

Behavioral and Brain Sciences

Using the study of reasoning to address the age of unreason

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Corresponding Author:	Magda Osman University of Cambridge Cambridge, Cambridgeshire UNITED KINGDOM
Corresponding Author Secondary Information:	
Corresponding Author's Institution:	University of Cambridge
Corresponding Author's Secondary Institution:	
First Author:	Magda Osman
First Author Secondary Information:	
Order of Authors:	Magda Osman
Order of Authors Secondary Information:	
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04. FULL NAME(S): **Magda Osman**

05. INSTITUTION: **Centre for Science and Policy, University of Cambridge**

06. FULL INSTITUTIONAL MAILING ADDRESS(ES): **Centre for Science and Policy, University of Cambridge, 10 Trumpington Street, Cambridge, Cambridgeshire, CB2 1QA, UK**

07. INSTITUTIONAL TELEPHONE NUMBER(S) (for correspondence): **+44 01223 339596**

08. ONE EMAIL ADDRESS EACH: **m.osman@jbs.ac.uk**

09. ONE HOME PAGE URL EACH (where available): <https://magdaosman.com>

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Using the study of reasoning to address the age of unreason

Magda Osman¹

Abstract:

If we accept that societally, politically and even culturally enlightenment face some serious challenges, can we use this rethinking of theories of reasoning to address them? The aim here is to make a case for building on the work presented by De Neys as an opportunity to advance an applied reasoning research programme.

1. Centre for Science and Policy, University of Cambridge, 10 Trumpington Street, Cambridge, Cambridgeshire, CB2 1QA, UK. +44 01223 339596

Correspondence: m.osman@jbs.cam.ac.uk

Homepage: <https://magdaosman.com>

Since my critical review in 2004, and valuable critiques of others (Keren & Schul, 2009; Melnikoff & Bargh, 2018), the same question keeps getting asked, can we be sure that there are two qualitatively distinct reasoning processes? De Neys' recent answer to this is no, and because of this, De Neys shows how to handle the additional conceptual difficulty in explaining switching between the two processes.

De Neys' way out is to characterise the basics in an agnostic way that anyone other than a dual-process purist, be they a single system advocate, Bayesian, or other, might be happy. One key feature of his work is that the regulation of effort spent evaluating representations and inferences depends largely on internal (e.g. uncertainty, confidence) as well as external pressures (e.g. social interactions) to justify one's reasoning (De Neys, 2020). Dynamic-Value-Effort-based decision-making models have made similar proposals to explain moral behaviour (e.g., Osman & Wiegmann, 2017).

Where do we go from here?

What De Neys is proposing is as a new theoretical apparatus that diplomatically handles old internal factions. Can we use this as an opportunity to also rethink the study of reasoning on two other grounds: 1) what we do about normative standards? 2) How to promote the applied science of reasoning?

A feature unique to both reasoning and decision-making, is that they have at their disposal ways of benchmarking thought against normative standards, both a blessing and a curse. The research paradigms informed by how we ought to structure our thinking, and train us to do so better, is the success story. But, at the same time, we haven't gotten past the fact that we may be unfairly deferring to impossible benchmarks to assess the quality and success of an inferential process.

Maybe progress can be made if there is a more concerted interdisciplinary ambition like the one 100 years ago. In the 1890's the metaphysics club (for details see Kuklick, 2001) formed by Charles Sanders Peirce, William James, and John Dewey combined the interests of philosophy, mathematics, psychology, and linguistics. In their unified conception of language and thought viable inferences from impractical ones are sorted based on their communicative pragmatic value socially, politically and culturally, as well as internal coherence. Just as De Neys' alludes to, deliberation as we come to understand it in the current study of reasoning, is not merely epiphenomenal. Its function is to take us beyond a first pass inference to a defensible explanation that is persuasive to oneself and others; a position argued by others (Mercier, 2021). The reasoning field is already integrating insights from the psychology of persuasion, causal cognition, and linguistic pragmatism, but the next leap is to use this to agree on the normative approach to benchmark thought. We have the ingredients, but we need to agree on how to mix them.

Why is all this important?

As a field, we can capitalise on the popularised public face of reasoning, understood to be both fast and slow. But to do so, we might need to dedicate efforts to promoting the applied science of reasoning. Why? Because there is a sense that we are at a point in our history where enlightenment is taking a bruising. Equivalences are drawn between facts and feelings. The study of reasoning is crucial to addressing this, and other worrying patterns that emerging. The study of reasoning informs our understanding of how we develop sound arguments, how we

identify sound arguments from bad, and how we reason from evidence. This is not only of scientific value, this is a given, the field is of value because the insights are essential in their applications to helping improve education, medicine, law, forensics, journalism, public policy, to name but a few.

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