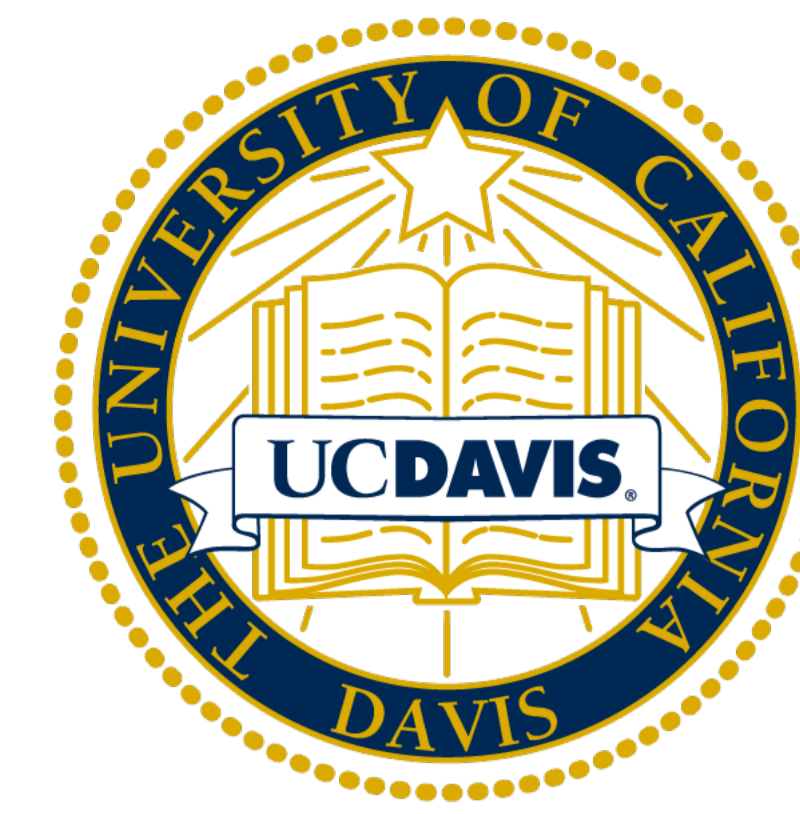


# Identity Crisis

## Logical constraints on physicalist solutions to the hard problem of consciousness



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### 1 The thesis, strategy, and argument:

**Thesis** For purely logical reasons, physicalists cannot offer a well-motivated, complete solution to the hard problem of consciousness.

**NOTE:** For this poster, we opt to present the content of our formal paper in terms of pictures and stories rather than definitions and theorems.

#### Strategy

- We construct a general system for modeling *identification problems*, which are a generic kind of problem faced by agents and identify the *solution* strategy types the agent might use to resolve her identification problem.
- We prove a formal result for one of the generic strategy types.
- Finally, we show that the physicalist commitments require using that strategy.

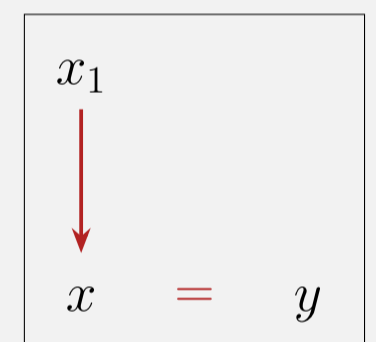
#### Argument

- Every *preservationist solution* to an identification problem that has a particular structure involves adding infinitely many new identifications.
- Every identification problem prompted by two *discriminable* things that can be solved with a preservationist solution has that structure.
- Traditional motivations for physicalism entail commitment to a preservationism.
- There are no well-motivated infinite solutions available to the physicalist.

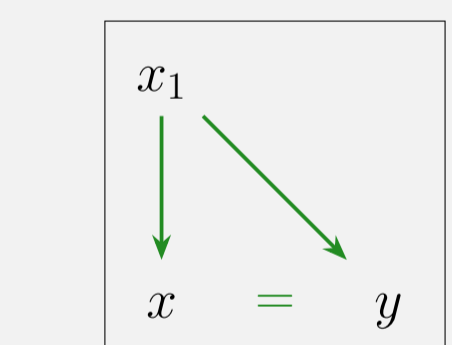
### 2 The anatomy of identification problems

#### A minimal identification problem and its minimal solutions

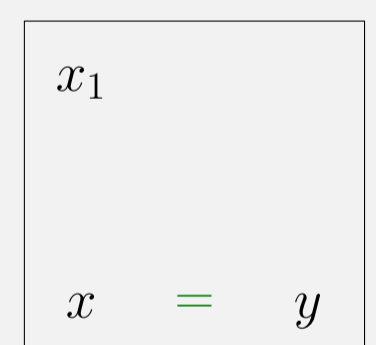
An *identification problem* is any set of sentences in which two things are identified, but one is ascribed a property that is not ascribed to the other.



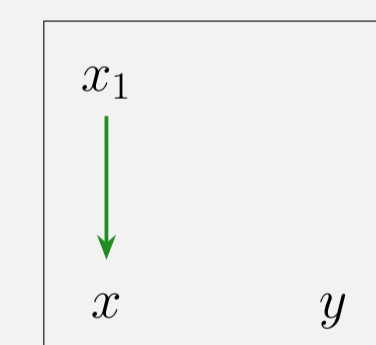
A *solution* is any revision to it that isn't an identification problem. As seen in the examples, different problems require different solutions.



Add Ascription (AA)

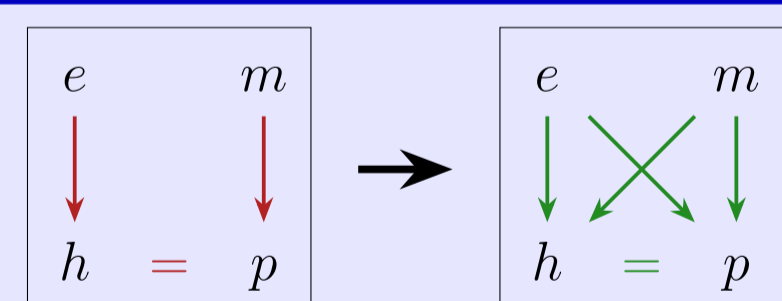


Remove Ascription (RA)



Remove Identification (RI)

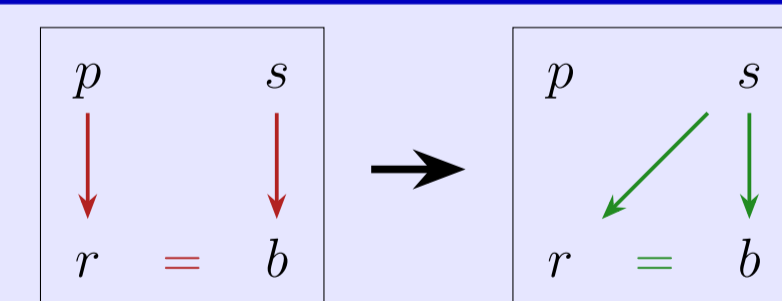
#### Example: Hesperus/Phosphorus



Solution type: AA + AA

A Babylonian learns that Hesperus is Phosphorus. Previously she believed that Hesperus is seen in the evening, and that Phosphorus is seen in the morning.

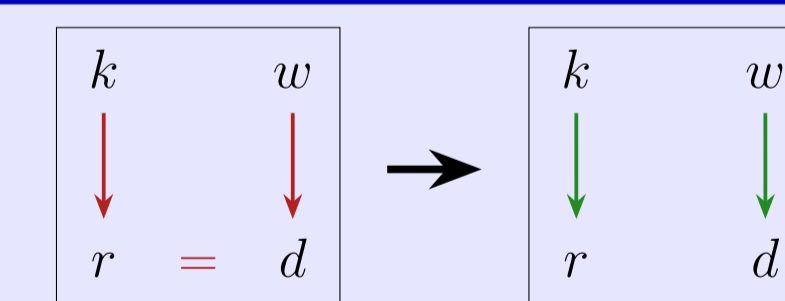
#### Example: Ace Ventura



Solution type: RA + AA

Ralph comes to learn that his friend Orcutt is the man in the brown hat. But, Ralph believed Orcutt to be a patriot and the man in the brown hat to be a spy.

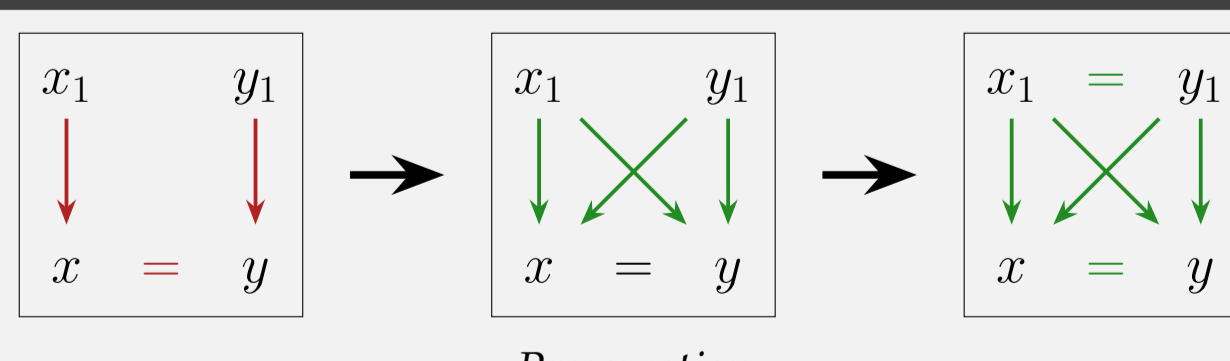
#### Example: Jack the Ripper



Solution type: RI

Ripperologists once thought that John Druitt was Jack the Ripper. However, it came to light that the Ripper lived in Whitechapel, but Druitt lived far away in Kent.

#### Another type of solution: Preservationism



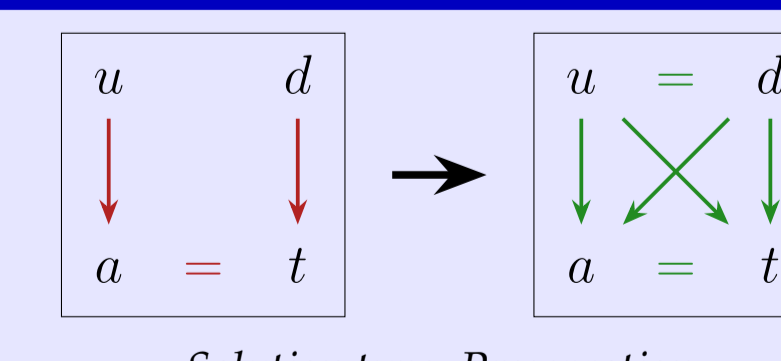
Solution type: Preservation

Sometimes a minimal solution is not enough.

A *preservation* is a variant of the AA strategy in which "new" ascriptions are treated as merely verbally distinct restatements of ascriptions that were made all along.

So, every time a property is newly ascribed, it is accompanied by the ostensible claim that it is *just the same property* as one previously ascribed.

#### Example: The Road from Athens to Thebes



Solution type: Preservation

A wanderer inadvertently hitched rides in opposite directions on the road between Thebes and Athens. Since the first sloped down and the second sloped up, he thought them to be distinct. Upon returning to Athens, he realized his blunder.

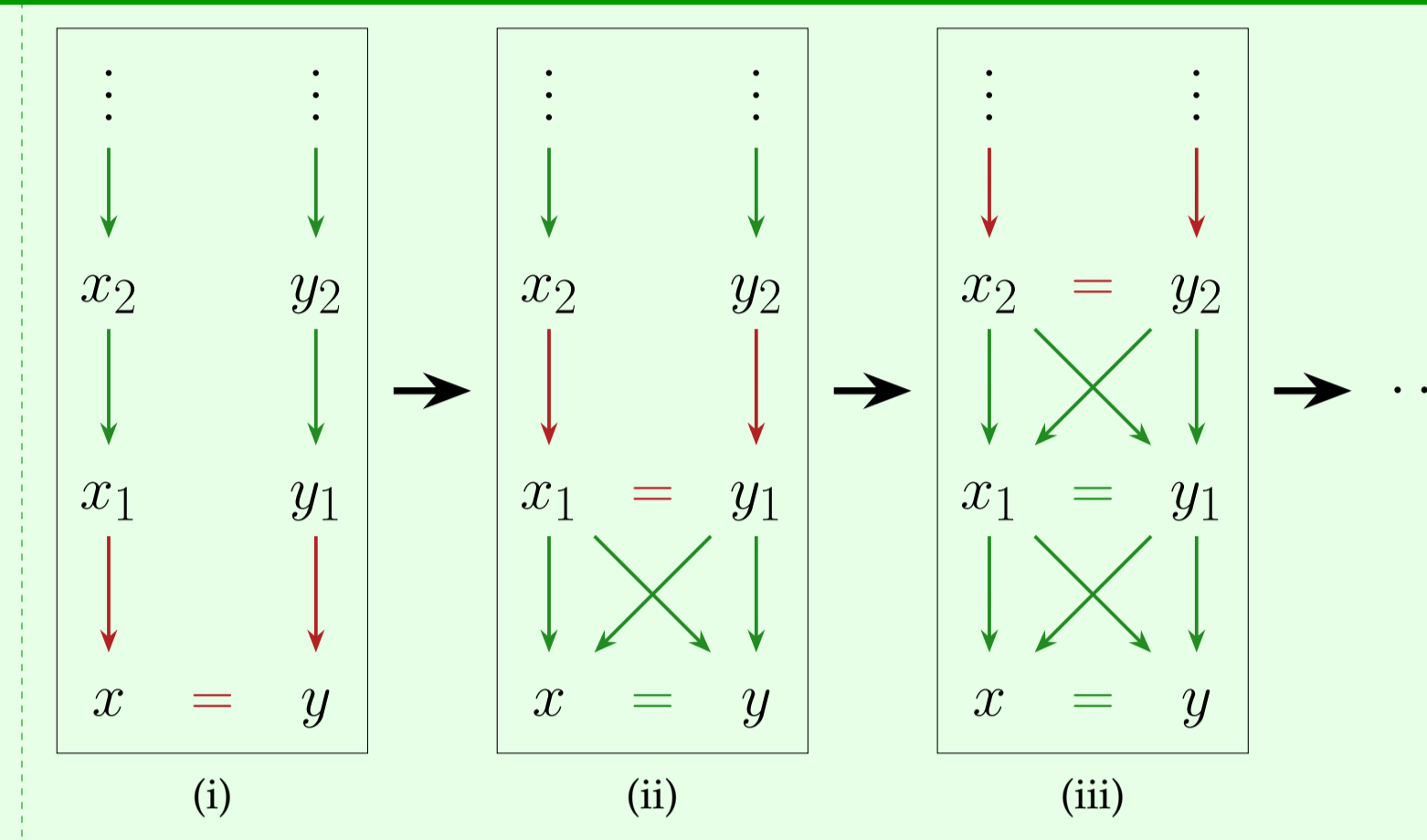
### 3 The preservationist's regress

#### Step 1: A sketch of the formal result

The only preservationist solutions to a problem like (i) must include infinitely many new identifications.

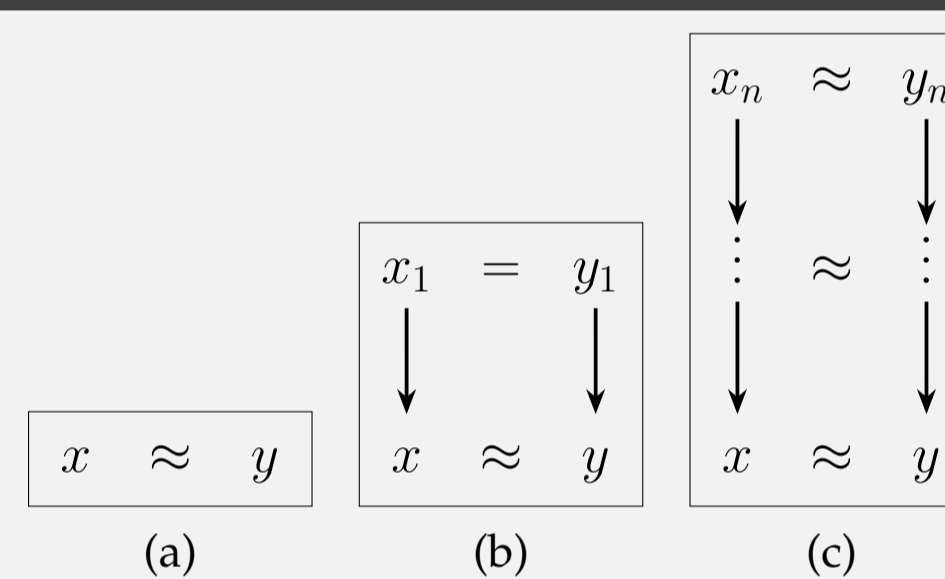
This is because provided the infinite ascending chains of property ascription, any finite attempt at solution will simply result in just another problem.

When we try to only resolve the problem in (i), we find ourselves with the problem in (ii). Were we to try to only solve the problems in (i) and (ii), we would find ourselves with the problem in (iii). And so on.



### 4 The infinite hierarchy

#### Discriminability and indiscriminability



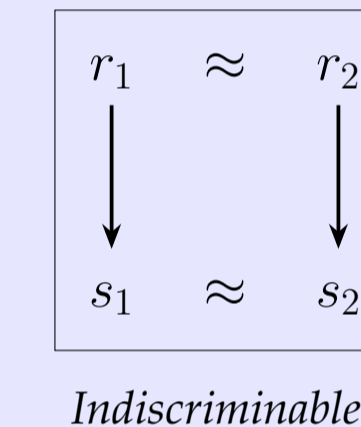
Two things are *discriminable* just in case there is some way to tell them apart by appealing to their properties. Indiscriminables are a bit more exotic.

For example, one way that two particulars could be indiscriminable is by not having any properties at all as in (a).

Or, by sharing identical properties as in (b).

Another way would be for all of their properties to be indiscriminable because *their* properties are indiscriminable as in (c).

#### Example: Red<sub>1</sub> and Red<sub>2</sub>



Two iron spheres,  $s_1$  and  $s_2$ , are alike in every way except that they possess distinct properties, Red<sub>1</sub> and Red<sub>2</sub>. However, Red<sub>1</sub> and Red<sub>2</sub> cannot be told apart despite being distinct. So, while  $s_1$  and  $s_2$  are distinct and have distinct properties, they are indiscriminable.

#### Step 2: Preservations and hierarchies

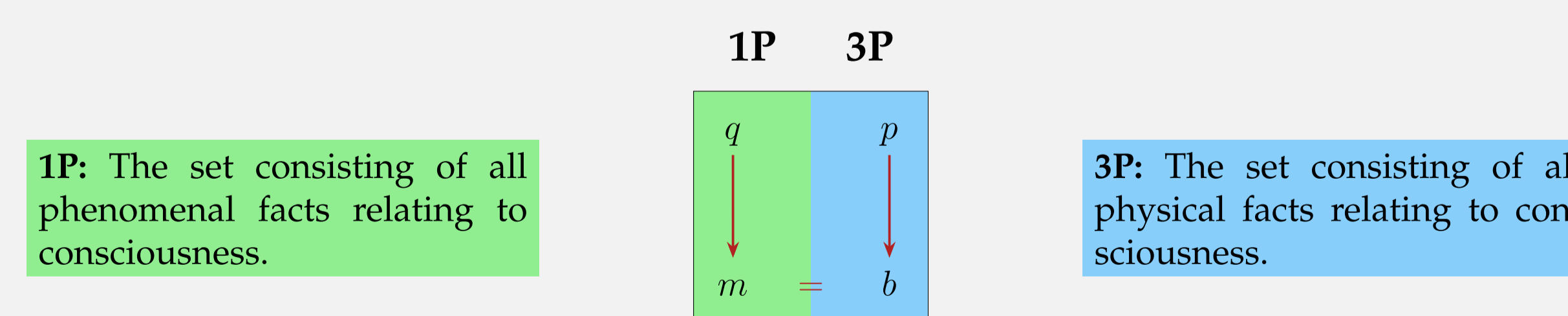
Indeed, the infinite structure seen in Step 1 is, in fact, required if the problem is prompted by discriminables and a preservationist solution is possible. This can be seen quite easily since:

- there must be a one-to-one mapping between the properties for a preservation to be possible, and
- the two chains of properties may not terminate at the same level because the problem is prompted by discriminables.

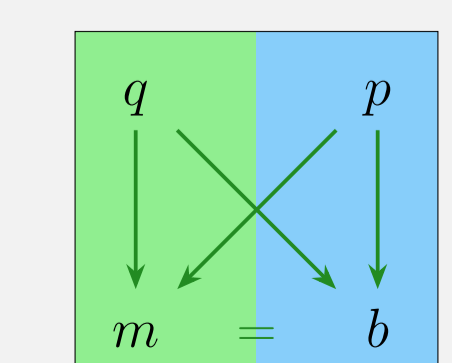
Thus, the two chains of properties can neither terminate at the same time nor at different times.

### 5 The mind-body identification problem

#### Anatomy of the mind-body identification problem

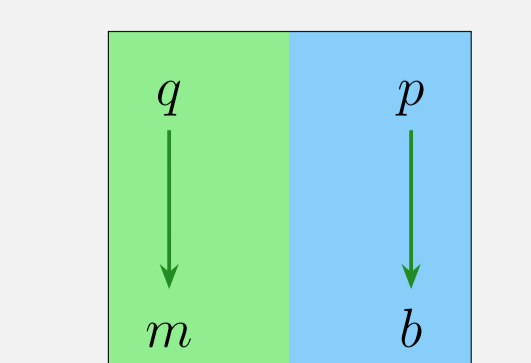


#### Property Dualism



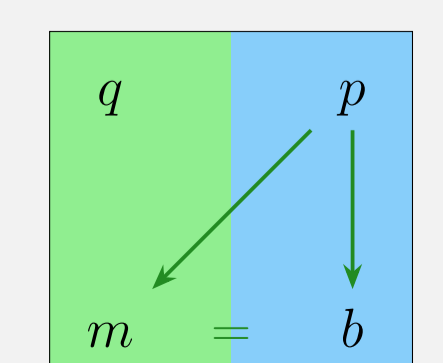
AA(1P) + AA(3P)

#### Substance Dualism



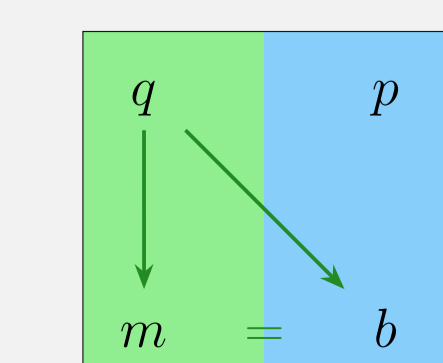
RI

#### Eliminativism



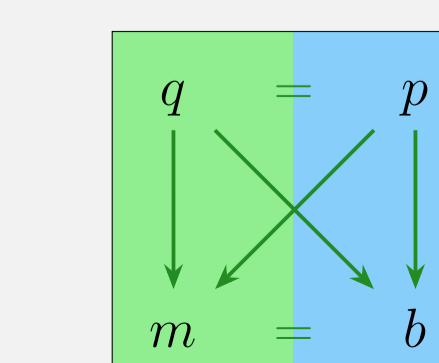
RA(1P) + AA(3P)

#### Idealism



AA(1P) + RA(3P)

#### Physicalism



Preservationism

### Step 3: Physicalist commitments require preservationism

**First-Person Preservationism (1PP)** Do not revise our first-person beliefs about phenomenal types without independent motivation. (e.g., Chalmers [1996], Goldman [2002], Dennett [2005], etc.)

**Third-Person Preservationism (3PP)** If empirical science says an object or property is there, the philosopher of mind has no business denying it; and if empirical science finds no object or property to be there, the philosopher of mind has no business insisting upon it.

*Physicalism is best taken [...] as nothing more than an attitude, a commitment to form one's ontology according to whatever the physics of the day says exists.* [Ney, 2008, p. 3]

1PP + 3PP = Preservationism for the mind-body identification problem.

#### An illustration of the dialectic

David, behold my astonishing hypothesis: the mind is identical to the brain!

But the brain has mass, while the mind has different features like feeling pain!

Then those features must not be genuinely different. Every feature of the mind at a time must be a disguised feature of the brain at that time.

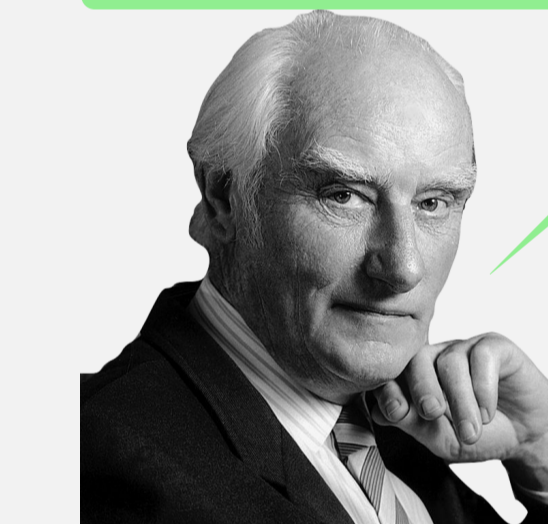
But how can feeling pain be some physical feature? Feeling pain has the property of being intrinsically horrible, but no physical feature has that property.

Because being intrinsically horrible must be a further physical property in disguise! A property of a property!

But being intrinsically horrible is different from all physical properties. It has different features!

Then those features only appear different, but are in fact identical to further physical features!

But those features seem different because they have different prop... Ahhh forget it, this will never end!



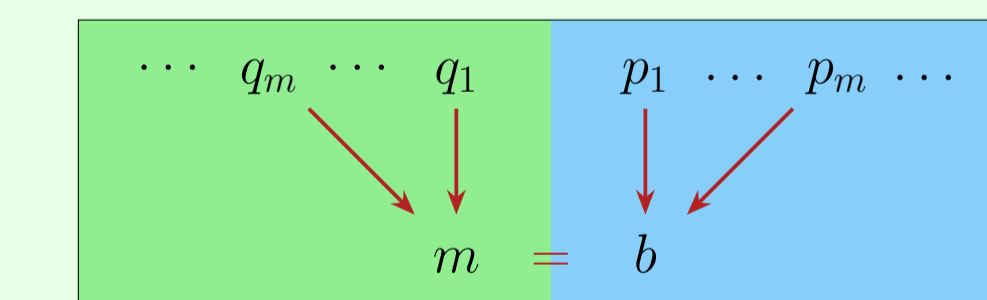
### Step 4: Recursively defined solutions will not be well-motivated

Finite agents, like us, cannot accept infinitely many new identifications into their theories.

**QUESTION** Why can't we simply define the solution through a mechanical procedure?

- Put another way: why couldn't we offer a recursive algorithm that would define all of the required identifications?

**ANSWER** The mind-body identification problem is *much* more difficult than the one presented in our result because there are many candidates for each identification.



Solving the problem would not only require affirming infinitely many new identifications, but also *deciding* which properties to identify. The standard of adequacy for each decision is *empirical* and so no purely logical or mechanical procedure will suffice.

### 6 The conclusion

We showed that it is impossible for the physicalist to provide a complete solution to the hard problem of consciousness on the basis of the logical structure of the problem and the physicalist's strategy for solving it.

In contrast with other *a posteriori* physicalist solutions, our treatment better accounts for the difficulty of the problem since it does not rely on any special psychology.

This explains the unease that we feel with any incomplete physicalist solution, since *prima facie* discriminables are identified.

### 7 The next steps

In future work, we plan to:

- Further consider the mind-body identification problem in our framework;
- Establish our result by weakening (our already minimal) background assumptions;
- Apply framework to other problems of reduction (e.g. in meta-ethics, philosophy of science, etc.); and
- Further investigate the peculiar notion of indiscriminability in the context of metaphysics.

### 8 The references

- D. Chalmers. *The Conscious Mind*. Oxford University Press, 1996.  
 D. C. Dennett. *Sweet Dreams: Philosophical Obstacles to a Science of Consciousness*. MIT Press, Cambridge, 2005.  
 A. Goldman. *Pathways to Knowledge, Public and Private*. Oxford University Press, 2002.  
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