



# Epistemology, Agnotology, and Systems Thinking Practice

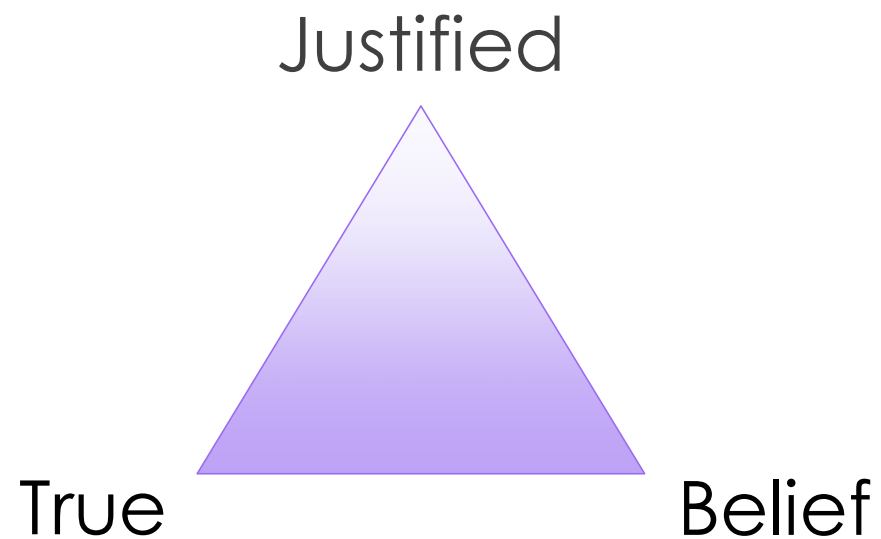
DR LISA MCNULTY



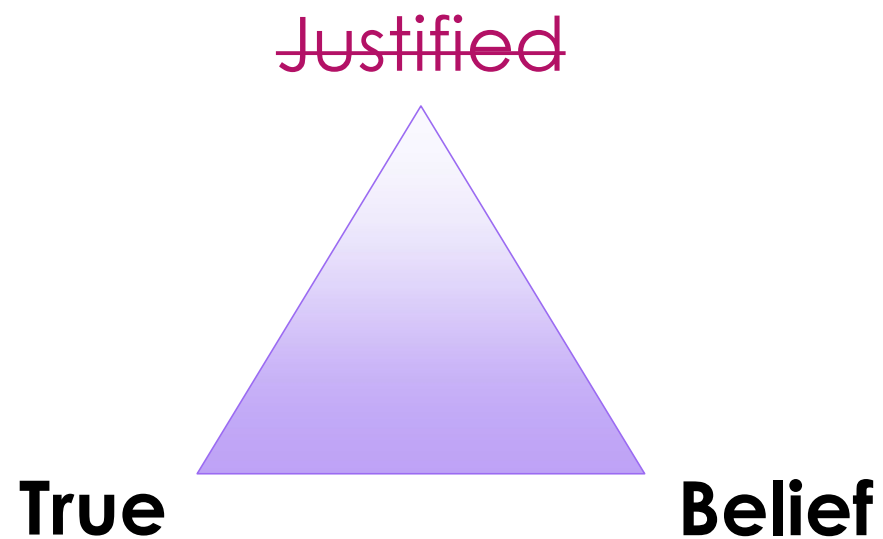
# Introduction

- ▶ My background
- ▶ The purpose of the talk
- ▶ The outline:
  - ▶ Defining knowledge
  - ▶ Epistemic standards and why they differ
  - ▶ Gaining knowledge from other groups
  - ▶ Choosing ignorance

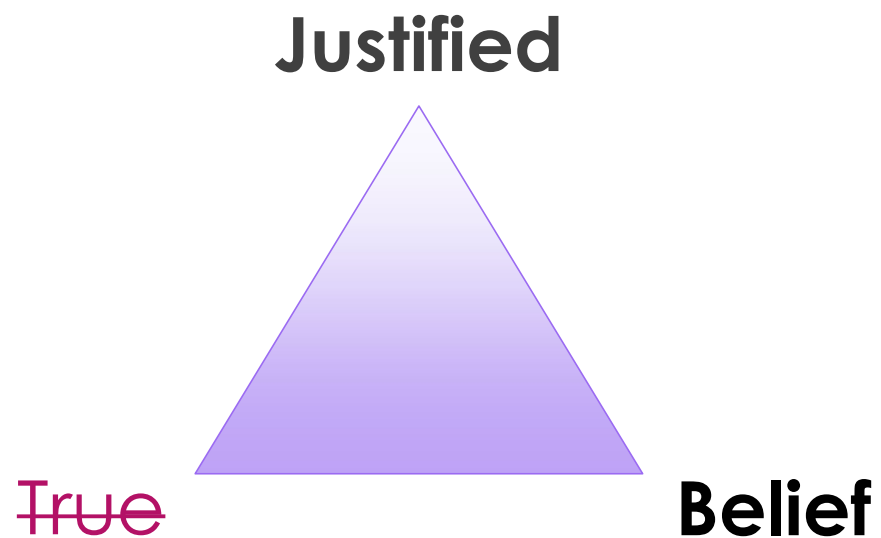
# Tripartite Definition of Knowledge



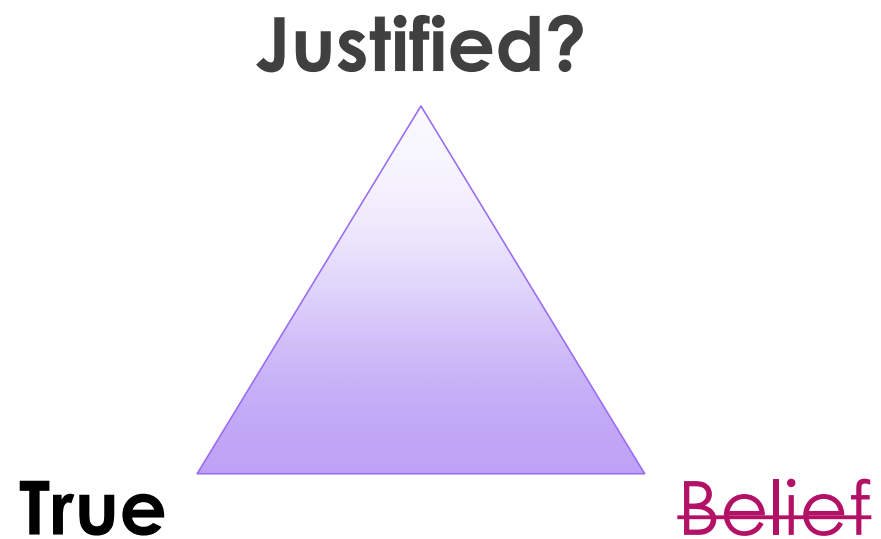
# Tripartite Definition of Knowledge



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# Summary

- ▶ Knowledge can be framed as **justified true belief**
- ▶ Belief ought to be proportionate to justification
- ▶ We must decide what counts as appropriate justification
- ▶ This decision is often taken not by individuals but by **groups**.

# What affects our epistemic standards?

- ▶ The subject matter
- ▶ Our values/what we are trying to achieve



# What affects our epistemic standards?

## **The subject matter**

- ▶ Mathematics
- ▶ Chemistry
- ▶ History
- ▶ Archaeology

# What affects our epistemic standards? Courtroom example

- ▶ Epistemic standards are dictated by the context...
- ▶ ...but not the subject matter.
- ▶ Rather, the epistemic priorities of the space...
- ▶ 'innocent until proven guilty'
- ▶ (...mostly)

# What affects our epistemic standards? Example of Wikipedia

- ▶ **Epistemic vices:** ‘Somebody who reads Wikipedia is “rather in the position of a visitor to a public restroom”’
- ▶ **Epistemic virtues:**
  - ▶ **Power:** How much knowledge can be acquired?
  - ▶ **Speed:** How fast can the knowledge be acquired?
  - ▶ **Fecundity:** How many people/how many new ideas can it inspire?

‘Wikipistemology’ (Don Fallis)



# Evaluating Standards

- ▶ Your own...
- ▶ ... other people within groups to which you belong.
- ▶ But what about groups you don't belong to?

# Requirements for Epistemic Groups

## Helen Longino

- ▶ **Publicly recognized forums for the criticism of evidence**, of methods, of assumptions and reasoning.
- ▶ **Uptake of criticism.** The community must not merely tolerate dissent; its beliefs and theories must change over time in response to... it.
- ▶ **Publicly recognized standards** by reference to which theories, hypotheses, and observational practices are evaluated and by appeal to which criticism is made.
- ▶ **Equality of intellectual authority.** What consensus exists must be the result not of exercise of political or economic power, or of the exclusion of dissenting perspectives... (though this)...does not require that each individual, no matter what her or his past record or state of training, should be granted equal authority on every matter.

(Longino 1994: 145).

# Agnotology

- ▶ Theory of Ignorance.
  - ▶ Specifically, the cultural production of ignorance
- ▶ Example topics:
  - ▶ Censorship
  - ▶ Manufactured uncertainty

# Why would we choose ignorance?

- ▶ Inquiry is always selective
- ▶ Some information is sensitive
- ▶ Knowledge can depend on ignorance



# The Engineer's Bridge

- ▶ “How much weight can the bridge take?”
- ▶ “That number does not exist.”



Thank you!