

CAUTION on TERMINOLOGY:

Higher order causation

Iterated causation

meta-causation, e.g.:

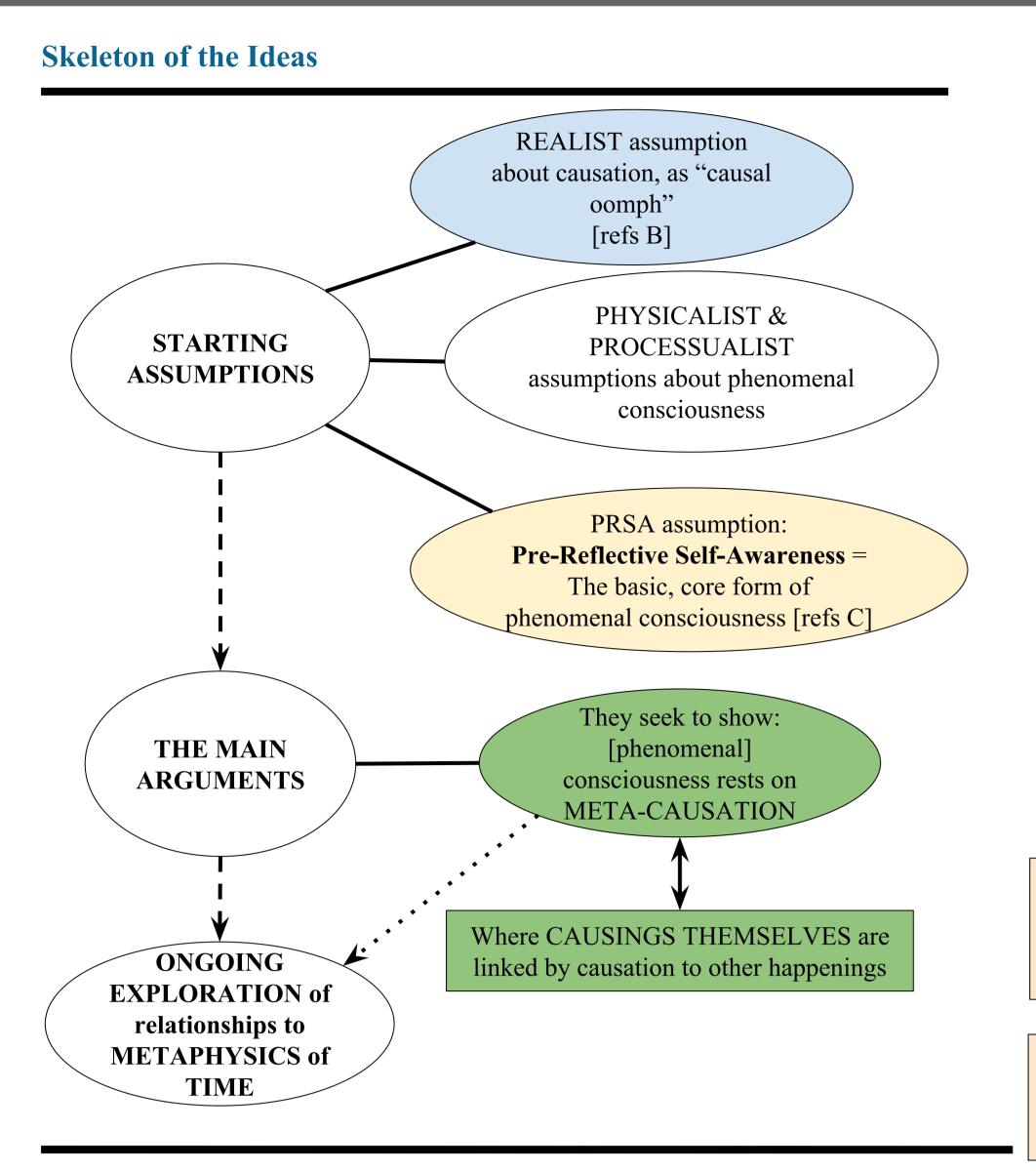
Meta-causation in this work has also been called

in meta-causal powers [refs F: Ellis]

Consciousness, Causal Oomph, and Meta-Oomph

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Notes: This poster extends previous work reported in refs A. For the causal-power aspect, ask me: not explicit in this poster.



Argument for Reasonableness of Meta-Causation in General as part of the Physical World

Causation is itself subject [Assumption] to causal binding just as no reason Causation (oomph) is a real other physical happenings to deny part of the physical world

> Meta-causation - as physically real as ordinary causation is

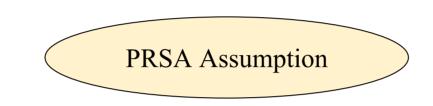
PHYSICALIST and **PROCESSUALIST** assumptions about phenomenal consciousness

Objective, Realist, Physicalist Assumption

Whether something is accurately, phenomenally conscious is an objective, physical matter - it supervenes on the physical world and is not a construction projected onto the word by people.

Causal-Processualist Assumption

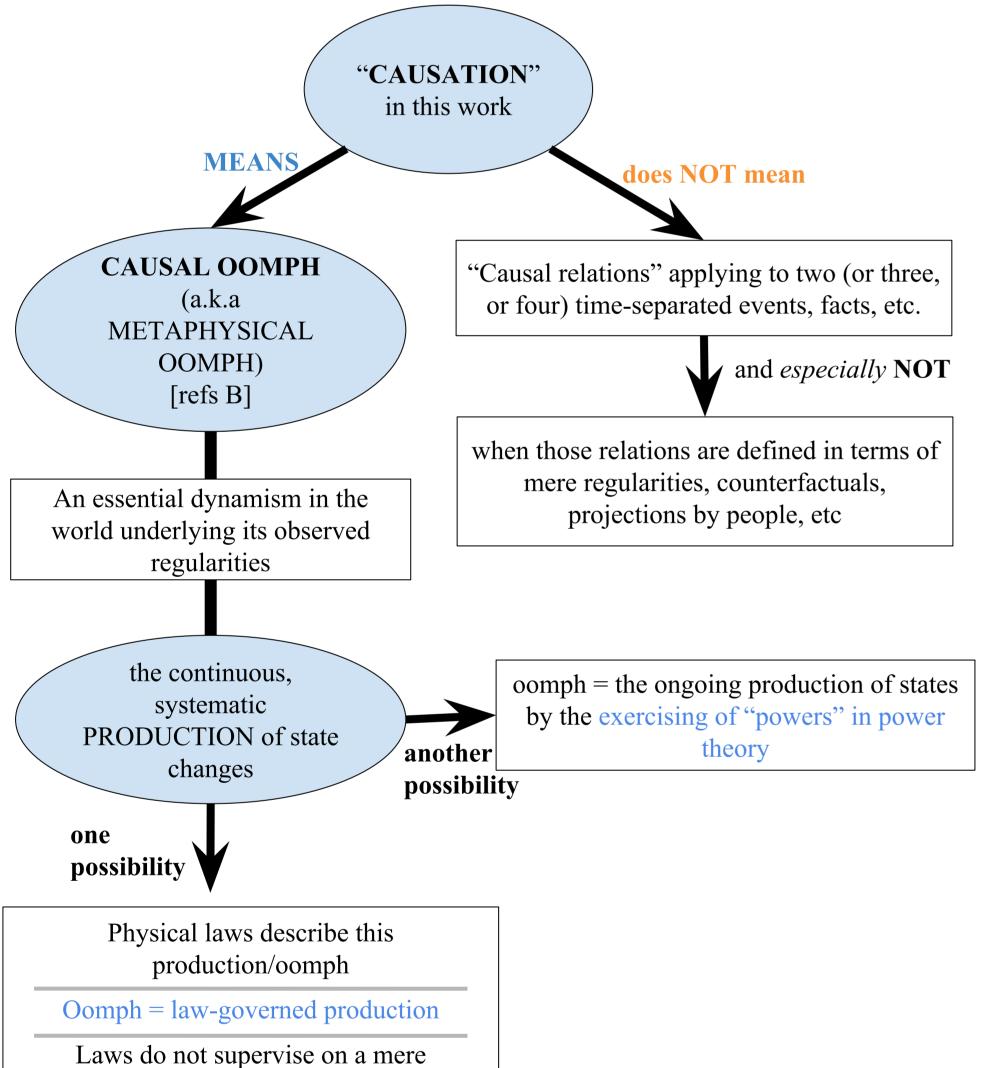
Centrally, being-accurrently-conscious is a property of some [causal] processes, (states, creatures, programs, etc. are conscious only in a derivative sense.)



A basic, minimal core of consciousness is some form of PRE-REFLECTIVE SELF AWARENESS (some non-intellectually/conceptually-mediated form of reflective reactiveness)



The "self" in the PRSA of conscious process is just that process itself, and can be sub-personal and momentary.

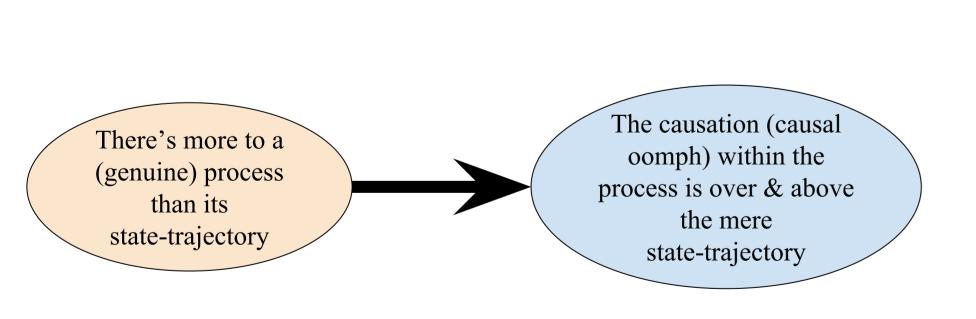


[refs D: Ehring]

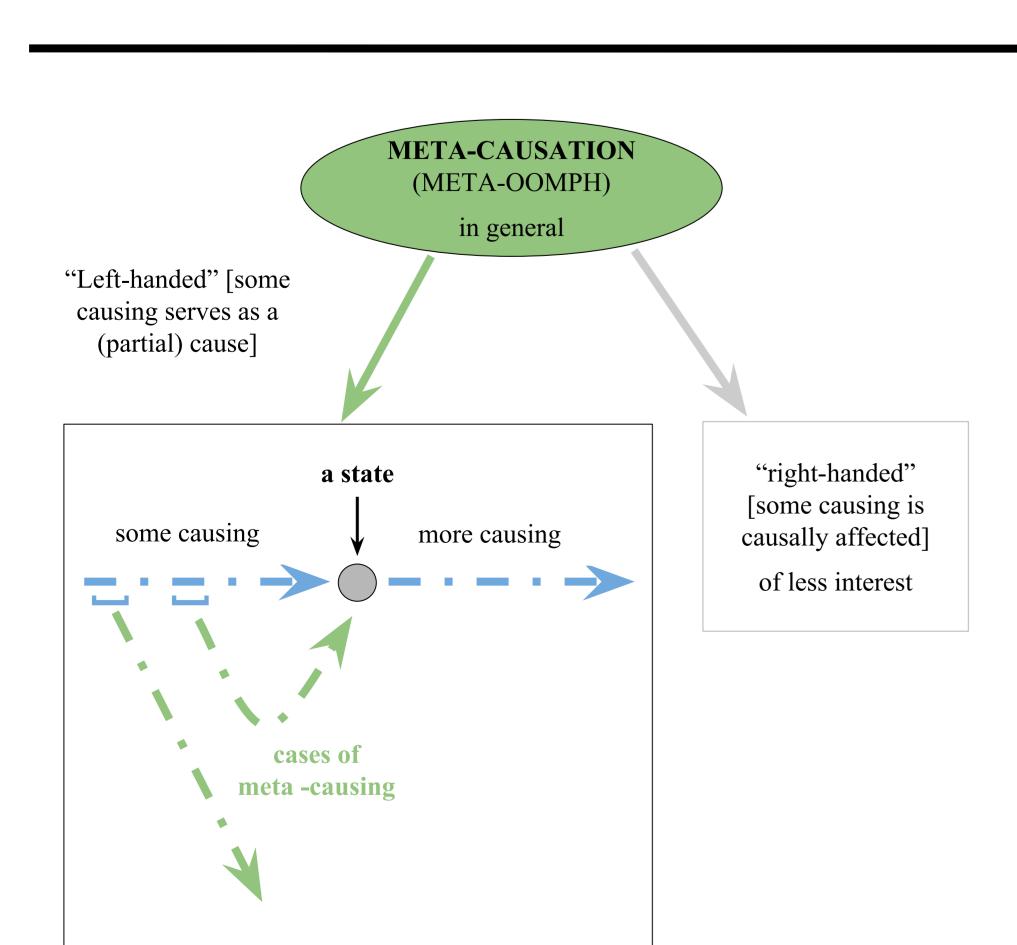
[refs D: Koons]

Forms of top-down causation, or setting of parameters of causal models, or as

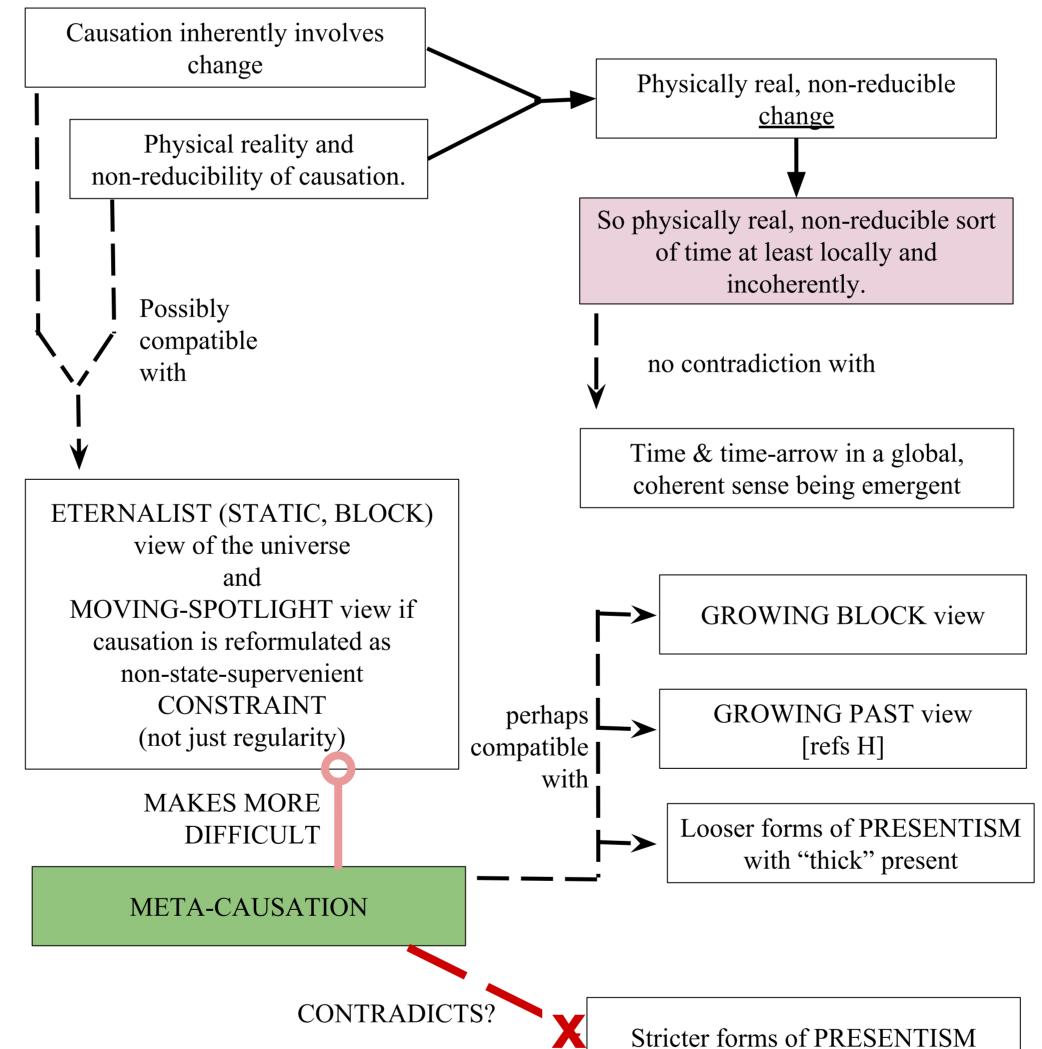
Meta-causation in this work is *NOT* other things that have been labelled as



spatiotemporal mosaic [refs E]



Relationship to Metaphysical Theories of Time [refs G]



References

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Gallagher, S. & Zahavi, D. (2014). Phenomenological approaches to self-consciousness. In Edward N. Zalta (Ed.), The Stanford Encyclopedia of Philosophy (Spring 2015 Edition), URL = http://plato.stanford.edu/archives/spr2015/entries/self-consciousness-phenomenological/, accessed 8 October 2015. Kriegel, U. (2009). Subjective consciousness: A self-representational theory. Oxford, UK: Oxford University Press. Zahavi, D. (2005). Subjectivity and selfhood: Investigating the first-person perspective. Cambridge, Mass. and London, UK: MIT Press (a Bradford Book).

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Ehring, D. (2009). Causal relata. In H. Beebee, C. Hitchcock & P. Menzies (Eds), The Oxford Handbook of Causation. pp.387-413. Oxford, UK: Oxford Koons, R.C. (1998). Teleology as higher-order causation: A situation-theoretic account. Minds and Machines, 8: 559-585.

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Kastner, R.E. (2013). The Transactional Interpretation of quantum mechanics: the reality of possibility. Cambridge, UK: Cambridge University Press.

This poster was mainly laid out and produced by Harish Tayyar Madabushi.

1st Argument for involvement of META-CAUSATION in CONSCIOUSNESS.

Reasonable additional assumption of Awareness of Own Processuality

The PRSA of a conscious process includes reacting to its own coherent processuality and not just to its own state trajectory.

Overview of the Argument:

- Processuality rests on causation
- So the process reacts to its own <u>causation</u>, directly or indirectly.
- This reaction is itself a causal matter.
- Thus, direct reaction to own causation is META-CAUSATION. • The <u>indirect</u> option has major problems:
 - o Presumably involves representing previous states and their causal links.

 - o Difficult to make this naturalistic & objective.
- Threatens to violate pre-reflectiveness • META-CAUSATION → SIMPLER, MORE STRAIGHTFORWARD account.

2nd Argument for involvement of META-CAUSATION in CONSCIOUSNESS.

As a more natural alternative to above Awareness of Own Processuality, I propose:

Assumption of Awareness of Own PRSA

The PRSA of a conscious process includes awareness of that PRSA itself.

This is reasonable because the "self" in PRSA is the conscious process, and PRSA is essential to the process, so awareness of the self plausibly includes awareness of the PRSA

Overview of the Argument:

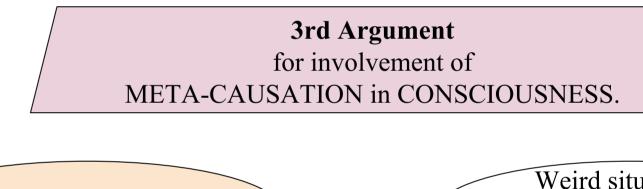
- The awareness of own PRSA is a matter of <u>causally</u> reacting to it, and the PRSA is itself crucially causal
- So we have causal reaction to causation.
- So now we have just a special case of 1st Argument.
- But in an especially demanding form, as the process needs to "single out" the causation underlying self-awareness.

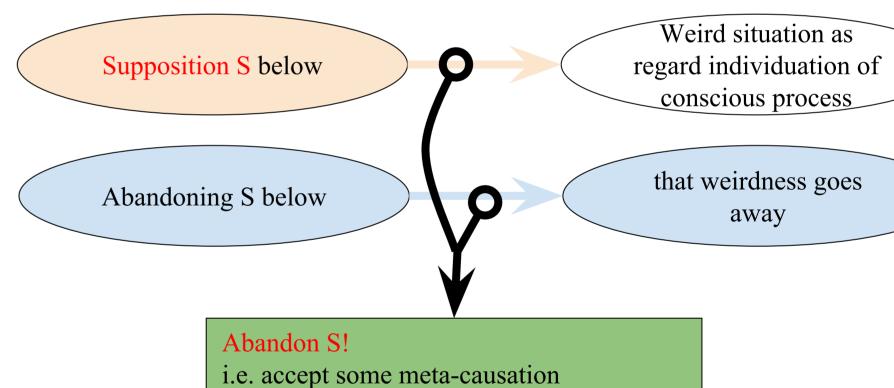
Danger of Infinite Regress:

- Have argued that PRSA is partially constituted of <u>meta</u>-causation.
- So awareness of own PRSA involves meta-meta-causation.
- So PRSA is partly constituted of <u>meta-meta</u>-causation.
- And so on up: meta-meta-meta-...

Avoidance of the Regress:

- At each level the process needn't have <u>full</u> awareness of its self-awareness.
- MORE SPECULATIVELY a regress could be prevented by circularity: meta-causation where 'meta' aspect is that it is reacting to itself.





Supposition S (which leads to an Absurdum):

Time t_o

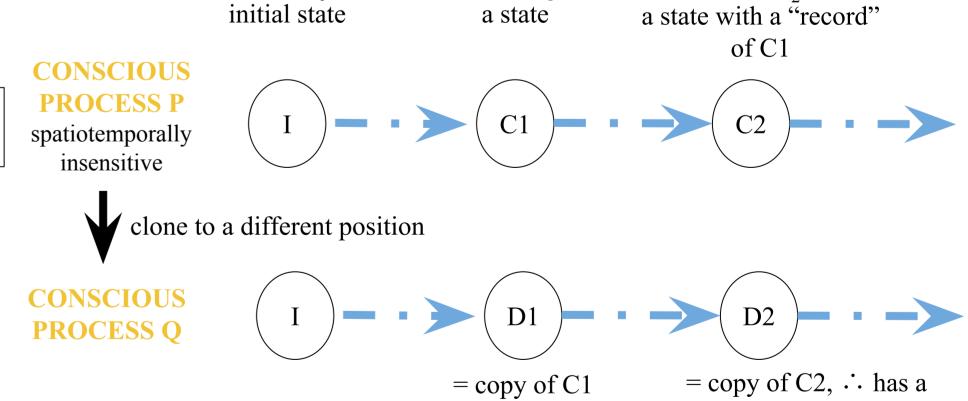
The causal self-reacting in PRSA is fully accounted for by causal reaction to own state trajectory with no direct reaction to the causal linking within the trajectory.

Time t₁

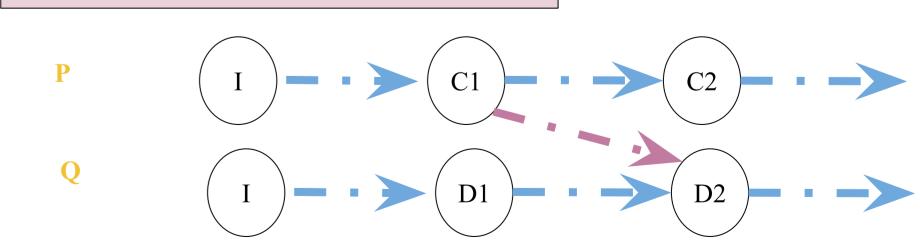
Time t₂

"record" of D1 that is a

copy of C2's record of C1



Now add a new "diagonal" process:



The diagonal process is just a moving version of the C1-to-C2 subprocess, and so just "confirms" D2

Argue that now, D2's record of D1 is equally well a record of C1,

HENCE

Weird set of alternatives, such as:

- Q is no longer aware of itself from t₂ onwards, but rather of a larger conscious process that also includes P up to $C\bar{1}$, even though from Q's point of view nothing has changed and there was no connection to P before t₂
- Q from t2 onwards has two selves: Q, and a larger process that includes P up to C1.
- There is no objective fact as to what particular conscious process exists (contradicting Objectivist assumption above)

