

The Myth of Rationality

- *Rationality often isn't*
- *Even when it is, it isn't really*

Daniel Kahneman

Thinking, Fast and Slow

System 1 and System 2

System 1: cognitive biases

Ideas accepted if . . .

- *Familiar*
- *Presented nicely*
- *Fit what we believe*

And we . . .

- *Jump to conclusions (WYSIATI)*
- *Are influenced by irrelevant ‘nudges’*
- *Can’t handle statistics for toffee*

“Linda is 31 years old, single, outspoken, and very bright. She majored in philosophy. As a student, she was deeply concerned with issues of discrimination and social justice, and also participated in antinuclear demonstrations.”

- a) *Linda is a teacher in elementary school*
- b) *Linda works in a bookstore and takes yoga classes*
- c) *Linda is active in the feminist movement*
- d) *Linda is a psychiatric social worker*
- e) *Linda is a member of the League of Women Voters*
- f) *Linda is a bank teller*
- g) *Linda is an insurance salesperson*
- h) *Linda is a bank teller and is active in the feminist movement*

I, ME, MYSELF

- *The product of all my life to date*
- *The subject of all my thinking and other experiencing*
- *Just one of me*

More biases

- *Inherited beliefs and attitudes*
- *Loyalty to our existing beliefs*
- *Loyalty to the beliefs of our family and culture*
- *Wishful thinking*
- *Laziness*

'Reasoning' = rationalising

From intuition to reasoning

- *Kahneman:*

System 1 v System 2

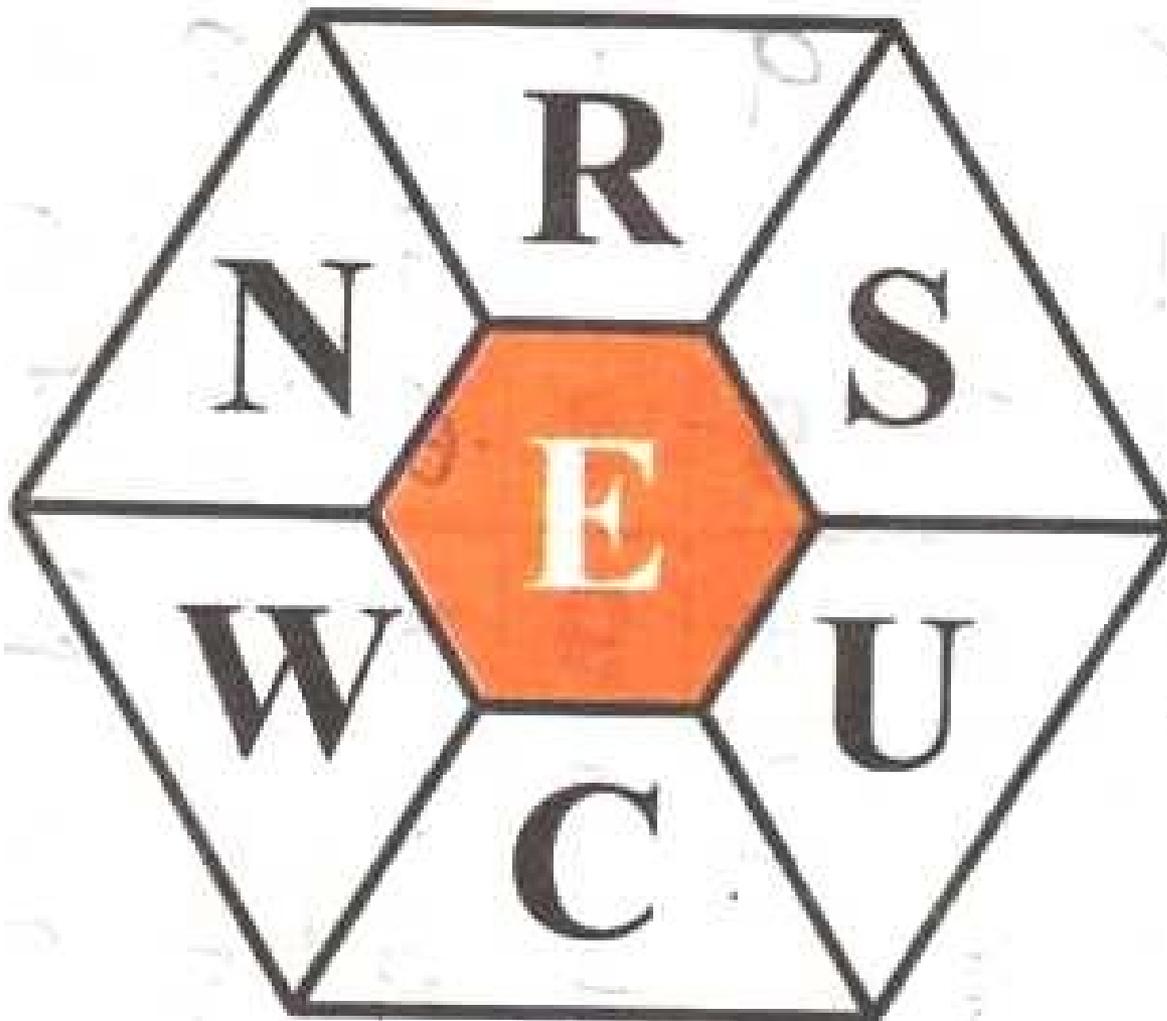
- *Bayne:*

Associative v systematic

Problem 1

- 7×2
- 7×15
- *The 1-in-a million medical condition: what is the probability of a positive diagnosis being correct if given by a 99% reliable test?*

Problem 2



RED CHIPMUNK

Problem 3

- *40 periods a week*
- *43 lessons needed*

Sort it!

Problems 1-3

*'Rational' thinking =
a sequence of thoughts/images,
each prompted by . . .*

(a) preceding thoughts

(b) thinker's history

Thinking is out of our control!

- *Thoughts occur only when prompted*
- *Memories occur only when prompted*
- *We cannot decide to have a thought, we cannot decide not to have one*

Talking (like walking)

- *We talk rationally, consciously, deliberately*
- *BUT we do not make conscious, deliberate choices of words*
- *They just tumble out!*

Summary

System 1: pseudo-rational

*Our thinking prone to 'cognitive
biases'*

System 2: rational

- *Associative sequence of thoughts, each triggered by the one before*
- *Either learnt stimulus-response*
- *Or memories and ideas occurring anarchically*

- *Rationality is not a feature of the process of thinking*
- *There is no inferential sequence of thoughts*

*Rationality is a feature of the
OUTCOME*