Consciousness, Meta-Causation and Temporal Passage (Real or Imagined)

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I draw from my existing, rather radical proposal about the nature of consciousness: physicalist, albeit involving a radically anti-Humean extension to physics.

Basically: consciousness = suitable meta-dynamism (meta-causation).

I mainly assume real temporal passage, but am developing a static-block version of the ideas also.

I raise questions about possible, profound time-metaphysical and related ramifications of the proposal.

In particular, I speculate about a deep connection between the nature of consciousness and the nature of time, arguably in both the real-passage and the static-block versions.
A Radically Anti-Humean Stance

Aspects of the stance that are similar to other anti-Humean stances:

The universe’s regularities are not there just by brute fact—it must unfold as it does. It is not just its particles, forces, momenta, curvatures, fields, etc., just happening to unfold in a regular way.

The extra is dynamism:

the lawful pushing-forward (ongoing lawful necessitating) of the universe.

[I am influenced by Maudlin 2007, though I stress lawful pushing-forward rather than laws themselves as the extra, non-Humean ingredient.]

A (genuine) process or a spatiotemporally localized instance ("chunk") of dynamism is NOT just a trajectory of (spatially localized or global) states over time:

it’s the lawful pushing-forward responsible for providing that trajectory.
The particularly radical element of my stance:

The dynamism is a “first-class citizen” of the physical universe: a fully physical aspect of it, not just some metaphysical addendum or ground.

i.e., I physically reify dynamism.
“Meta-Causation” In General

Whatever your notion/theory of “causation” in general,

- **meta-causation** is when
  - a causing [instance of causation]
  - itself, directly causally influences something and/or is causally influenced.

[CAUTION: There are other meanings for “meta-causation.”]

Cases and Heuristic examples:

**Left-handed 1**: “＜Donald’s causing democracy to collapse＞ caused Vlad to like him.”

**Left-handed 2**: “＜The way Donald caused democracy to collapse＞ caused Dom to like him.”

**Right-handed 1**: “Petulance caused ＜Donald to cause democracy to collapse＞.”

**Right-handed 2**: “Greed affected the way ＜Donald caused democracy to collapse＞.”

**Right-handed 3**: “Non-reelection prevented ＜Donald causing democracy to collapse＞.”

**Ambidextrous**: a causing causes/ modifies/ inhibits a causing.

**Tower of meta**: There can be meta-...-meta-causation up to any level, in principle.
For me: “causation” = dynamism.

It underlies any dynamic effect, such as from entanglement, quantum collapse, etc., even if not usually regarded as “causal.”

[So my causation is not as usually discussed in philosophy of causation (causal links between time-separated events or property instances or facts or ....).]

So (for me) “meta-causation” = meta-dynamism.

An instance or “chunk” of dynamism over some spatio-temporal region, as a bona fide physical entity, can itself have causal power and be causally influenced, and that causal interaction is meta-dynamism.
**Main Overall Claim about Consciousness**

Consciousness $= \text{Suitable Meta-Dynamism}$:

An episode of conscious [phenomenal] experience is a physical process that suitably includes \textit{meta-dynamism (meta-causation)} of a suitable sort.

The nature of the "suitability" remains To Be Determined.

\textit{Part} of the "suitability" is that: At every moment during the episode, the process’s dynamism \textit{in some interval up to that moment} (itself directly) has an effect on the portion of the process starting at that moment.

The directness there includes: The effect is not a matter of the instantaneous process state at the current moment having a representation of past dynamism (or states).
I have detailed arguments suggesting that the *necessity* of suitable meta-dynamism for consciousness follows from certain assumptions.

[Barnden 2019a,b (considerably modifying assumptions and arguments in Barnden 2014, 2018a,b)]

I merely conjecture the *sufficiency* [mainly in Barnden 2014]. But it leads to major benefits.

I am not aware of previous researchers linking consciousness to meta-causation/meta-dynamism. Indeed, there’s very little discussion of meta-causation at all.

Caution: In Barnden (2014) I used the terms “running” and “runningness” rather than “dynamism” or “causation,” and was particularly concerned to avoid the latter, but later adopted it as a useful intuitive guide,
Additional/Stronger Conjectures

- **Existence of Core, Minimal Consciousness:**
  Some basic form and arrangement of meta-dynamism, present within all the "suitable" meta-dynamism, provides (constitutes) a core, minimal form of consciousness, present in all consciousness.

- **Intrinsic Reflexivity of the Core:**
  An episode of meta-dynamism that provides core, minimal consciousness is intrinsically reflexive: it causally reacts to and affects itself, where that auto-meta-dynamism is within the episode itself.

- **Isolability of the Core:**
  A process can consist entirely of core, minimal consciousness.
Taking those conjectures together, we get that

an episode of isolated, core, minimal consciousness is, entirely, auto-meta-dynamism dynamically reacting to and affecting itself.

Possible great affinity with the following from Kierkegaard:

Man is spirit. But what is spirit? Spirit is the self. But what is the self? The self is a relation which relates itself to its own self, or it is that in the relation [which accounts for it] that the relation relates itself to its own self; the self is not the relation but [consists in the fact] that the relation relates itself to its own self.

[cf. Kierkegaard 1941. Quotation is from https://www.religion-online.org/book-chapter/chapter-1-that-despair-is-the-sickness-unto-death/ Brought to my attention by Jeff Yoshimi at University of California – Merced.]
A Benefit of the Proposal

It provides small but significant steps towards getting a handle on specific types of phenomenality.

All there is in core, minimal consciousness is pure processness and a process identifying itself as itself. This suggests the following Additional Conjecture:

▶ Temporality of the Core:

The core, minimal consciousness is a fundamental, bare feel (quale) of own continuing existence of this experience itself. This feel is at the basis of all other feels (qualia).

The “own” refers to possession by the experience itself, not by a personal self.

The experience can be very brief.

Separately:

▶ (Meta-)dynamism resisting/corrupting/inhibiting itself through auto-meta-dynamism constitutes a basic painful feel?

▶ (Meta-)dynamism facilitating itself through auto-meta-dynamism constitutes a basic pleasurable feel?
Outline of Argument for the Necessity Claim

► Given: a minimal reflexivity assumption, about a conscious process needing objectively to be pre-reflectively sensitive to itself.


► Then: the process must, objectively and pre-reflectively, pick itself out as a particular causal process.

► Because of the objectivity and pre-reflectiveness, a good (only?) way of achieving the auto-sensitivity and auto-picking-out is for the process’s internal dynamism

1. not to be reducible to the process's trajectory of states (of familiar sorts), and
2. in itself to have a direct, non-representationally-mediated influence on states in the process.
Caveats

- I only propose that *some particular* form and regimentation of basic-physical meta-dynamism, TBD, provides consciousness. The universe conceivably contains other forms, possibly completely unrelated to consciousness or anything biological, though I do not know of or specifically propose any such forms.

- These other forms may be anything from rare to ubiquitous. (The meta-dynamic laws governing meta-dynamism apply ubiquitously, but relevant physical conditions for actual meta-dynamism to arise may only be satisfied in some places at some times.)

- The meta-dynamism providing consciousness is not claimed to be ubiquitous! The proposal is not panpsychic! Rather, it is merely "bathypsychic" in being a *deep* physical matter.

- And deep does NOT necessarily imply spatially/temporally micro.

- I do not propose that any particular sort of matter (e.g. biological) is required by the meta-dynamism that provides consciousness, even though it may contingently be the case that consciousness is (currently, on Earth) only available in what we regard as biological matter.
It seems plausible that:

*Dynamism is not a coherent notion as an attribute of points of space-time, but only of (appropriate) regions of non-zero spatial and temporal extent.*

It is intrinsically a matter of how bits of the universe at different times hang together. It's a matter of a physically real time-spanning relation.

(I have ideas countering possible objections concerning quantum mechanical or relativistic effects.)

Any physical phenomenon constituted in part of dynamism (whether base-level or meta-level) is intrinsically non-instant.

It cannot be defined as states holding at an instant or at collections of instants.

Attributing the phenomenon at an instant does not make sense.
Some Implications of the Non-Instantaneity

In particular, consciousness cannot be coherently be said to hold at instants, only over intervals.

But consciousness, experienced moment by experienced moment, is physically real and in each (non-instant) “moment” exists holistically all-at-once in experience.

Given that consciousness is *actually* not definable at instants, it is plausible that the all-at-once-ness is not an illusion at an instant (in fact, a conscious illusion at an instant *a fortiori* does not makes sense!) . . .

. . .and all stages of the physical processing within that moment must be considered equally physically real, even if stages further in the past can be assigned some lesser sort of reality.
That has implications for the precise nature of temporal passage (assumed real).

It supports versions in which there is something like a sliding time-window (specious moment, “fat” Now, etc.) rather than a changing instant.

NB: The time-window need not have fixed size. And may have fuzzy edges??

In particular, there are implications for the precise nature of Presentist and Growing-Block theories of time, at least.
Questions that Meta-Dynamism raises for (Real) Temporal Passage

Q1: Isn’t temporal passage strongly/intrinsically bound up with dynamism?

Q2: For any positive answer to that, what are the implications for passage being subject to dynamism?

(I.e., intuitively, for passage to have causal power and/or be causally influenced—but the “causation” terminology is especially subject to pitfalls in this context.)
Q3: A Plausible View??

▶ Basic tenet (BT):
All dynamism has passage as an aspect, and all passage is an aspect of dynamism.
More precisely: Every dynamism instance is also an instance of passage, and vice versa.

▶ Passage as subject to meta-dynamism:
Given BT, whenever there is meta-dynamism, one or more instances of passage are subject
to it, simply because one or more instances of dynamism are. (“The passage instances
partake in causation.”)

▶ Auto-meta-dynamism of passage:
Auto-meta-dynamism [a dynamism instance in dynamic interaction with itself] $\Rightarrow$
passage in dynamic interaction with itself (“passage causally affecting itself”).

▶ Minimal case:
It is possible for a universe to be completely empty and unchanging in the usual senses of
these terms, but there is still passage, and it is a minimal form of dynamism.

All dynamism is in principle subject to meta-dynamism, so temporal passage in an “empty
unchanging” universe would be too. It could be in dynamic interaction with itself. So
passage could itself be changing.
Core, minimal consciousness:

If there can be a core, minimal conscious process consisting only of intrinsic auto-meta-dynamism (cf. Additional Conjectures above)

and pure passage is the minimal form of dynamism

then it is reasonable to suggest that all the dynamism in minimal, core consciousness is pure passage or its auto-dynamism —

minimal, core consciousness would just be intrinsically auto-meta-dynamic passage.

Caution: But this does not mean that any instance of intrinsically auto-meta-dynamic passage would be an instance of consciousness. There may be further constraints (cf. “suitability” earlier in this talk).
Towards a “Static Block” (or Moving Spotlight) Version

- Basic anti-Humean stipulation: Dynamism is replaced by systematic static constraining that holds across the whole block and is over and above the regularities in the block. The regularities in the block are not just there arbitrarily.

- Radical anti-Humeanism: the particular instances of constraining are themselves first-class, physical citizens of the block, not just some sort of metaphysical underpinning of the block.

- As such citizens, they are themselves subject to systematic constraining as above – meta-constraining.

- The analogue of objective temporal passage may be the aspect of constraining that is not dependent on specific existing entities other than constraint instances themselves, and is the constraining that would occur in an (otherwise) empty block.
Consciousness is a matter of suitable meta-constraining within a 4D worm through the block. It is intrinsically non-instant.

In particular, to accommodate consciousness, a moving spotlight would need to light up non-instant slices of the block.

Analogues of the “Additional Conjectures”: There may be minimal, core consciousness consisting merely of intrinsic auto-meta-constraining.

If such a theory can explain the existence of feels at all, there is no particular difficulty with the illusional feel of passage, as consciousness intrinsically extends over time and is moreover a matter of the meta-constraining in that interval. There is a feel of “own changing intervality.”
Concluding Summary

- I physically reify dynamism (alternatively: the constraining in a static block).

- I propose (minimally) that consciousness requires meta-dynamism (or meta-constraining) and (maximally) that it is some suitable form of intrinsic auto-meta-dynamism/constraining.

- This gives support to the idea that the most basic form of consciousness, present within all consciousness but possibly able to exist in isolation, is a feel of own-containing-existence, possibly very brief (“own” referring to the experience episode itself).

- The proposal supports the idea that consciousness is intrinsically non-instantaneous and is one case of full physical reality going back at least a little way into the past, with implications/support/challenges for [meta]physics of time (A- or B-theoretic).

- Assuming there is a tight enough relationship between dynamism and real temporal passage, passage is physically reified, and a passage instance can itself enter into dynamic interaction with physical entities, including dynamism/passage instances and even itself.

- And consciousness is (to some extent) a matter of passage instances partaking in meta-dynamism. It may even be that core, minimal consciousness is identical to some suitable form of intrinsic auto-meta-dynamic passage.


Oizumi, M., Albantakis, L. & Tononi, G. (2014). From the phenomenology to the mechanisms of...

