

# A Critical Analysis of the Argumentative Theory of Reasoning:

## Caveats from the Evolution of Human Communication

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# Introduction

- ▶ Hugo Mercier and Dan Sperber
- ▶ Function of reasoning: not epistemic, but social
- ▶ Argumentative theory of reasoning:  
the function of reasoning is to produce and evaluate arguments

Mercier and Sperber (2011, p. 60)

"Reasoning has evolved and persisted mainly because it makes human communication more effective and advantageous."

# Outline

- 1 The stability of communication
- 2 The argumentative theory of reasoning
- 3 The evolution of human communication
- 4 Criticizing the ATR
- 5 Conclusions

# The stability of communication



Scott-Phillips (2008), "On the correct application of animal signalling theory to human communication"

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# The evolutionary arms race

insert flowchart with four steps, including epistemic vigilance (which you'll spend some extra time on

Sperber (2001), "An Evolutionary Perspective on Testimony and Argumentation"

Sperber et al. (2010), "Epistemic vigilance"



# The argumentative theory of reasoning

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  - ▶ Senders produce arguments

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reasoning → argumentation



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reasoning → argumentation → communication

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reasoning → argumentation → communication → cooperation

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reasoning → argumentation → communication → cooperation → survival






# The evolution of human communication

# Criticizing the ATR

# Conclusions

- ▶ Intuitively attractive idea
- ▶ Theory is not cutting it

# Selected bibliography

-  Mercier, H. and D. Sperber (2011). “Why do humans reason? Arguments for an argumentative theory”. In: *Behavioral and Brain Sciences* 34.2, pp. 57–74.
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