

## 'In Two (or more) Minds' about Rationality? Dual Process Theory's Contribution to the Rationality Debate

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### 1. What's the problem?

'The rationality debate' – a wealth of research into human cognition has evidenced patterns of reasoning which appear to violate rational norms; yet many theorists have been extremely reluctant to conclude that humans are systematically irrational. So, how to explain the data?

One possible move – redefine the research question: not 'how rational are we?' but 'what counts as rational?' E.g. Cosmides & Tooby's (1994) assessment of human reasoning performance as 'better than rational'.

*But* this leads to 'rationality relativism' – we can always redefine rationality so that we come out as rational; but this deprives rationality of any normative force.

### 2. Dual process theory to the rescue?

The dual process framework gives structural scope for a distinction between human reasoning performance and rational norms.

E.g. Evans & Over (1996) – dual account of rationality as well as reasoning:

*Rationality<sub>1</sub> [or personal rationality]:* Thinking, speaking, reasoning, making a decision, or acting in a way that is generally reliable and efficient for achieving one's goals.

*Rationality<sub>2</sub> [or impersonal rationality]:* Thinking, speaking, reasoning, making a decision, or acting when one has a reason for what one does sanctioned by a normative theory. (1996: 8)

The starting point for any understanding of human rationality must be behavioural: we must ask how decisions taken and actions performed serve the goals of the individual. Formulating and making use of logical and other rules has always had to rest on a more fundamental human ability to achieve behavioural goals. (1996: 1)

Stanovich (1999, 2004) – distinction between evolutionary and normative rationality:

	System 1 processes	System 2 processes
<b>Evolutionary rationality</b>	Pursuing genetic interests	Pursuing genetic interests
	Pursuing interests of genes & individual	Pursuing interests of genes & individual
<b>Normative rationality</b>	Pursuing individual's interests	Pursuing individual's interests

[adapted from Stanovich (2004: 65)]

### 3. Rationality relativism again

These dual process theories share a core conception of *personal* rationality – rationality is indexed to that which serves the goals of the individual. But it can be notoriously difficult to determine what are 'the goals of the individual'... how do we avoid redefining the goals of the individual (and thus rationality)?

#### 4. 'Rationality of the self' to the rescue?

(a) The fundamental locus of rationality is the *agent* – *not* discrete reasoning processes or task performances. This places significant constraints on interpretation – for example, requiring a rational agent to have *coherent* goals (at a time, and over time), which are pursued in an *integrated* manner *via* appropriate means.

But the threat of relativism remains, albeit reduced...

(b) Agency requires the principle of charity (Quine 1960, Davidson 1984):

- We do not have privileged access to the mental states of others;
- Therefore, in order to be able to understand them, we need to rely upon certain background assumptions which enable us to make sense of them.
- This background assumption is the *principle of charity* – we work on the assumption that most of an individual's beliefs are true, and most of his/her inferences are rational.

Charity requires *minimal* rationality in order to make sense of an individual as an agent at all – e.g. appropriate use of conjunction and entailment. This is a conceptual constraint, so rationality relativism is defeated. However, it leaves scope for irrationality above the 'threshold' level for agency, so the normativity of rationality can be preserved.

#### 5. Implications for a dual process theory of rationality

Key features this account holds in common with current dual process theories (§2):

- Core notion of rationality is at the level of the agent – 'rationality of the self'
- Rationality involves both system 1 and system 2 reasoning processes

There is also precedent for an appeal to basic-level rationality as constitutive (Frankish 2004).

Key differences:

- Dual process theories tend to portray system 1 as primary, system 2 as supplementary (e.g. Evans & Over 1996, §2)
- On this account, conceptual priority is instead given to *analytic* reasoning – Evans & Over's rationality<sub>2</sub>. This is the fundamental notion for minimal rationality, and thus underpins – is a prerequisite for – any more full-blooded account of human reasoning and rationality.

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