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Four Kinds of Perspectival Truth

MICHELA MASSIMI

University of Edinburgh

relativism

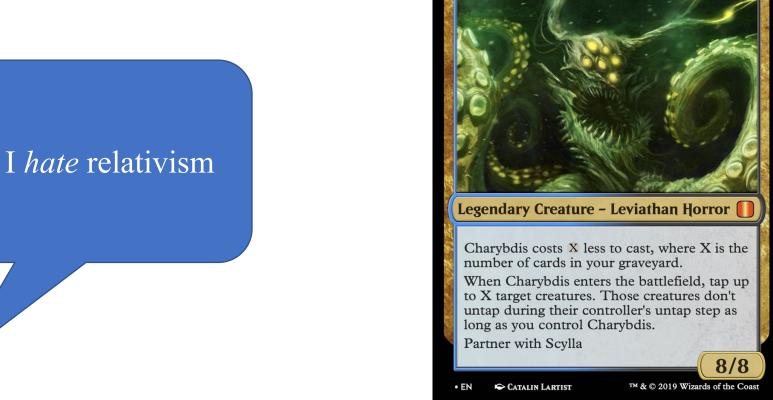
- our scientific knowledge claims about worldly states of affairs are *perspective-dependent*
- that electrons have half-integral spin depends on our currently accepted scientific perspective





1066

Charybdis







'objectivist' realism



- states of affairs about the world are perspective-independent
- that there are electrons is a state of affair about nature and its ultimate constituents

Epistemic Pluralism



'objectivist' realism



• how can *anyone* ever be in the position of knowing whether *their belief that theory x is true* is indeed correct?

'objectivist' realism





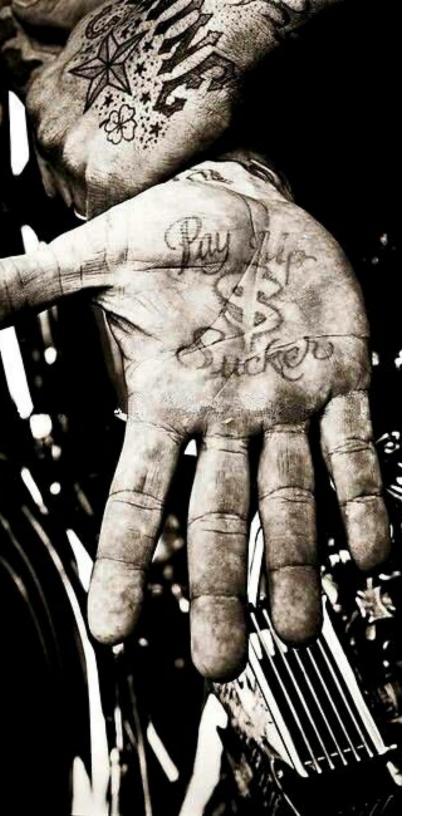
relativism



perspectival realism

Perspectival Realism

- what is it like to be a realist about science while also acknowledging that our beliefs in the truth of any scientific theory are inevitably situated and perspectival?
- how can we be realist despite epistemic pluralism and the ever-changing bounds of our scientific perspectives?
- can our scientific knowledge claims be *perspectival*, while also being claims about the world as *it is*?



Main Question

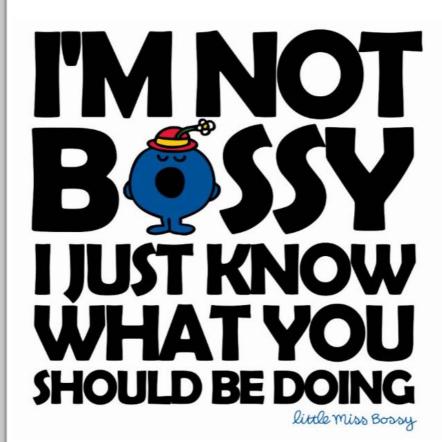
• What is it like to be *true within* a scientific perspective?

Strategy

- what is the *minimal realist commitment* that should be upheld in cashing out a viable notion of perspectival truth?
- why does perspectivalism pose a *hurdle* to it?
- how can the hurdle be overcome?

Minimal Realist Commitment

- Getting Things Right
 - what science *ought* to do
 - science *ought* to map onto reality in a truthful way
 - getting things right is a *norm* about what we take science to be about





Hurdle

• how can anyone ever know that they are Getting Things Right?









Success from Everywhere

success from here now

(P) Perspective-dependence

• (P) knowledge claims in science are dependent on a given historically and/or intellectually situated scientific perspective

(P) Perspective-dependence

- (P) knowledge claims in science are dependent on a given historically and/or intellectually situated scientific perspective
- 3 + 1 ways of understanding (P)



(P₁) Perspective-dependence₁

• (P₁) knowledge claims in science are perspective-dependent₁ when their propositional contents depend on the scientific perspective in which such claims are made

(P₁) Perspective-indexicality

- claim: <it is sunny here>
- index: September 9th, 2020
- index: April 14th, 1638

(P₁) Problem

- claim: <the Earth is orbiting the Sun>
- perspective: present day (True)
- perspective: *Ptolemaic* (???)
- different truth-makers

(P₁) Problem

- claim: <the Earth is orbiting the Sun>
- perspective: present day (True)
- perspective: *Ptolemaic* (???)
- different *truth-makers*
- can (P₁) Get Things Right?



(P₂) Perspective-dependence₂

• (P₂) knowledge claims in science are perspective-dependent₂ when their *truth-values* depend on the scientific perspective in which such knowledge claims are made

(P₂) Perspective-relativity

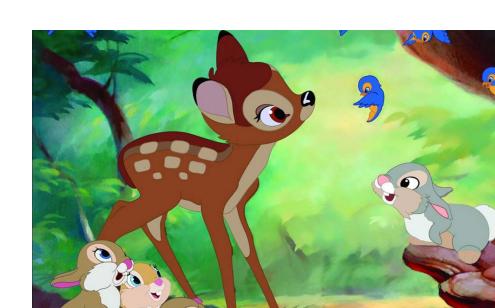
- claim: <the Earth is orbiting the Sun>
- perspective: present day (True)
- perspective: *Ptolemaic* (False)

(P₂) Problem

- conflicting truths
- claim_a: <the Earth is orbiting the Sun>
- claim_b: <the Earth *is not* orbiting the Sun>

(P₂) Problem

- conflicting truths
- claim_a: <the Earth is orbiting the Sun>
- claim_b: <the Earth *is not* orbiting the Sun>
- explained away any disagreement
- Gets Things Wrong

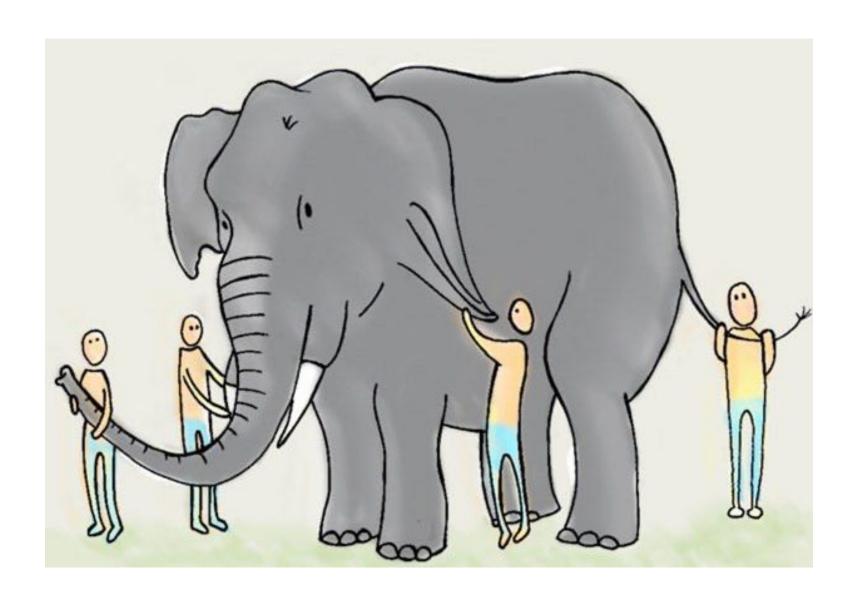


(P₃) Perspective-dependence₃

• (P₃) knowledge claims in science are perspective-dependent₃ when their *truth-conditions* depend on the scientific perspective in which such claims are made

(P₃) Perspective-sensitivity

- claim: <water is a liquid with viscosity>
- context of use: hydrodynamics (True)
- context of use: statistical mechanics (False)
- Gets some Things Right



(P₃) Problem

• Truth recedes into the distance







(P₄) Perspective-dependence₄

• (P₄) knowledge claims in science are perspective-dependent₄ when their truthconditions (understood as rules for determining truth-values based on features of the context of use) depend on the scientific perspective in which such claims are made; yet such knowledge claims must also be assessable from the point of view of other (subsequent or rival) scientific perspectives

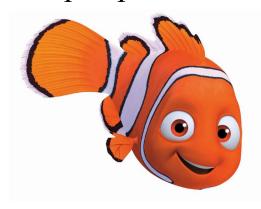
$$(P_4) P_3 +$$

- context of use and context of assessment
- take (P₃) and add:
 - standards of performance-adequacy
 - assessment across various perspectives

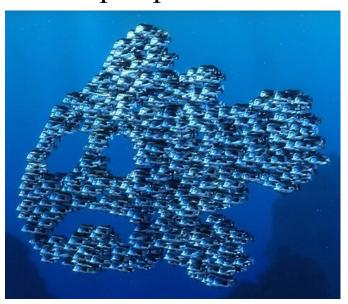
(P₄) Standards of Performance-adequacy

- accuracy
- empirical testability
- projectability
- heuristic fruitfulness
- etc.

hydrodynamic perspective



statistical mechanical perspective



viscosity

cross perspectival assessor



momentum
across laminae
of mean flow

(P₄) P₄ In Action

- claim₁: <the electron is a structural element of an elastic ether>
- claim₂: <the electron has half-integral spin>

(P₄) P₄ In Action

- claim₁: <the electron is a structural element of an elastic ether>
- claim₂: <the electron has half-integral spin>
- evaluate ongoing performance:
- Getting Things Right:

Gems

- nation/solut
- so good use of examples
- not overreaching