

*Panpsychism and
Compositionality:
A solution to the
Hard Problem*

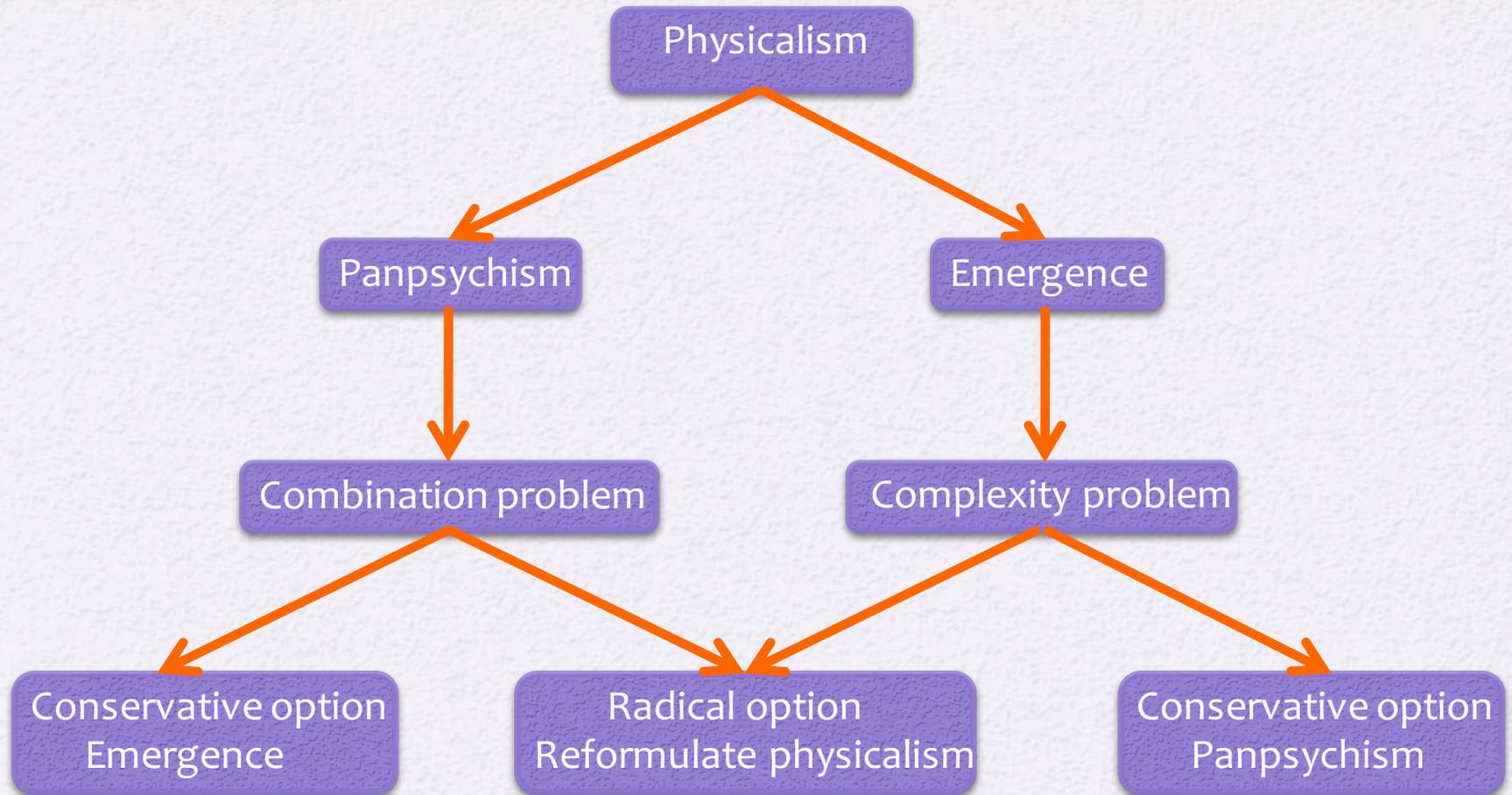
Anand Rangarajan

Dept. of Computer and Information Science and Engineering
University of Florida
Gainesville, FL, USA

Realistic physicalism & experience

- *How do we accommodate experience (Hard Problem)?*
- When more radical alternatives like idealism or mysticism are ruled out, only **physicalism** remains.
- **Emergence** - most popular physicalist approach.
 - Complexity problem: When does experience emerge?
- Does realistic physicalism entail **panpsychism**?
 - Combination problem: How do qualia combine?
- Are these the only alternatives at present?

Panpsychism, Emergence & Physicalism



Phenomenology: Thin Subjects

- Persons and selves as **subjects of experience (SoE)** (Lowe).
- “A subject of experience is something that exists only if experience exists of which it is a subject” (Strawson).
- “The thinking or the existence of the thought and the existence of my own self are one and the same” (Kant).
- Thin subjects (SESMET): subjects that persist for brief periods of time, a “gappy process” (Strawson).
- mere self in Mahayana Buddhism (*Tsongkhapa*).
- Notion goes back at least to Frege in the west.

Physicalism = Physicalism + X

- Add ingredient X to physicalism.
- Physicalism should remain physicalism despite X.
- Re-examine panpsychism and emergence in light of new physicalism.



- It is accompanied by experience because X is always accompanied by experience.

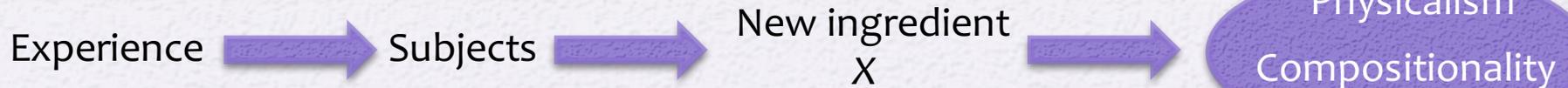
Compositionality

- *A counter-intuitive proposal.*
- *Assertion: Physicalism + Compositionality accompanied by experience.*
- *Letter but not the spirit of panpsychism: fundamental but not pan.*
- *Spirit but not the letter of emergence: non-reductive but fundamental.*

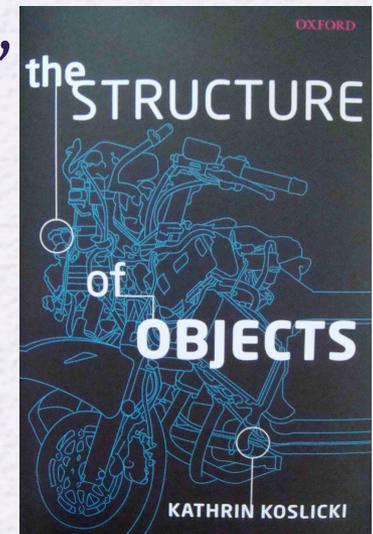


Restricted Compositionality Principle

(RCP)



- Kathrin Koslicki's work.
- RCP: Some objects m_1, \dots, m_n compose an object O , of kind K , just in case m_1, \dots, m_n satisfy the constraints f_1, \dots, f_n dictated by some formal components, associated with objects of kind, K .
- Weak Supplementation Principle.
- Avoid proliferation of *sui generis* relations.
- Relies on ontology of *natural kinds*.
- Material and formal parts of object (composition).



SoE as Natural Kinds

- **Subjects of Experience (SoE):** Restricted compositionality principle requires commitment to ontology of natural kinds.
- SoE as a natural kind term:
 - Appeal to *same-kind relation* between SoE objects.
 - Non-descriptive and does not require rigidity (*Koslicki*).
 - Requires specification for picking out same kind object.
- Intersubjectivity as specification? Clearly controversial.
 - I see You, Y'All, namaste.
 - Second person as foundation for SoE?
 - Could be wrong but more importantly could also be right.
- SoE in psychology:
 - analogous to species in biology.
 - Different SoE: prehension, sensation, emotion, cognition, visualization.

Physics of Compositionality?

From Physicalism to Physics

Need new idea to set up compositionality in physics

Second Quantization

- Tucson series of conferences obsessed with first quantization: how do particles act like waves.
- Second quantization: How do waves act like particles? Sets up field-particle relation.
- Set up SoE compositionality relation using second quantization.

“First quantization is a mystery but second quantization is a functor”
John Baez, Somewhere on the Internet.

SelfOn: Physical thin subjects

- Fundamental physics: Set of quantum fields.
- Compositionality relation linking SoE to physical.
- SelfOn (selfon): Thin subjects realized from basic fields.
- Akin to a new particle formed by second quantization.
- SoEs: objects of natural kind SelfOn.



Star Trek DS9: The Search (Part I)
URL withheld

Phenomenology, Philosophy and Physics

| Phenomenology | Philosophy | Physics |
|-------------------|---------------------------|--|
| Thin subject | Subject of Experience | SelfOn |
| | Compositionality relation | 2 nd quantization: Akin to Particle ↔ Field |
| Experience | Physical property | SelfOn state |
| Intersubjectivity | SoEs form natural kind | SelfOn interactions |
| Gappiness | Spatiotemporal bound | SelfOns appear and decay |

Fields, Particles and SelfOns

- **Eliminativism**: There are only (quantum) fields, no particles, no selfons.
- **Naturalistic dualism**: There are only (quantum) fields and selfons.
- **Materialistic dualism**: There are (quantum) fields, particles and selfons.
- **Interactionist dualism**: There are only particles and selfons.
- **Materialistic monism**: There are only (quantum) fields and particles, no selfons.

Objections

- ① There is experience (*Chalmers*).
 - Denied by eliminativists.
- ② Experience implies (thin) subjects of experience (*Strawson*).
 - Denied by materialists and some panpsychists.
- ③ Everything is physical or entailed by the physical (*Stoljar*).
 - Denied by interactionist dualists.
- ④ SoE are physical compositions of a certain natural kind (foll. *Koslicki*).
 - Denied by idealists and property dualists.
- ⑤ SelfOns are SoEs set up via new compositionality relation akin to field to particle 2nd quantization.
 - Denied by physicists?

Discussion

- ① “Why is it accompanied by experience?” (*Chalmers*).
- ② “Everything is physical or entailed by the physical” (*Stoljar*).
- ③ “Until more is said it amounts to simply dismissing of... the intuition that the experiential cannot emerge from the non-experiential” (*Strawson*).
- ④ Expand physicalism: Physicalism = Physicalism + *y* (*Montero*).
- ⑤ Compositionality: “There exists a *y* the *x*’s compose if and only if the activity of the *x*’s compose a life” (*vanInwagen*).
- ⑥ Experience implies a subject of experience (*Lowe, Frege*).
- ⑦ Subjects of experience (SoE) are physical compositions of a certain natural kind (following *Koslicki*).
- ⑧ SelfOns – formed by 2nd quantization - are SoEs accompanied by experience.

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Thank You

We are indebted to Leopold Stubenberg for pointing out Koslicki's work
All mistakes are of course ours

Substances versus properties

- Approach raises intriguing picture of substance (SoE) linked to properties via compositionality relation.
- Not property or substance dualism but weird hybrid.
- No worry over natural kinds if there is only one kind of substance, namely, SoE.
- Substance introduced only to accommodate experience seems jury rigged.
- May be democratizing Spinoza (matter and mind as properties of single substance/God).