Third? — Notes

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YHouse, June 21, 2017

I. Preamble
   A. Abbott and Costello: "Who's on First?"

II. Intro
   A. Explanatory gap
      1. Between
         a. Private, subjective, inexorably 1st-person qualitative phenomenological character of conscious experience—
         b. Public, objective, detached, 3rd-person character of empirical science (from physics and neuroscience to cognitive science to scientific psychology).
      2. Hard problem ("what it is like")
         a. Basically first; but "hard" because of relation to the second.
         b. How to bridge 'is' and 'what it is like'
   B. Discussion
      1. Most agree (phenomenologists and scientists)
         a. Nothing in our current scientific picture of the world explains—sheds the remotest light on—the essentially private, qualitative, "awake" character of what it is like to be a conscious subject (get Nagel quote).
         b. Extant scientific picture of the world is somehow inimical (ontologically and/or epistemically) to an adequate naturalistic account of the "phenomenal" character of first-person conscious experience.
      2. Disagreement
         a. Some (≡"optimists") view gap as temporary—merely reflecting an inadequacy in the progress of science, which should be repaired.
            i. Many neuroscientists; also scientifically-minded philosophers
            ii. Expect it to be explained in ordinary scientific terms—on model of neurotransmission or digestion
         b. Some (≡"pessimists," Nagel, new mysterians) view conflict as intrinsic, leading them to propose desperate measures: *pan-psychism*, *neo-dualism*, *new mysterians*, etc.).
            i. Public/empirical realm, private/transcendental realm, essentially incommensurable
            ii. Chalmers
         c. Intermediates: gap can be crossed, but only with radical adjustments to our conception of the physical world (Penrose, Gregg)
            i. Also: quantum mechanics (quantum microtubules), etc.
   C. Me
      1. All wrong
         a. Optimists, pessimists, and intermediates
      2. Instead, will argue three contrary views

   a. Familiar first-person, phenomenological character of conscious experience, far from being independent of physics, is virtually a *direct consequence of it* (of a rather abstract property) of physical law—implying that any embodied creature must be conscious, if it has a sufficiently robust sense of the world around it.
   b. No new resources, physical or metaphysical, needed to explain it—though our meta-theoretic understanding of the nature of scientific knowledge will come in for serious adjustment;[1] and
   c. "Bridging the gap," from physics to consciousness, is almost *simple*, if only one looks at the problem correctly.
3. Rabid physicalist?
   a. Depends
   b. Nothing like traditionalists
   c. Rather, an especially rigorous form of what I call radical physicalism, assuming no more than (an intuitive version of) elementary field theory, gives rise, from a third-person, empirical perspective
      i. "From the outside" (or "sideways-on," to use McDowell's phrase
   d. …to a picture of consciousness
      i. Far more like that developed from a first-person perspective ("from the inside"), as for example in ordinary contemplative reflection, or in the phenomenological tradition
      ii. Than like the pictures of mind one normally encounters in neuroscience or analytic philosophy of mind.
4. Discussion
   a. May seem a stretch
      i. From (quantum) field theory
      ii. To originary self-reference of pre-reflexive intuition.
   b. By the time we are done, hope to make it seem like not much of a stretch at all.

III. Strategy

A. Intro

1. Explanatory gap (1st-person/3rd-person) based on use-mention confusion
   a. What is third-person is our *understanding* of the physical world
   b. What must be 1st-person, to understand consciousness,[2] is *physical world thereby understood*
2. Leads to two tasks
   a. Ontological
      i. Develop an objective, presumptively 3rd-person,[3] scientific account of how

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[1] That is: I will argue for relatively radical revisions in how we *understand* (all) scientific knowledge, rather than claiming that the character of scientific knowledge itself has to be adjusted in order to understand consciousness. Consciousness, I will claim, can be understood in essentially the same scientific way as we have "always already" understood other material phenomena.

[2] I.e., what needs to sustain or "subvene" first-person content, in order for consciousness to be naturalised.

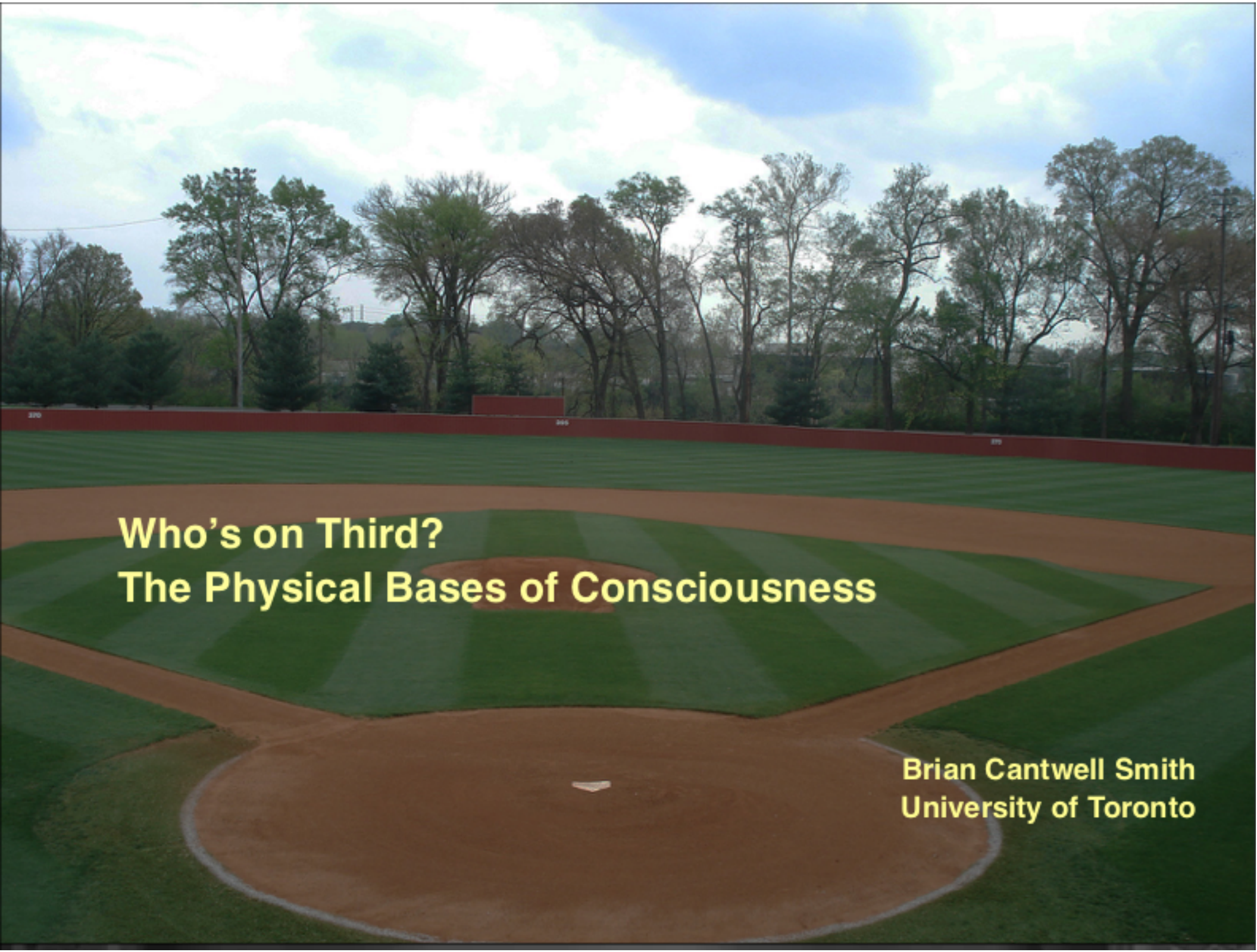
[3] Whether objective, scientific accounts are *really* "third-person" is questioned in §▪▪.

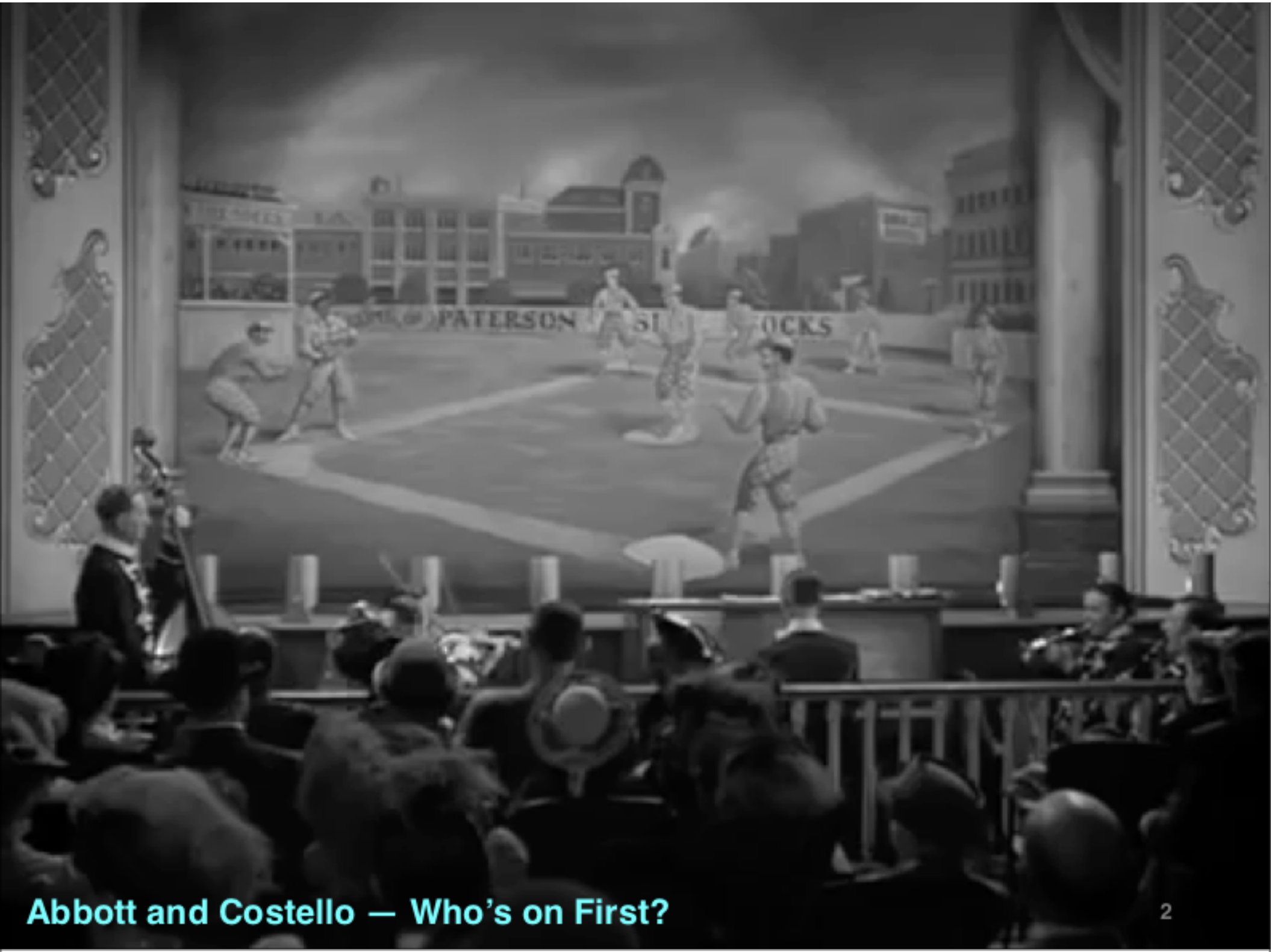
subjective, 1st-person (and 2nd and 3rd) content can arise in—or supervene on—the (seemingly impersonal) physical plenum.

ii. Two parts, in turn
   a. First person is *easy*
   b. Then: how 3rd person arises (what it takes)

b. Epistemological: integrate
   i. Our 1st-person, subjective awareness of our own (1st-person) consciousness
   ii. With (allegedly) 3rd-personal objective scientific understanding of the physical world

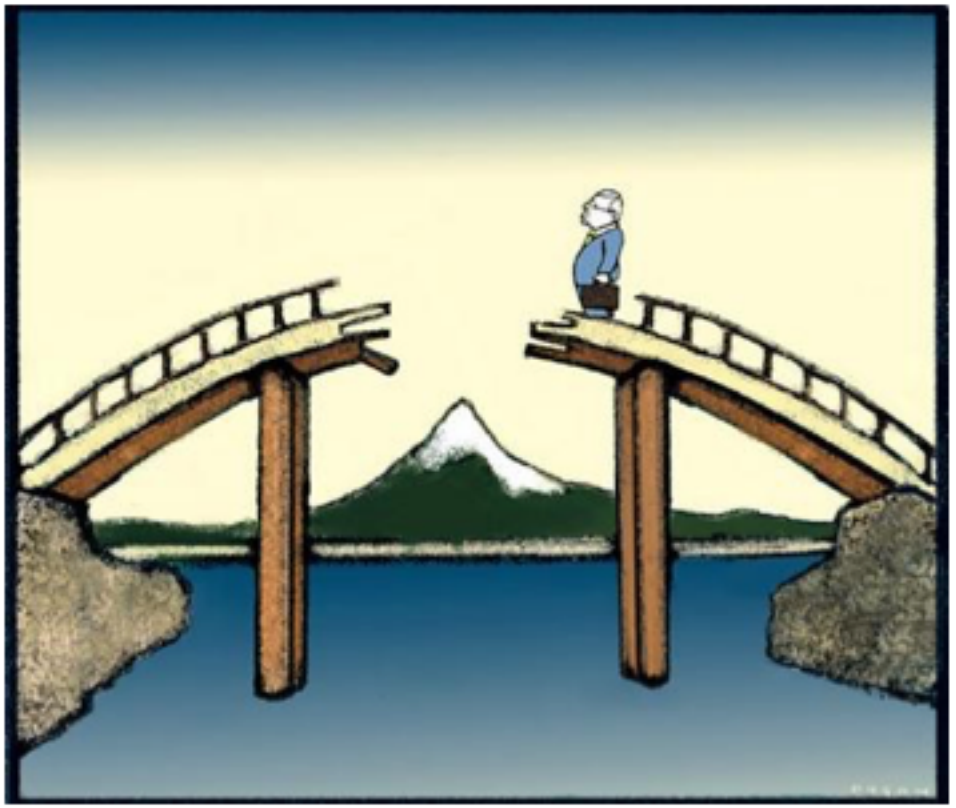
3. Summary
   a. specific facts about the nature of the physical world entail that (at least inchoate versions of) first and second person content are relatively "easy." It is *third-person* content, often assumed to be the default, that turns out to be difficult.
   b. It is a substantial trick, given the nature of physical law, for a physically embodied agent to achieve anything like a genuinely third-person perspective on the world around it.
   c. Developing such a perspective, I will argue, requires no less than the attainment of *objectivity*—not only in order to count as *third-person*, but also, perhaps more significantly, in order to count as a perspective on the *world*


Who's on Third?
The Physical Bases of Consciousness
Brian Cantwell Smith
University of Toronto



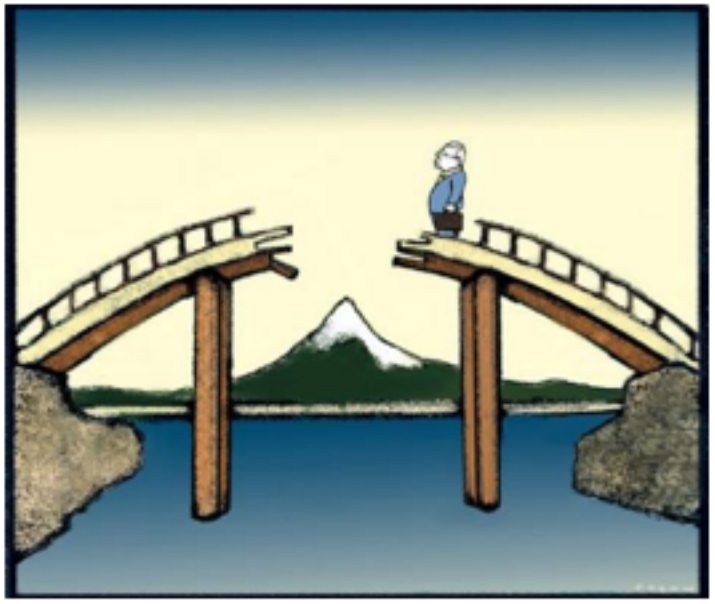
Abbott and Costello — Who's on First?

Explanatory Gap



1. Many people take there to be a profound, explanatory gap between
   a) **Private**, **subjective**, inexorably **1st-person qualitative phenomenological character** of conscious experience
   b) **Public**, **objective**, **3rd-person character** of empirical science (from physics and neuroscience to cognitive science to scientific psychology)
2. Explaining how to bridge the gap is the so-called "**hard problem of consciousness**"

Explanatory Gap (cont'd)



3. **Agreement**
   a) Nothing in current science explains—sheds the remotest light on—the essentially private, qualitative, "awake" character of **what it is like** to be a conscious subject
   b) The scientific picture of the world is ontologically and epistemically inimical to an adequate account of the "phenomenal" character of 1st-person consciousness.

Everyone is wrong!

4. **Disagreement**
   a) **Pessimists:** The gap is *inexorable*—between incommensurable realms: (i) public/empirical vs. (ii) private/transcendental [neo-dualists, new mysterians]
   b) **Optimists:** The gap will be closed, and we will (soon) understand consciousness the same way we understand digestion or neurotransmission
   c) **Intermediate:** We can close the gap, but only with radical changes to our

I will argue instead:

1. Far from being independent of physics, the first-person, phenomenological character of conscious experience is virtually a *direct consequence of (a rather abstract property of) physical law:*
   - Any embodied creature—any creature made of clay—*must be conscious*, so long as it has a sufficiently robust **sense of the world** around it
2. *No new resources*—physical or metaphysical—are needed to explain it (though our meta-theoretic understanding of the nature of scientific knowledge will need adjustment)
3. Bridging the gap is *simple*, if one looks at the problem correctly

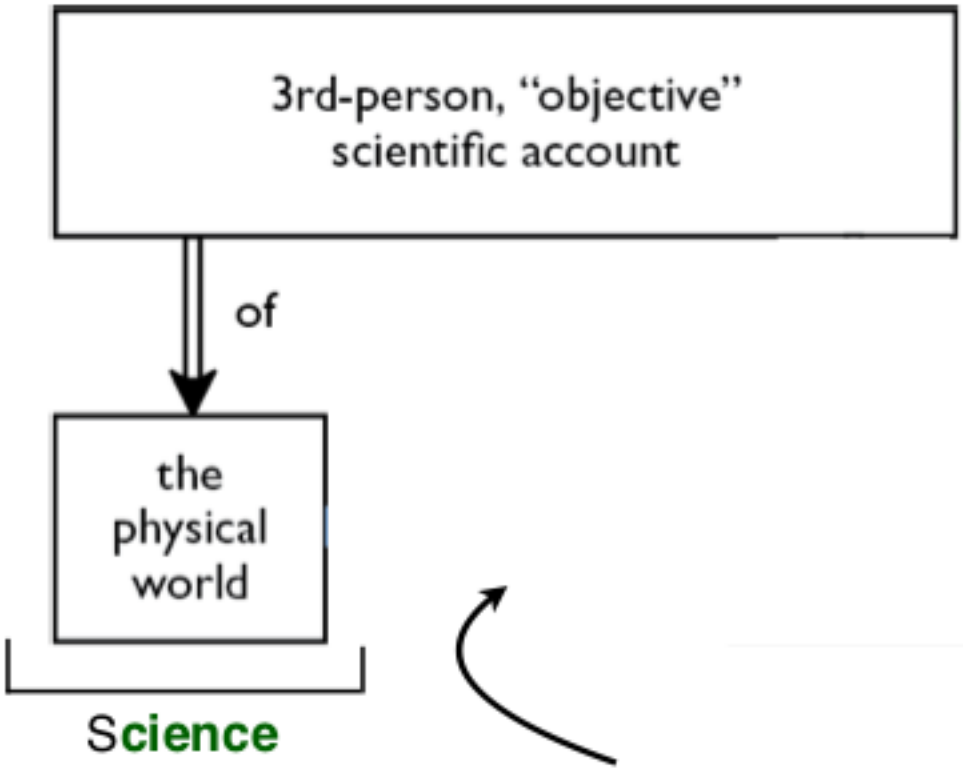
Strategy

1. The (standard account of) the explanatory gap rests on a confusion
   a) What is third-person is our **account** of the physical world
   b) What must be shown to be able to manifest a first-person character is the **physical world thereby understood**
2. In standard accounts, "physical stuff" isn't first-person…but it isn't third person, either. It isn't "**personed**" at all!
3. Leads to two tasks:

   a) **Ontological task:** show how the physical world can support (the emergence of) configurations of matter that represent the world from a subjective first-person point of view
      — An understanding of ***what consciousness is***
   b) **Epistemological task:** show how our understanding of that *physical-world-that-underwrites-subjectivity* can be understood from a phenomenological point of view.

Strategy (cont'd)

Epistemological: Integrate (new) *3rd-person understanding* of consciousness with our *1st-person* **problem**



Ontological problem: How does subjectivity arise in the physical world?

I.e.: develop:

a) An objective, *3rd-person*, scientific account
b) Of how *1st-person* conscious experience

Part II — Ontological Problem

Observations

Three theses need to be argued for—which I will simply assume:

1. **No objects**
   a) Traditional philosophical analyses assume that the "physical" or "material" world consist of discrete objects (exemplifying properties, standing in relations, etc.)
   b) But there are no objects in physics!
   c) The physical world is a vast sea of undulating, fields of stunning complexity.
   d) Think about falling overboard in a perfect storm at sea—and then suppose the boat pulls away, you are all alone. And then subtract you! That's kind of what it is like, out there

What you might imagine the world is like

But you just processed this image using a *100-billion neuron device* with *100 trillion interconnections* honed over *500 million years* of evolution for the express purpose of finding such images intelligible!

Or rather, for finding the world that these images are images *of* intelligible!

A better rendition of what the world is *actually like*, "prior" to your visual/perceptual processes

Observations (cont'd)

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2. **Integration**
   a) First-person perspectives don't stand alone.
   b) Our understanding of the world in fact consists of thickly integrated first, second, and third-person perspectives—singular and plural.
   c) This requires a bit of an adjustment to our strategy diagram

Strategy (cont'd)

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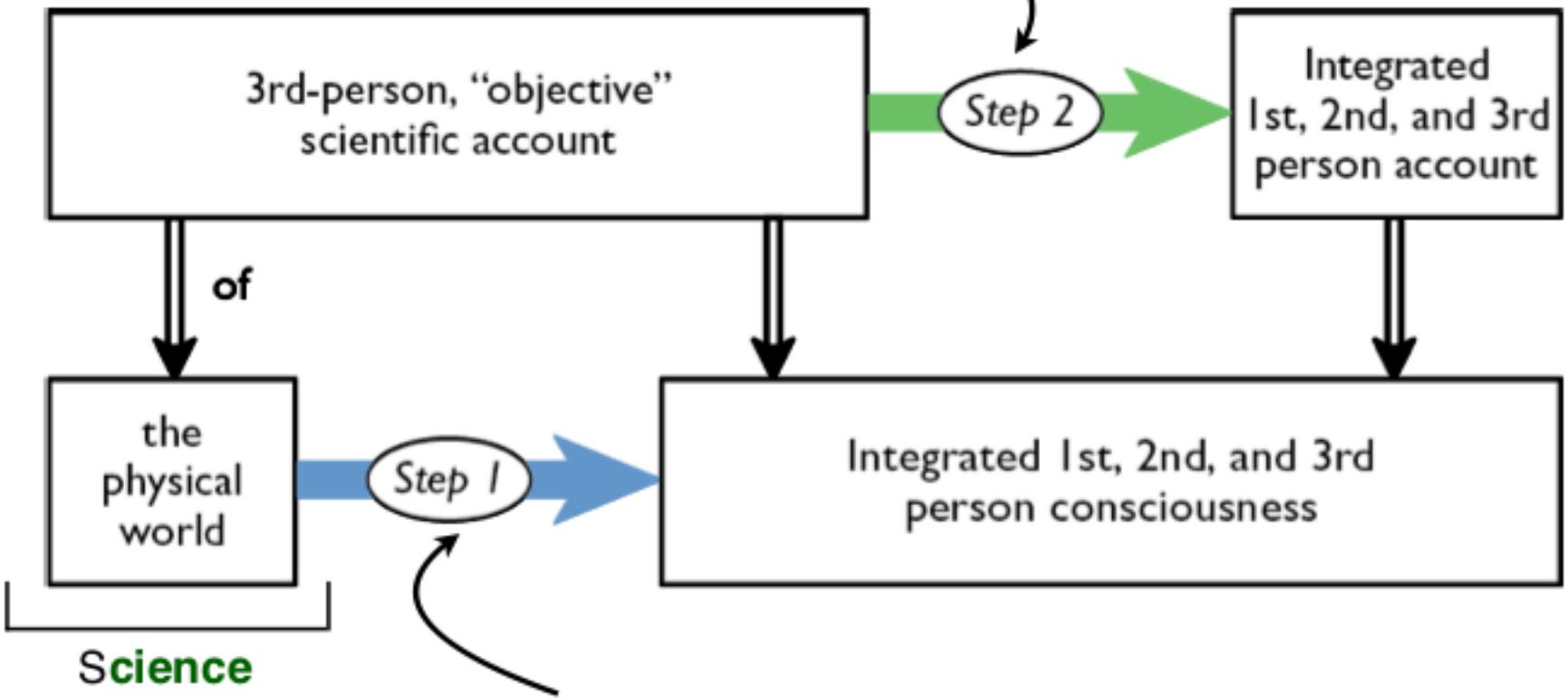

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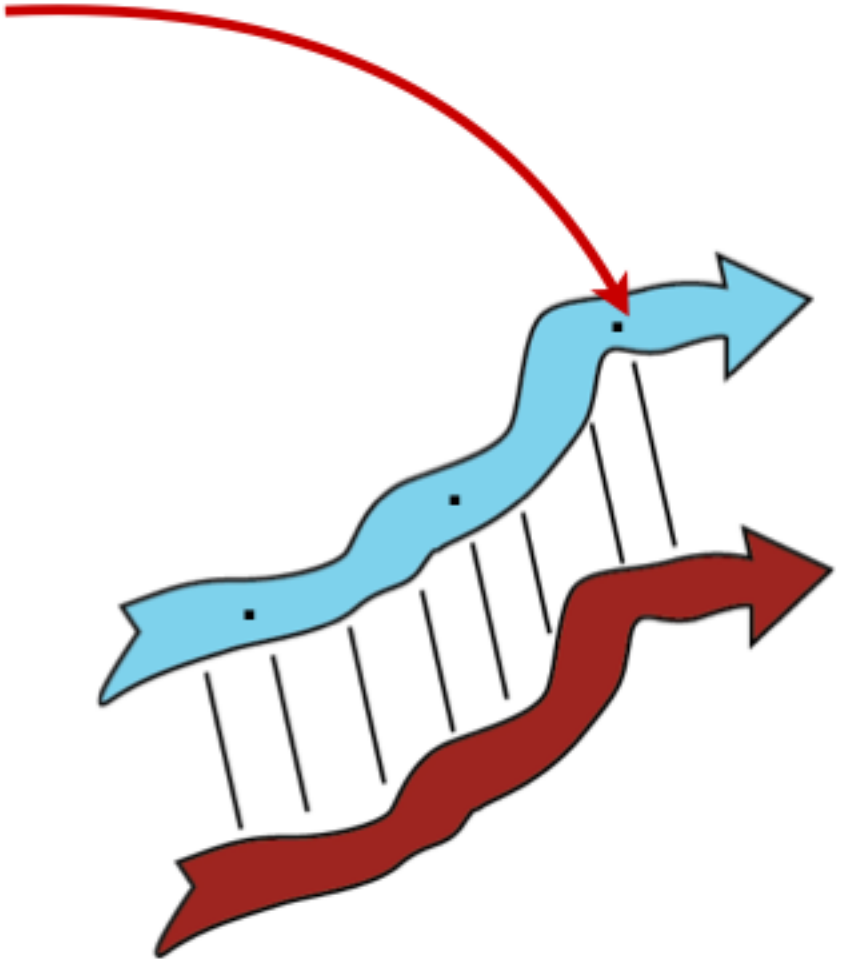
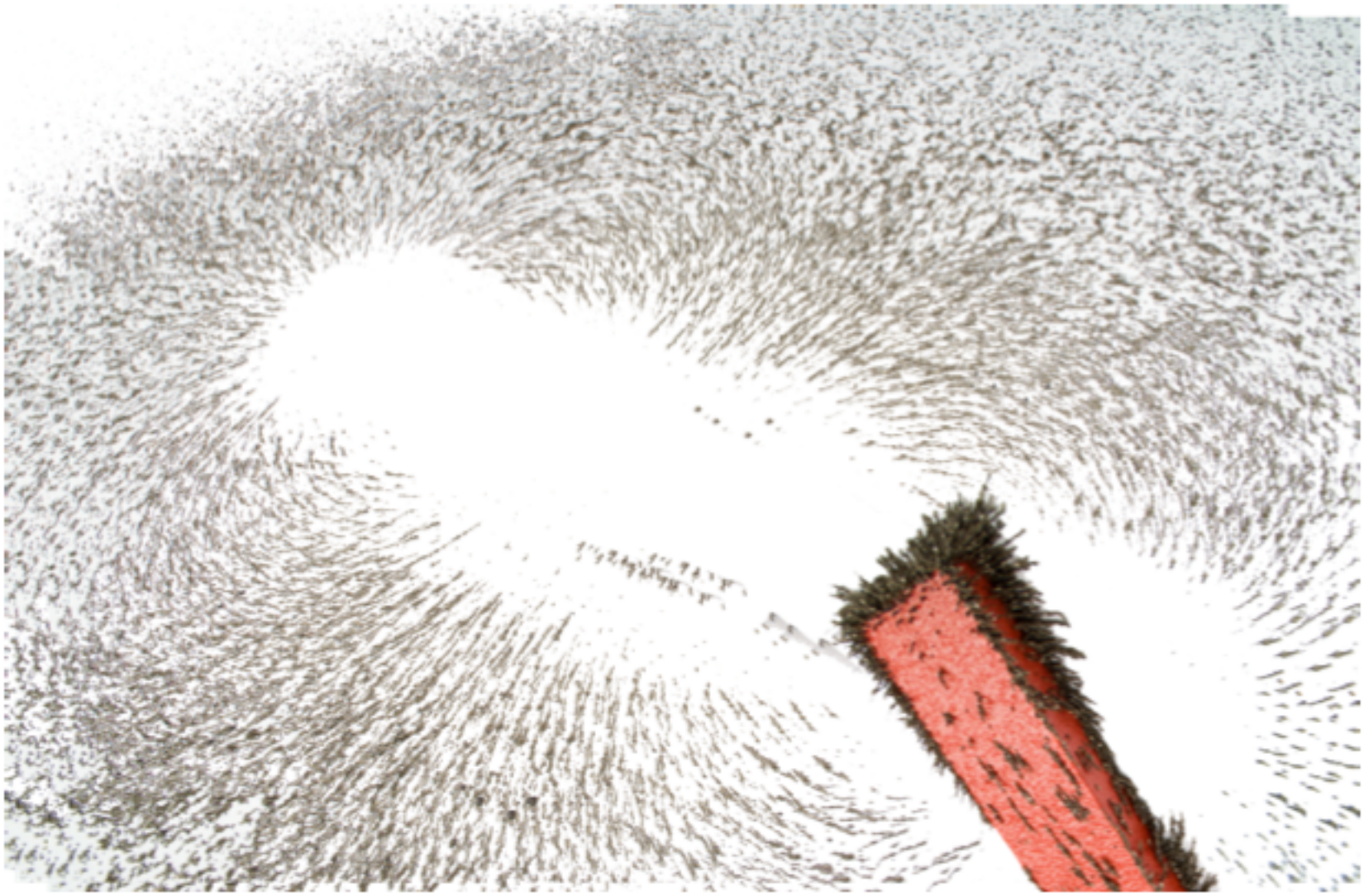
2. **Integration**
   a) First-person perspectives don't stand alone.
   b) Our understanding of the world in fact consists of thickly integrated first, second, and third-person perspectives—singular and plural.
3. **Representation**
   a) Consciousness, awareness, etc., are *representational*—they "give us the world" around us. I.e., they have the "of-ness" or "about-ness" of *intentionality*

How does physics work—if we don't assume objects?

1. At any given place and time in the 4D physical plenum, there are **point-to-point interactions** with neighbouring places and times—i.e., with those space-time points that are **spatially and temporally adjacent**
2. That is, physics is:
   a) **Local** (space & time)
   b) **Incremental** (space & time)
   c) **Pointwise**.

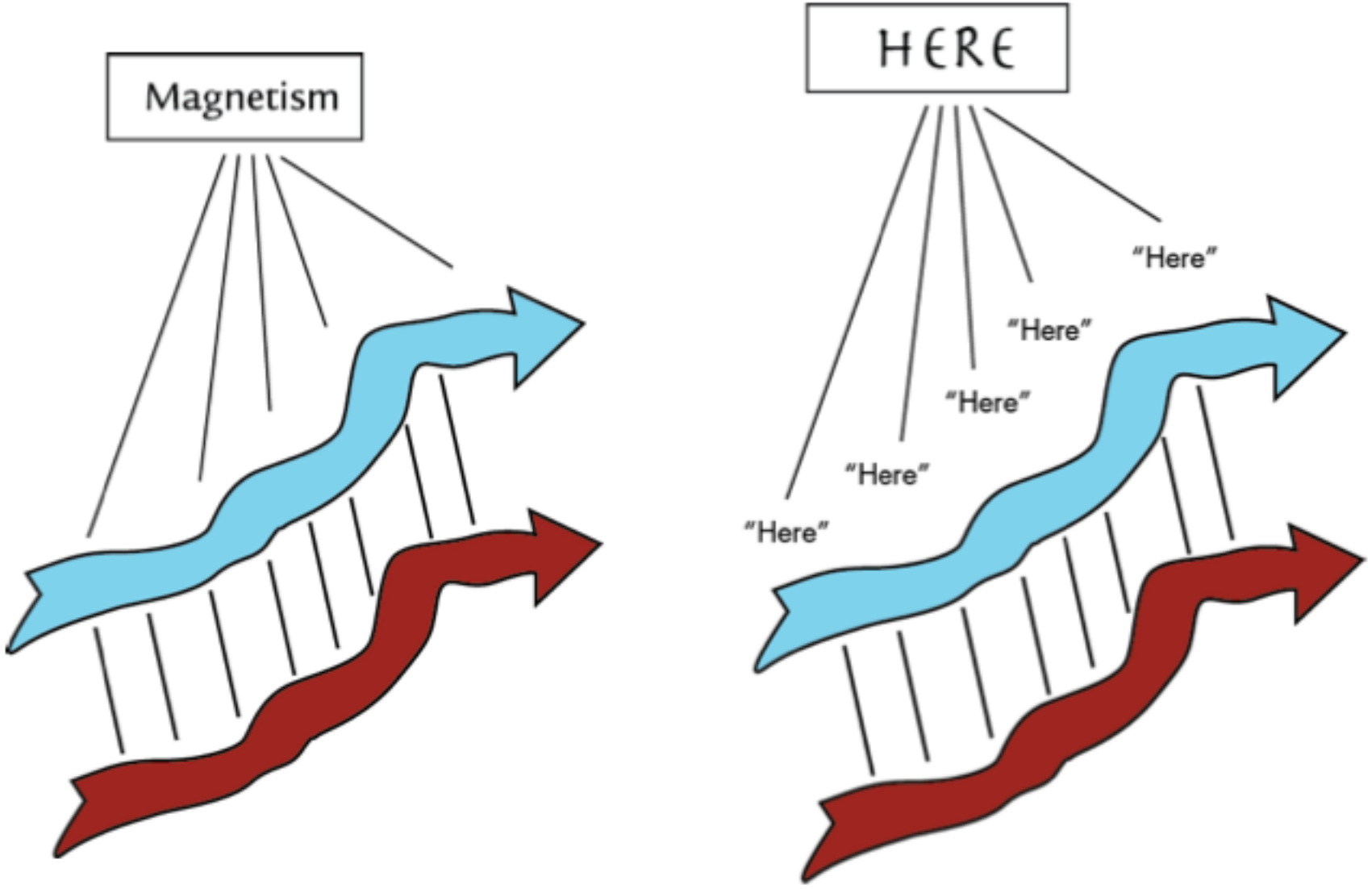


Example



Deixis / indexicality

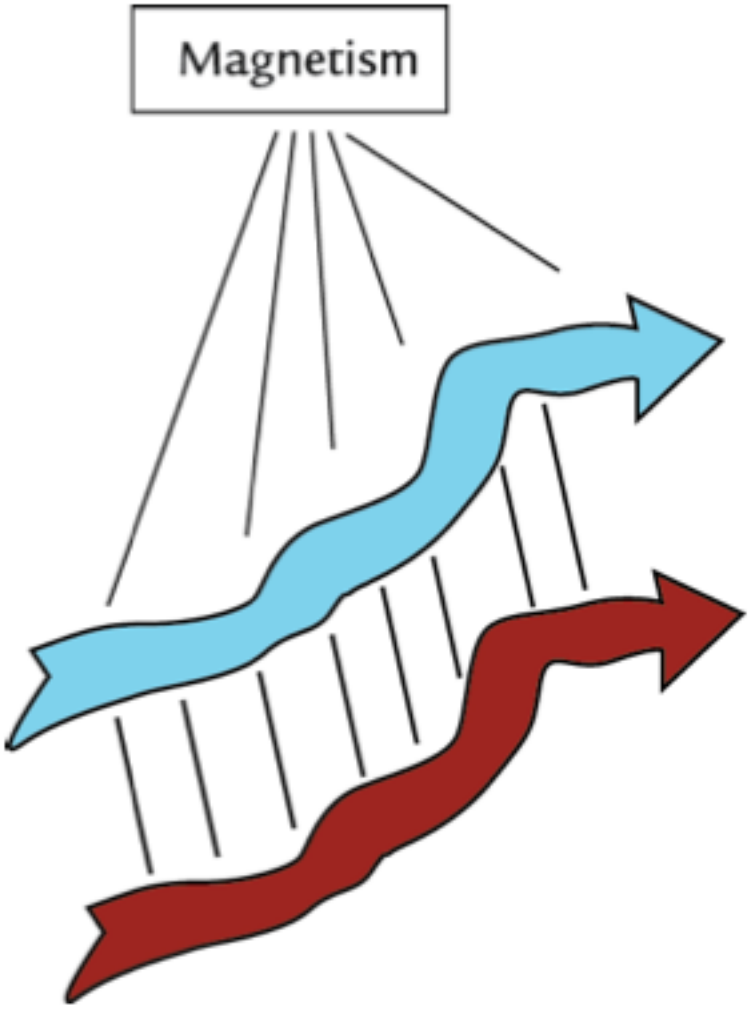
This point-to-point correspondence (of all physical regularities) is **strikingly similar to the way that indexical or deictic references work in natural language** (*here*, *now*,



Deixis / indexicality (cont'd)

It is as the magnet were constantly talking to the iron filings:

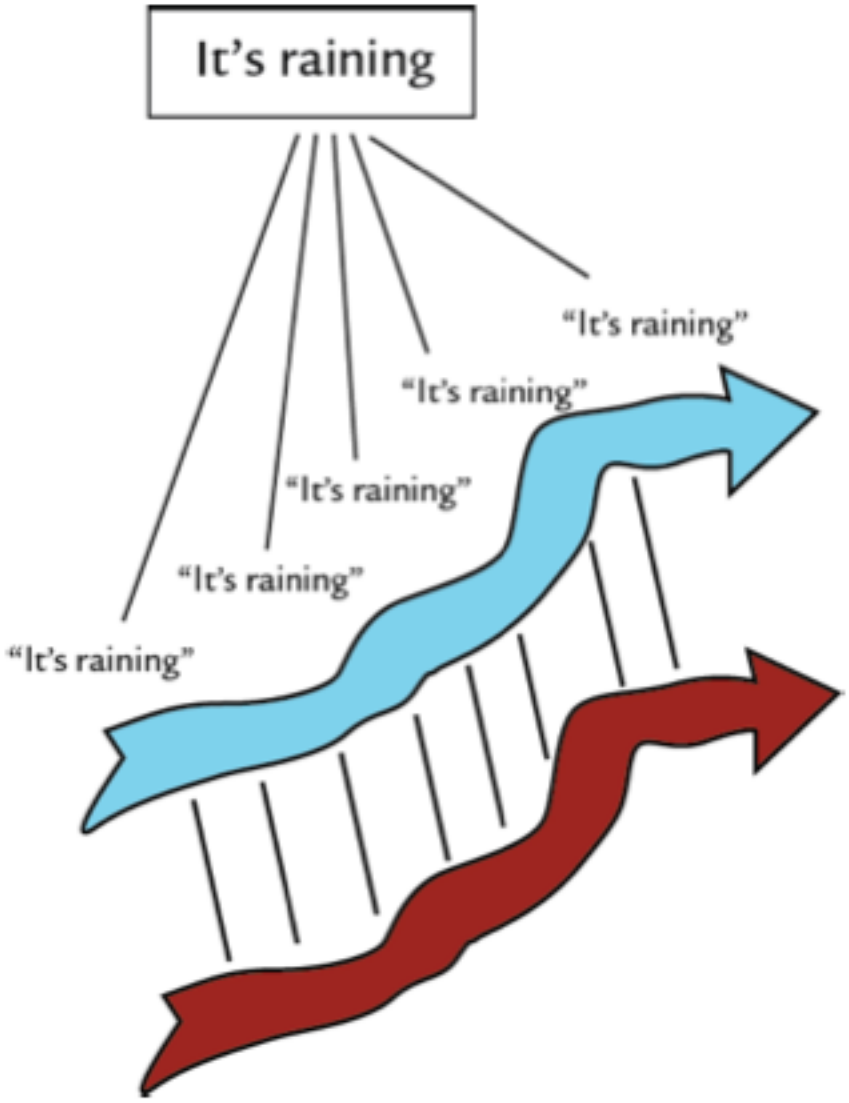
"Yo! Come here! Now!"



Deixis / indexicality (cont'd)

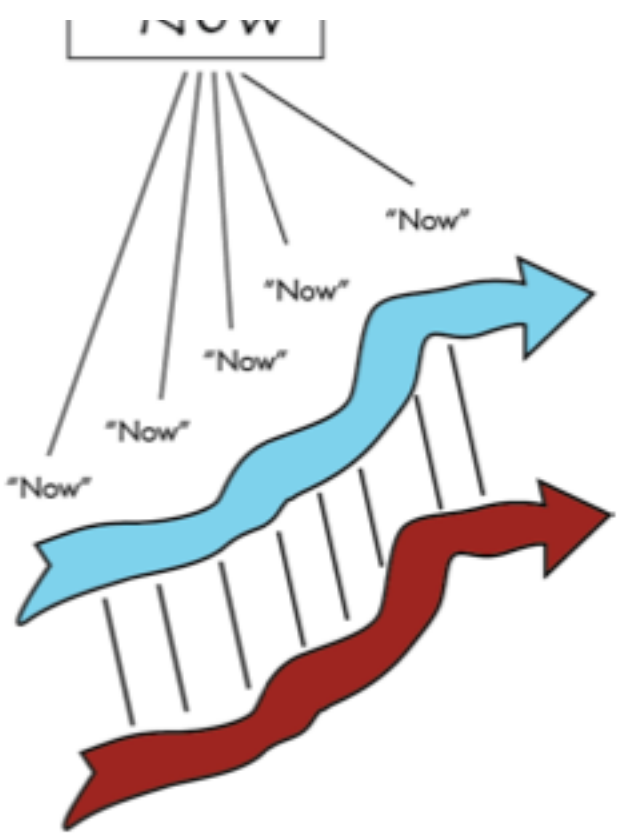
Deixis underlies a *huge amount* of language—not just obvious indexicals, but other common forms, including tense, context-dependence, etc., that don't posit or require (i.e., that don't register the world in terms of) *discrete individual objects.*

(What the philosopher Strawson calls "feature placing")



Deixis / indexicality (cont'd)

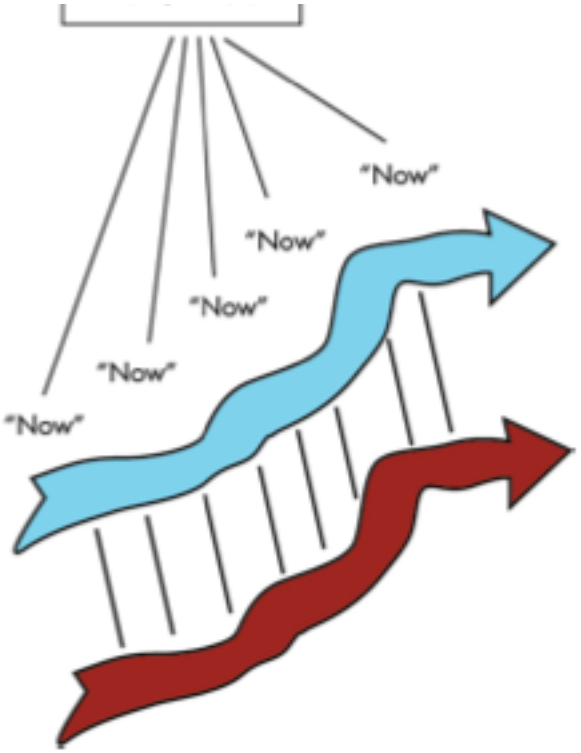
Because *physical (causal) interaction* has the same structure as *deictic or indexical language*, I say that there is a fundamental **deixis** (indexical structure) to the laws of physics (i.e, to



Physical deixis is the ontological consequence of the epistemological fact that the laws of physics are expressed as differential equations

Deixis / indexicality (cont'd)

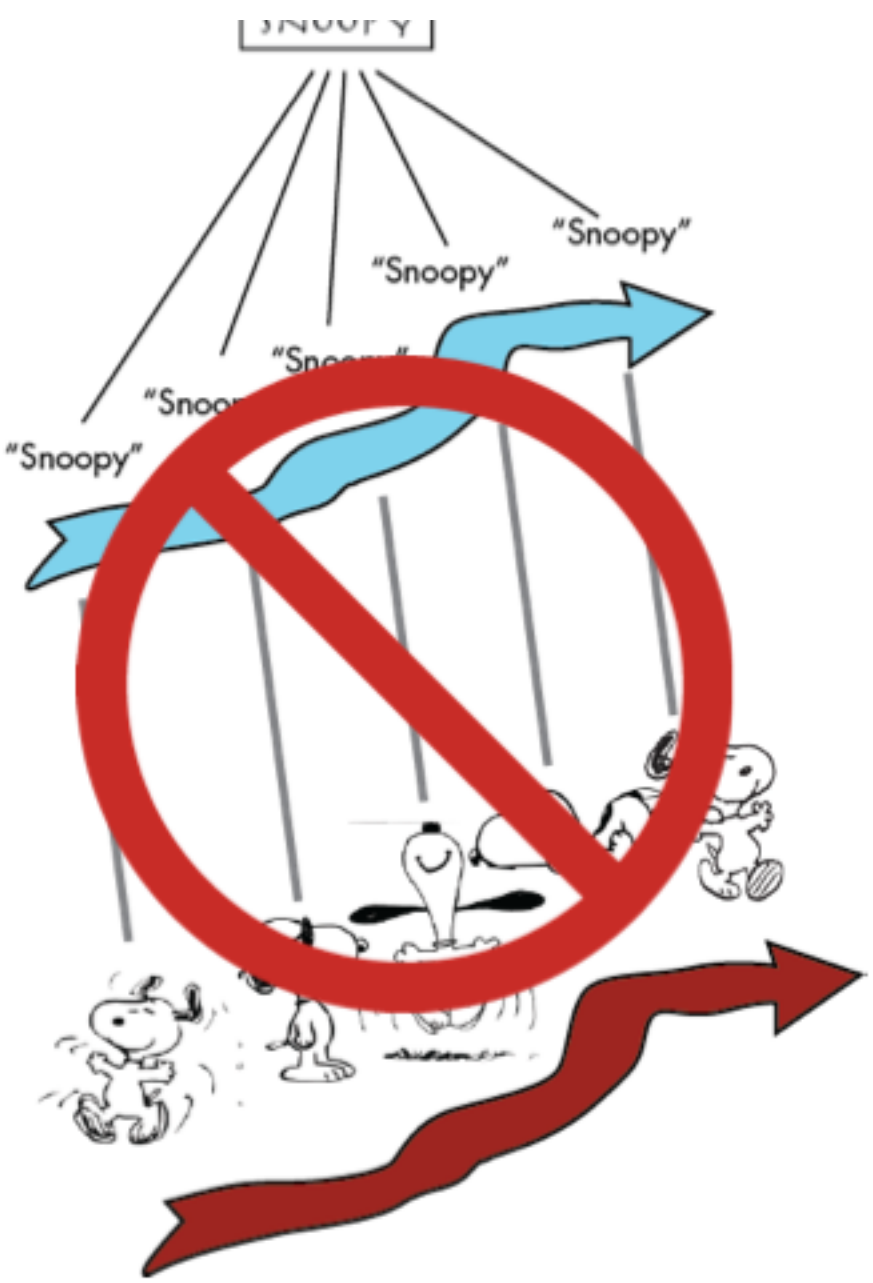
1. The deixis of the physical plenum, plus the fact that the plenum is a profusion of field-theoretic dynamics, means that initial/inchoate representation *gives us the world as an egocentrically centred phenomenal field of rich sensory impressions…*
   - No memory (local in space and time)
   - Purely immediate
   - Unfiltered
   - Not ontologically filtered or abstracted
2. Think about falling overboard in a perfect storm at sea—and then suppose the boat pulls away, you are all alone.
   - Then subtract you!
   - That's like what a purely deictic/indexical



Objects

Object registration, in contrast, is **not** another case of this kind of point-to-point correspondence

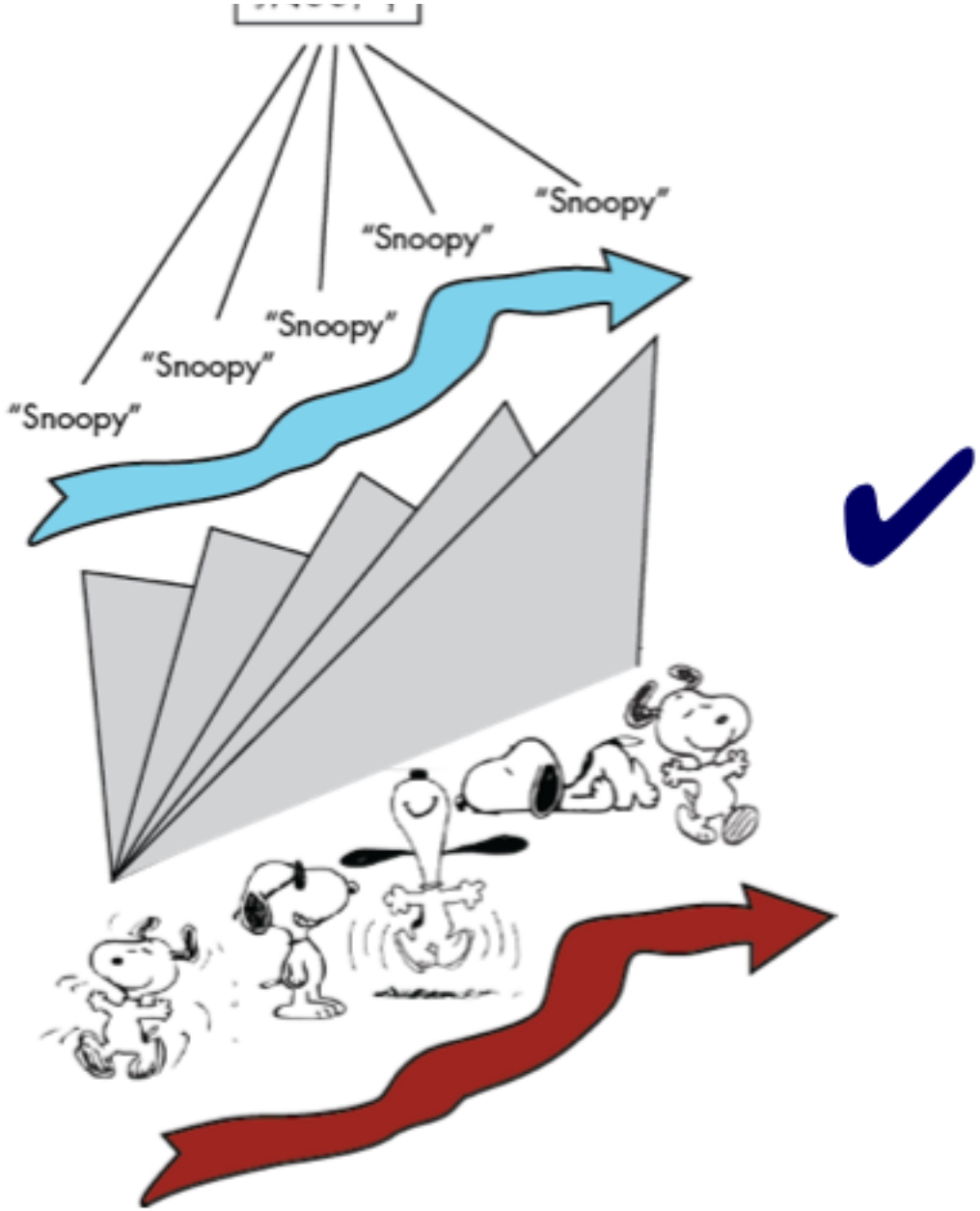
Object registration is neither local (in space), or local (in time), or point wise.



Deixis / indexicality (cont'd)

Rather, object registration involves point-to-extent correspondence

It opens up the whole (huge!) metaphysical subject matter of the relations between the one and the many



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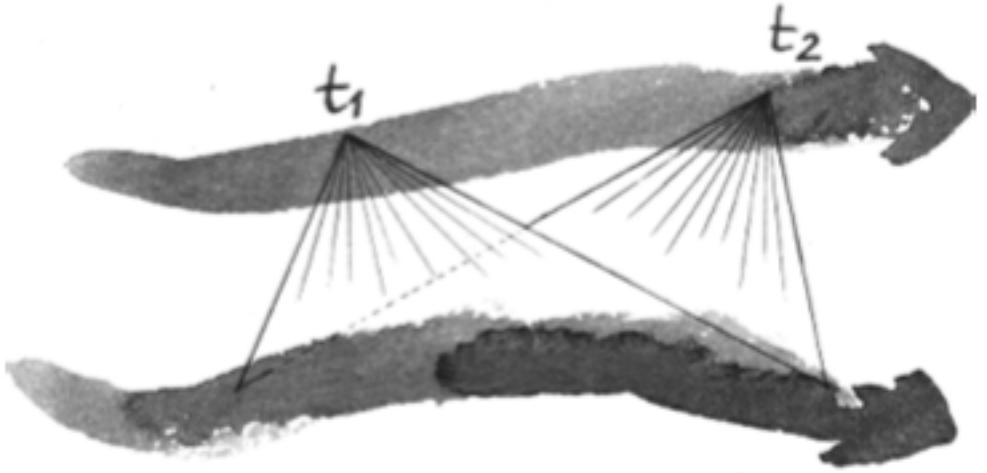


Ichabod

← Name

In other words, the

one name ↔ one object

model that children learn in school is far too simple.

Ichabod ← *Name*

← *Object*

Ichabod ← *Name*

In other words, the

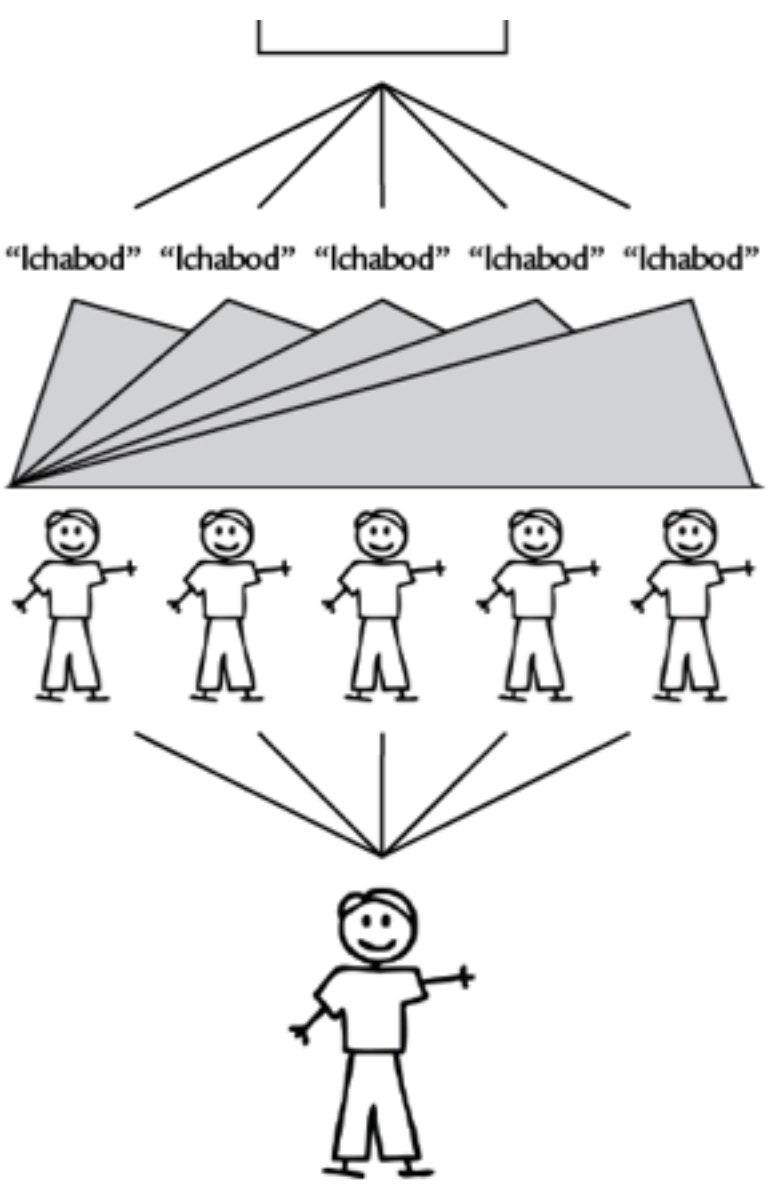
one name ↔ one object

model that children learn in school is far too simple.

It is more like

one name ↔
many utterances ↔
many manifestations ↔
one object

where—crucially!—
each utterance refers
to *all* manifestations



← *Name*

← *Utterances*

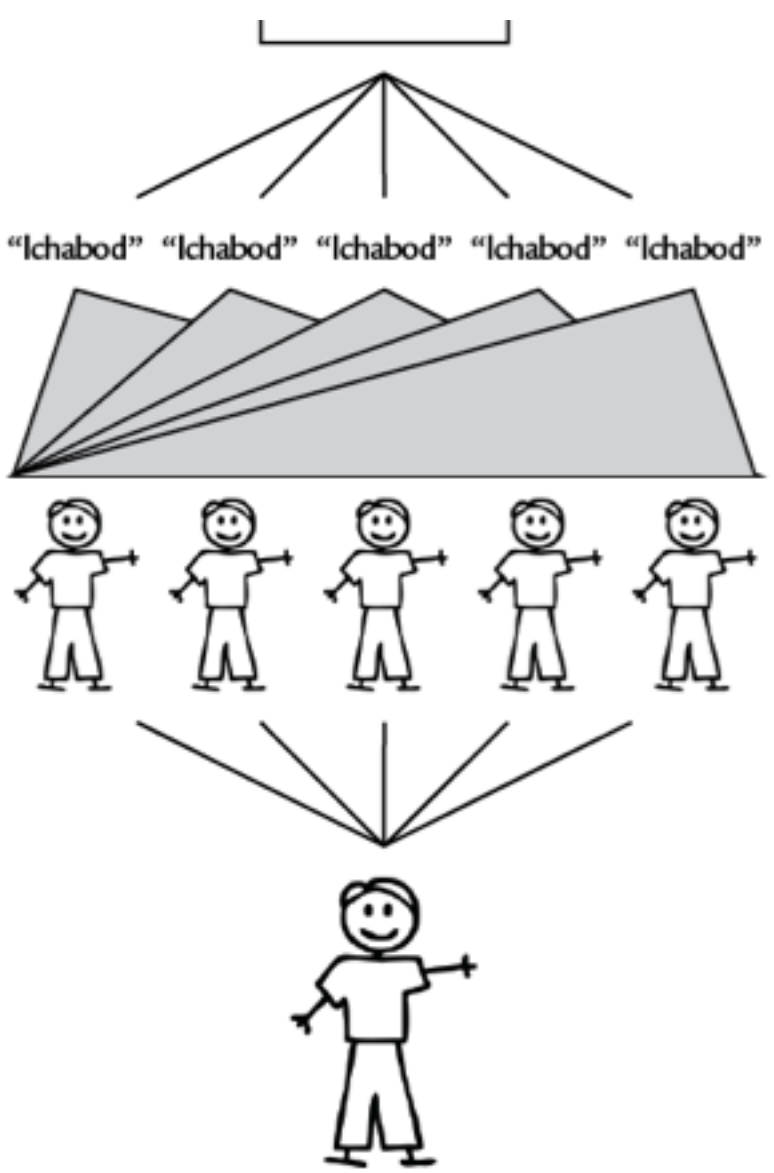
← *Manifestatio*

← *Object*

Ichabod

← *Name*

The *point-to-extent* nature of object representation (registration) is one reason why objects can only arise via the **disconnection** (non-causal coupling) and abstraction (ignoring of details, parcelling up into packets) that is true of representation in general



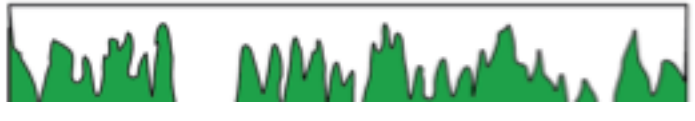
Moving towards 3rd base — achievement of the world

1. Pushing out from the first-person, to reach towards (spatial and temporal) extents, involves increasingly being able to focus beyond the local and proximate, and developing the ability to focus on alterity—on the distal—on the world around one.
2. From first to second to third—ultimately leading to the achievement of taking there to be the world
3. How do we achieve this?
   a) How do we reach further out, in order to take there to be **objects**?
   b) How do we reach out further yet, and take there to be a **whole world** out there?
4. The answer is extraordinarily complicated—and stupefying impressive!
5. This is yet another thing that those 100 trillion interconnections among 100-billion neurons have evolved to do over the last 500 million years!

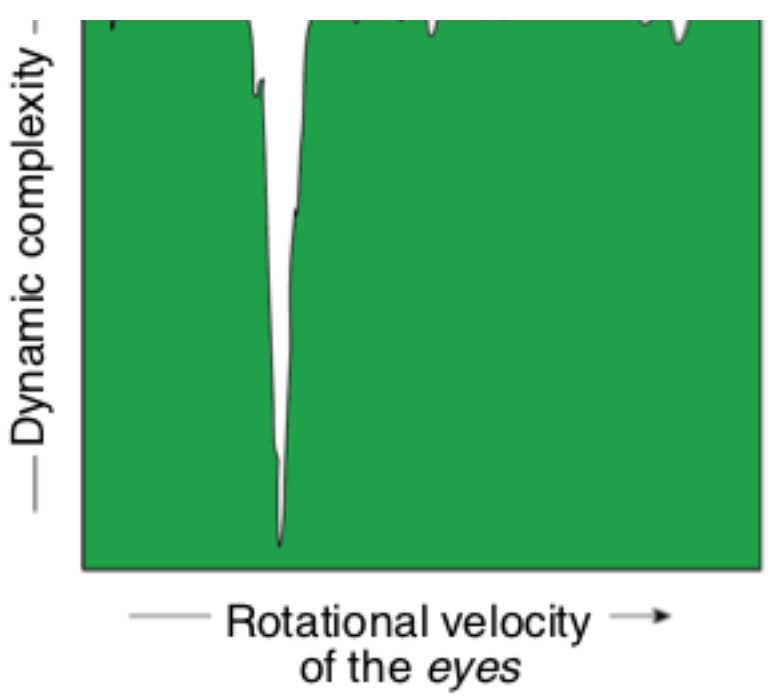
Stabilizing reference

1. Summary
   a) Registering objects requires **stabilizing the world** (not stabilizing one's self)
   b) Stabilizing the world requires **compensating for change**
   c) Compensating for change may require changing **oneself**, in order to **hold the world stable**
2. That is:
   a) To achieve sufficient detachment to reach out beyond the self, agents employ a dance-like set of acrobatic skills, in order to "**deconvolve the deixis**"—thereby washing out (some of) the indexical character of its primordial representations, so as to acquire a (relatively stable) picture of a (relatively stable) embedding world.
   b) *Deixis deconvolution* is essential to *world stabilization*— essential in turn to *objectivity*

Example: Vestibuloocular reflex



1. By moving one's body (or brain, or neurons) one *stabilizes that on which one is focused*
2. Goal is not to be static (that's easy: die!)
3. Rather: goal is to **stabilize the referent** (what you are looking at!)
4. When the world **locks into place**, it does so from a given perspective (in vision, but more generally too). This is because what is given—what arrives at the agent—is aboriginally deictic.

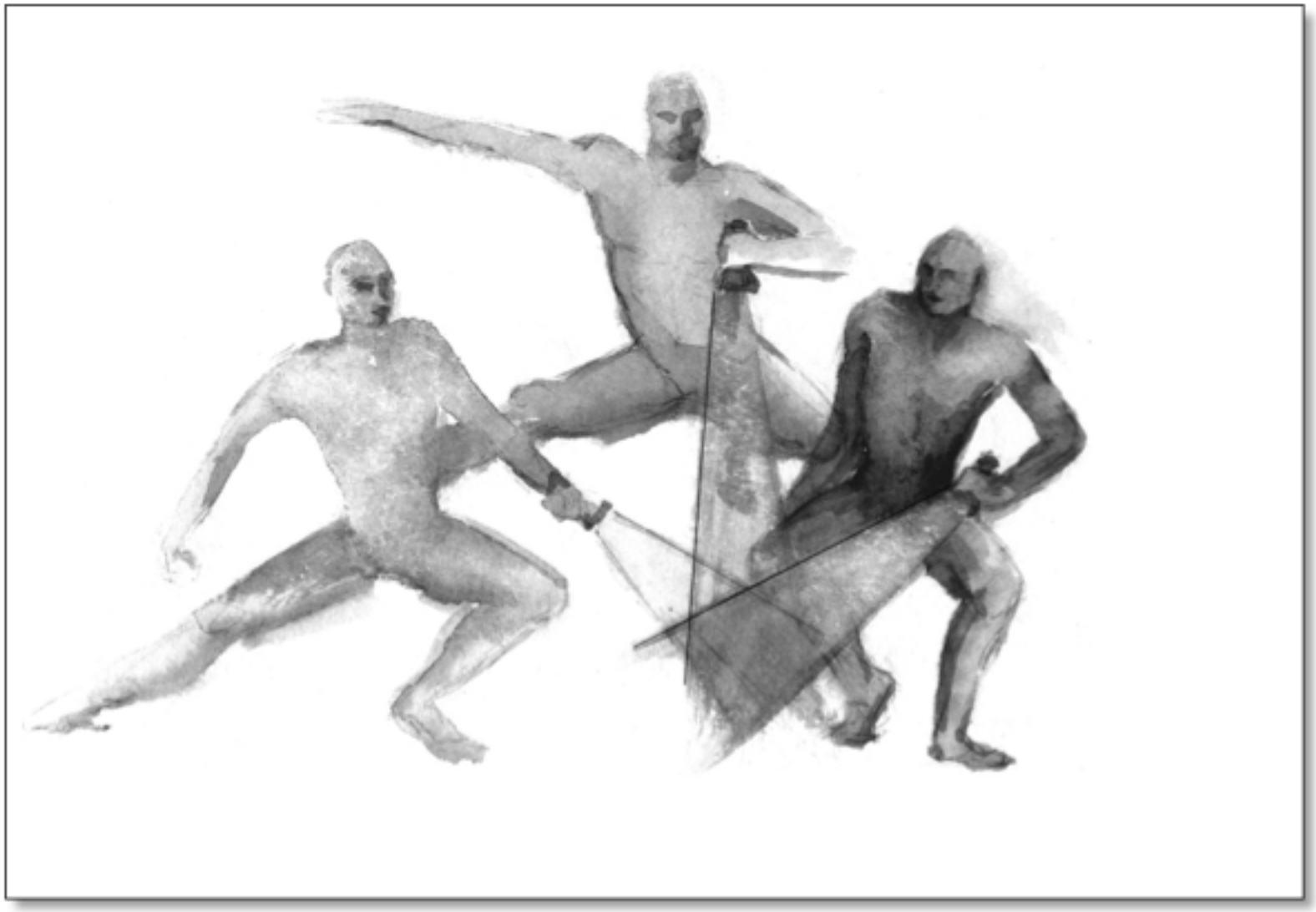


For a given rotation velocity of the *body*

Example: Indexical language

“Behind me”	$\Longleftrightarrow$	“In front of me” (upon turning around)
“Yesterday”	$\Longleftrightarrow$	“Today”
“Me”	$\Longleftrightarrow$	“You”
“The tallest person in the class”	$\Longleftrightarrow$	“The second tallest person in the class” (when someone new arrives)
<43° 40’ 1.16” N, 79° 23’ 30.7” W>	$\Longleftrightarrow$	Here!
Ebeneezer Le Page	$\Longleftrightarrow$	Soc Sec No. 876-54-3210
…	$\Longleftrightarrow$	…

The ‘Intentional Acrobat’



Objectivity

"Achieving the world" requires an limitless dance involving trade-offs between

1. **Low-level action and immediate perception**: intrinsically 1st-person (the point of view required by deictic fields)
   a) Infinitely rich, circumstantially specific, details of physical coupling
   b) Necessary to ground reference, objectivity
   c) But ultimately ineffable!
2. **High-level language, thought—and material object-based ontology**
   a) Good for summary, abstraction, portability, long-distance prediction, and long-distance inference
   b) More detached and dispassionate
   c) Good for global (but bad for local) connection with the world's transcendent richness

Part III — Epistemological Problem

If only there were time …

Conclusion

Consciousness involves fluid, flexible, continuous, extraordinarily intricate practices that **deconvolve the** (underlying physical) **deixis**, in order to **stabilize the distal world**, thereby enabling of a myriad forms of *indexicals*, *features*, and *objects*, integrated into complex facilities for *movement*, *navigation*, *communication*, and *survival*.

If one takes the field-theoretic nature of the physical plenum seriously, and realizes what is involved in these registration practices, from the most intimate and local to the there is:

No mystery as to why subjective consciousness has the