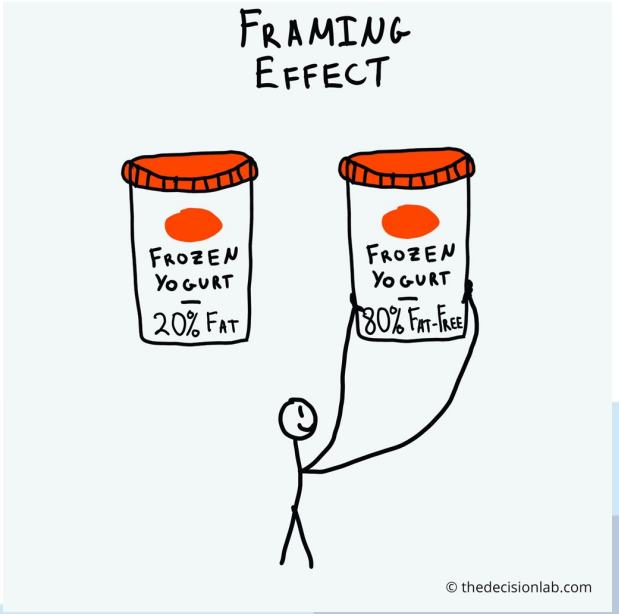


… and with EPLP?



Framing

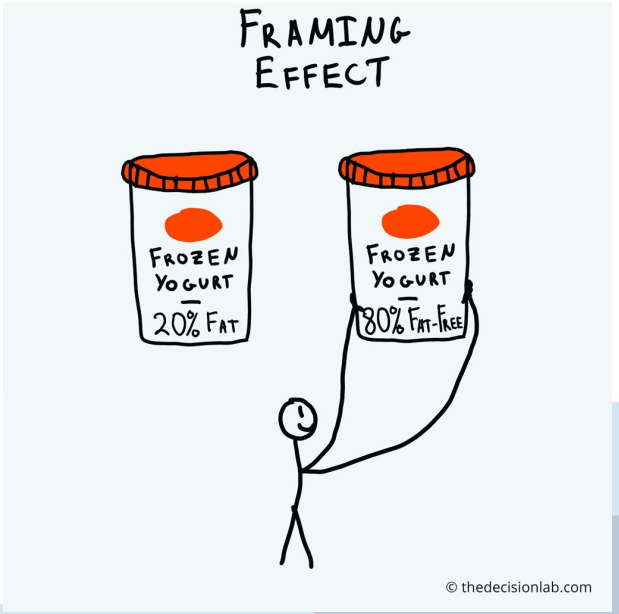
- *Framing bias* is how our decisions are influenced by the way information is presented.
- Equivalent information can be more or less attractive depending on what features are highlighted.



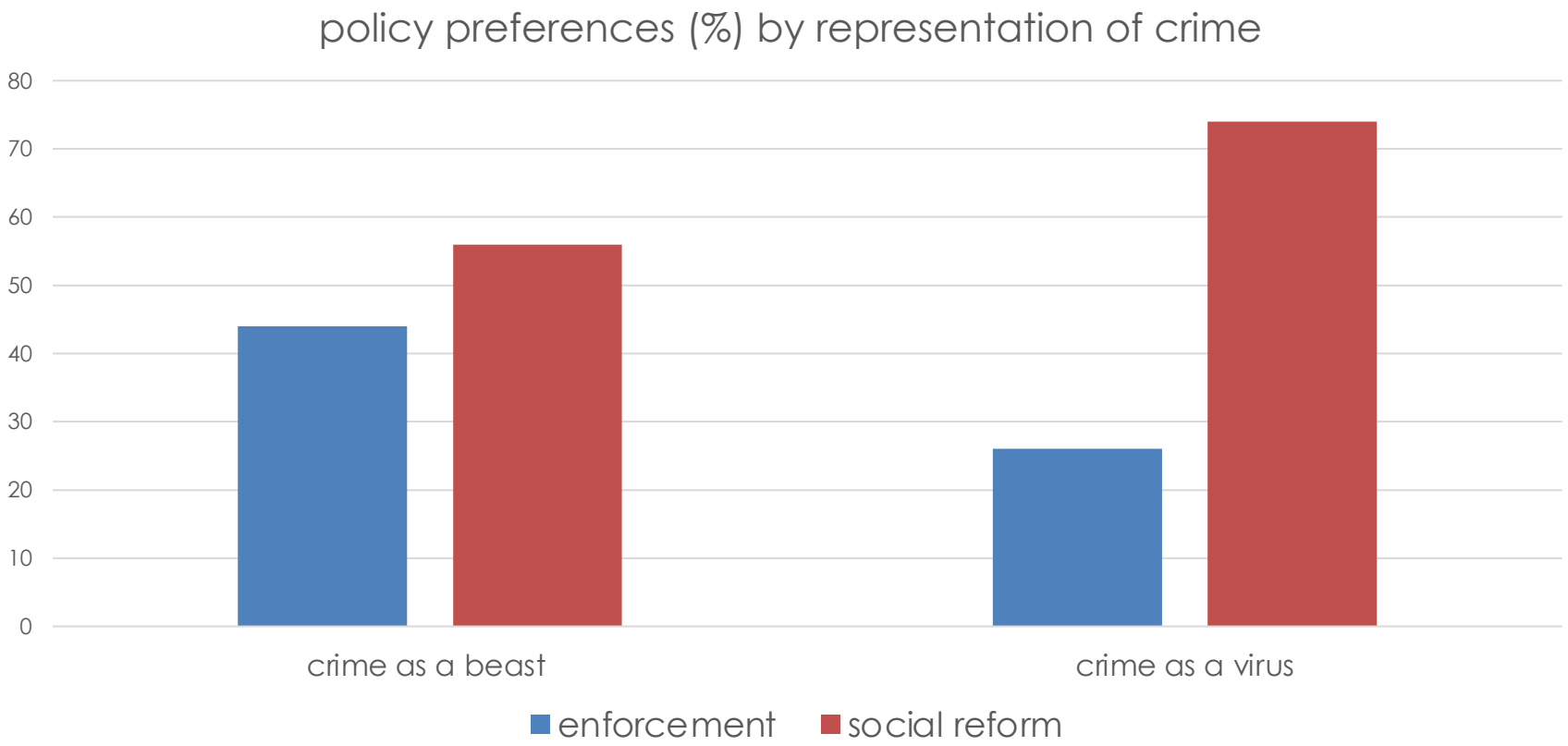
Framing

e.g.

- People are loss-averse: they strongly prefer to avoid losses than to acquire gains.
- When people are facing losses, they become more willing to tolerate risk.



Framing matters…



How to tackle framing bias: crime as beast or virus…

R		Reframe	Restate the problem with different frames
I		Incorporate	incorporate a challenging element into your own frame
S		Synthesise	Try to design policy in a way that delivers multiple outcomes
E		Embrace	Substantially alter your frame to include elements of the opposing frame with different underlying ‘values’

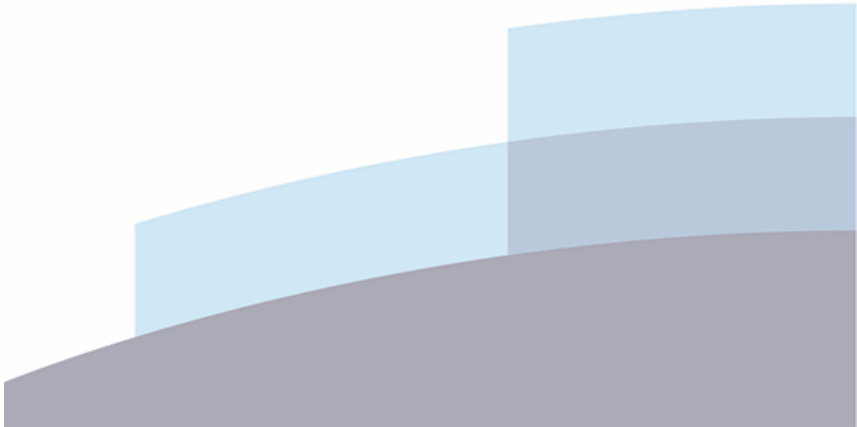
Examples: noticing

- **Framing effect**

  Drawing different conclusions from the same information, depending on how that information is presented.

- **Confirmation bias**

  The tendency to search for, interpret, focus on and remember information in a way that confirms one's preconceptions.[22]



Decision-making Flaws: Confirmation Bias

Confirmation Bias

Ask respondents to evaluate a set of data (on right)

- did the programme work?

Randomly provided different framing

- Treatment 1: fluoride and tooth decay
- Treatment 2: minimum wages and impact on incomes of poor

Results from a careful trial, pilot,

	Number better	Number same
Programme	223	75
No programme	107	21

Randomize label and outcome

Minimum wage framing

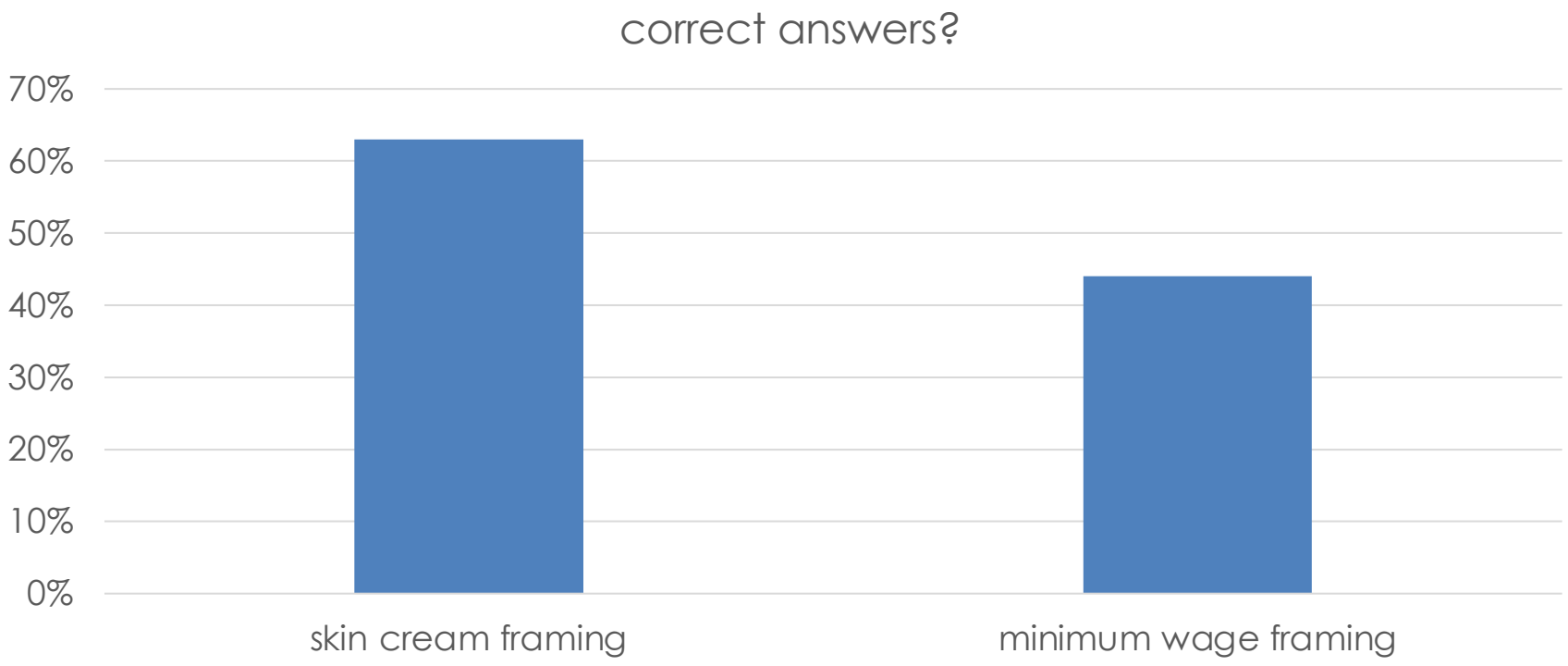
	Income of the poorest 40% rose	Income of the poorest 40% fell
Localities that did increase the minimum wage	223	75
Localities that did not increase the minimum wage	107	21

Option A: The income of the poorest 40% **falls** when the minimum wage is increased

Option B: The income of the poorest 40% **rises** when the minimum wage is increased.

Which option is correct?

Correct answers depend on framing (in study of 3000 WB and UK officials)



It gets worse…

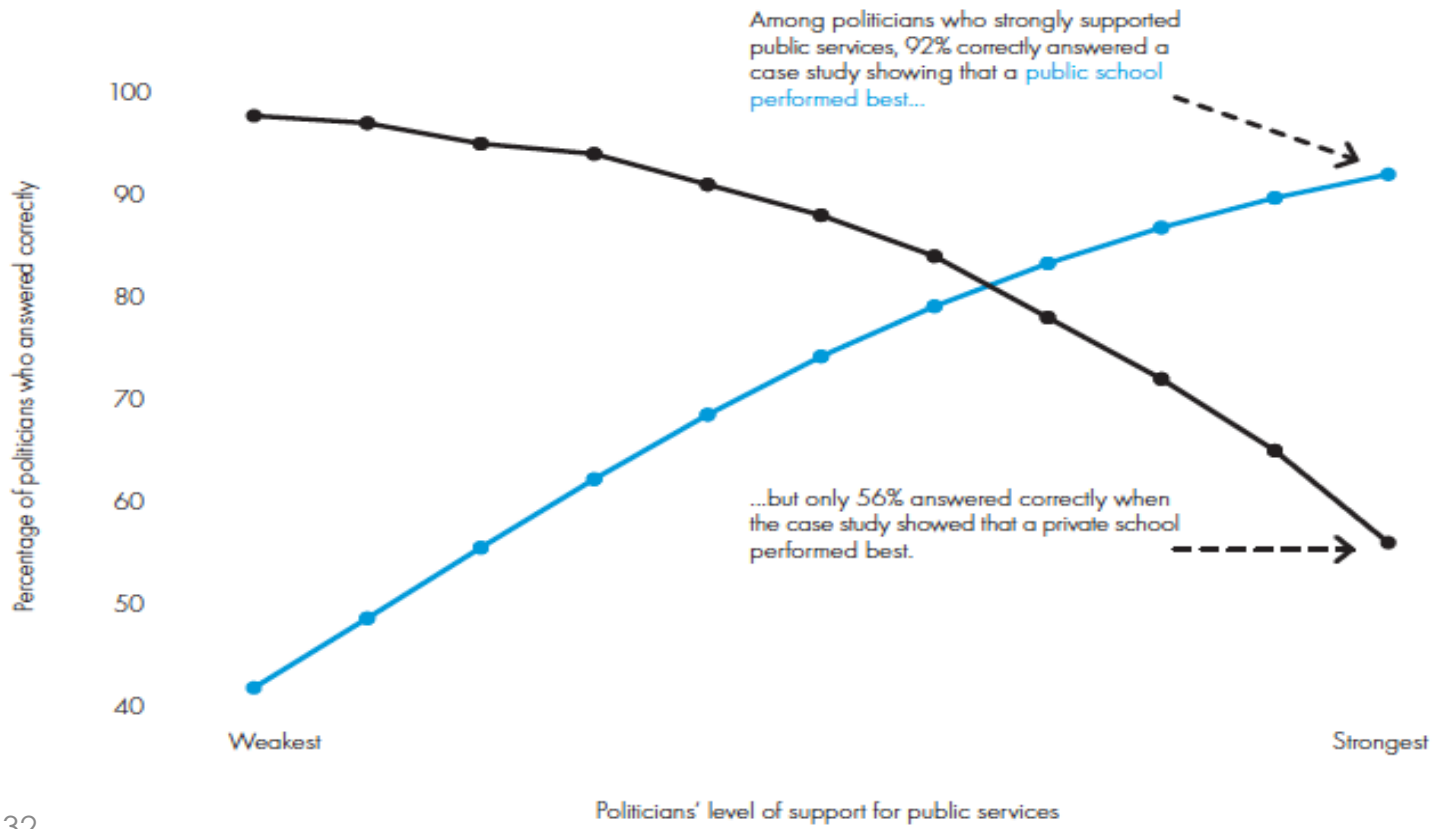
We investigated participants' preferences for inequality:

1=incomes should be made more equal…

10=we need larger income differences as incentives…

- And found that there is no correlation between incorrect answers and inequality preferences when asking about skin cream
- BUT when minimum wage framing, errors correlated with inequality preferences – e.g. if preference for inequality, more errors if true answer is that minimum wages increase incomes of the poorest 40%.

Danish Politicians' Confirmation Bias



How to tackle confirmation bias

S	**Separate** evidence and diagnosis from solutions.	Explicitly separate diagnosis or exploration from solution identification.
O	Consider the **Opposite**.	i.e. ask: 'would you have made the same judgement if exactly the same study had produced results on the other side of the issue?'
B	Build in **Breakpoints**	Build in opportunities to change course and revisit assumptions.
ER	**Evidence Review** made transparent	Possibility of external appraisal encourages a better evidence review. The quality of the evidence could be improved by outside experts pointing to overlooked evidence

Examples: noticing

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  Drawing different conclusions from the same information, depending on how that information is presented.

- **Confirmation bias**

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- **Anchoring or availability bias**

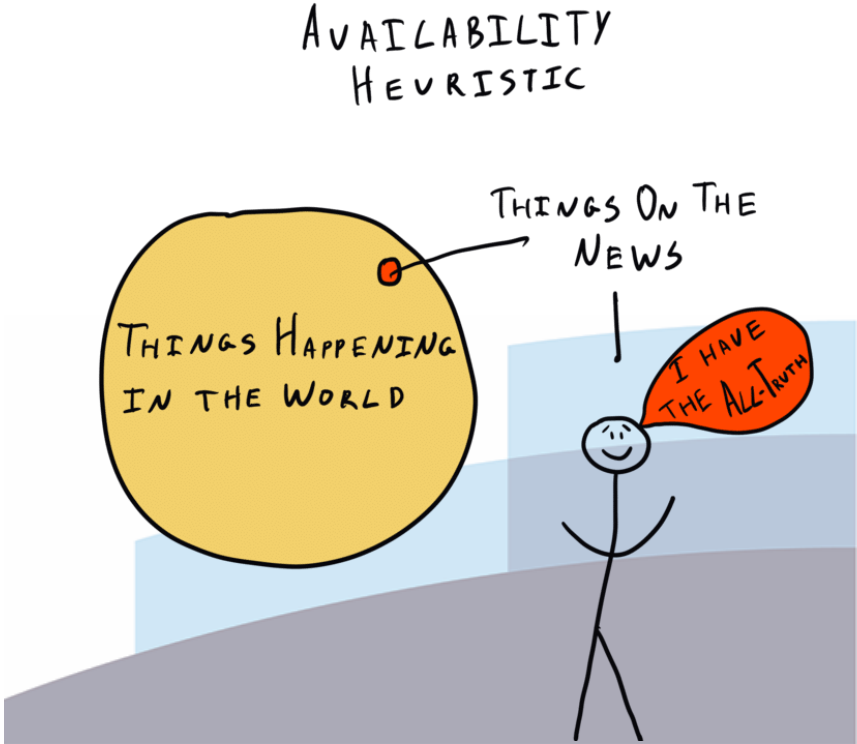
  The tendency to rely too heavily, or "anchor", on one trait or piece of information when making decisions (usually the first piece of information that we acquire on that subject)

Decision-making Flaws: Availability Bias

Allocation of Attention

A.K.A "availability bias"

- Availability bias describes our tendency to use information that comes to mind quickly and easily when making decisions about the future.
  - E.g. memorable news stories – such as plane crashes vs car crashes



Makes for poor decisions as only ‘latest’ problem or risk tackled….

But can be exploited for better policy making!

Information cascades

How to tackle allocation of attention bias

P	**Plan** for Windows of opportunity	Plan longer-term investment in understanding policy areas that currently attract little attention, but may attract more later.
R	**Robust policy** for 'sleeper' issues	Prepare robust and considered policies for longer-term problems that will draw public attention in the future.
E	**Engage** with Experts	Build strong external networks with academia and other sources of external expertise.
P	**Public attention**	Find vivid ways to portray issues so they grab public attention and raise the profile of important long-term problems.

Human bias: deliberating

Group decision as organizational design

Most institutions use ‘groups’ (meetings, team work) as means of getting better policies or decisions.

There is evidence that groups make fewer errors.

But is their judgement less biased?

Illusion of similarity.

This group has on average a score of 5.7 on the inequality question (1=equality is desired, 10=inequality is important…)

What is the **range** in this groups?

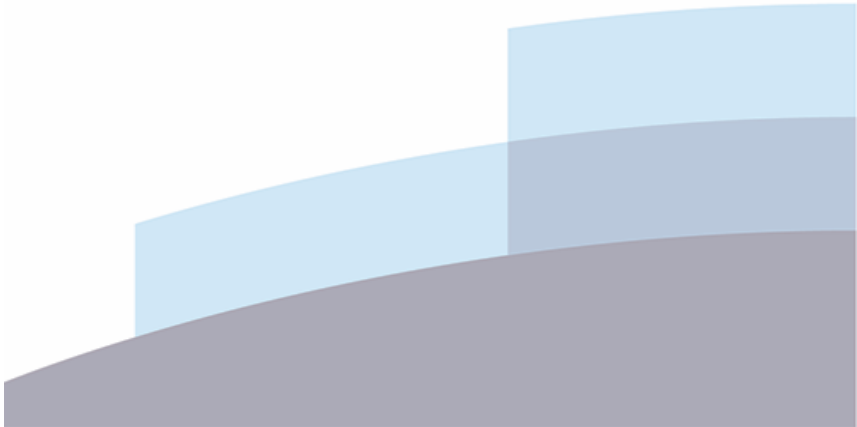
A	[2,8]
B	[1,9]
C	[3,9]
D	[4,7]

Group bias through reinforcement

- Bandwagon effects – tendency to believe things because other people believe the same.
  - Assuming others are better informed
  - Social pressure to conform, limited challenge
- Majority views can be tricky
  - Groups are not good at finding new insights (common knowledge effects)
  - Discussion may lead to extremes rather than reason
  - Initial contributions shape discussions

What to do about it?

- Create **new routes for diverse views** to be into meetings
  - Online document and silent completion
  - Written individual proposals during meeting before tabling
- **Alternatives to chaired** meetings
  - Rotating chairs, true workshops
- Cognitive **diverse** teams



What to do about biases in group decision-making?

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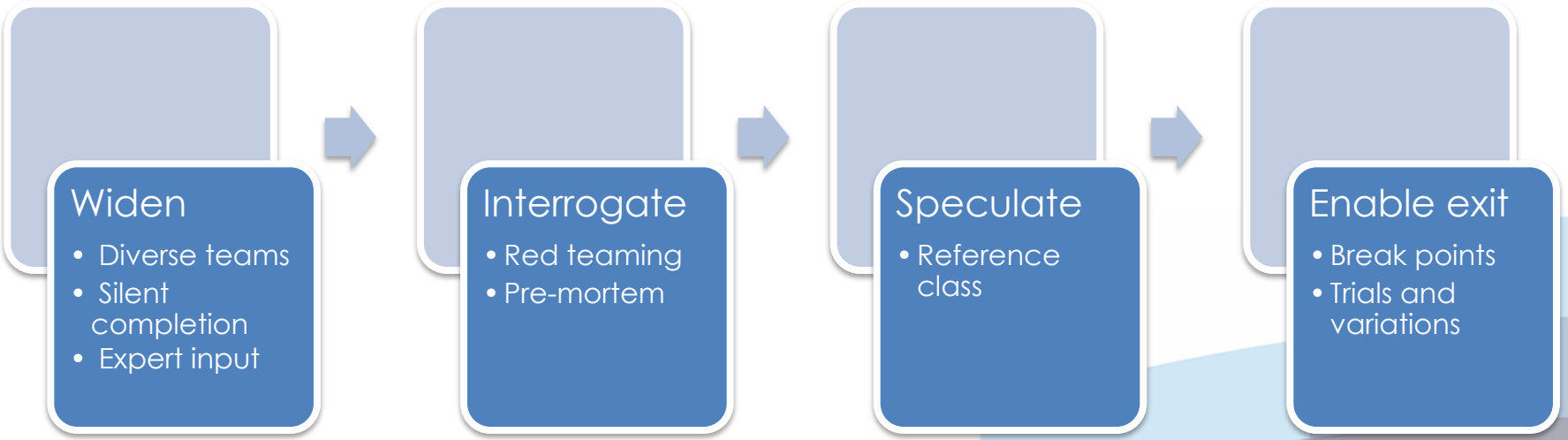
WISE decisions



Conclusion

1. Behavioural economics can enable policy-making more likely to achieve programmatic objectives
2. Even civil servants have biases in their decision-making

   These can vary depending on the context e.g. how politicised the issue is
3. Understanding decision-making biases can enable civil servants to improve their own decisions and design processes to improve group decision-making

Readings

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