

Anticipation Conference, Trento Nov. 2015

Praesens de futuris:

Whitehead on how to be going to move forward into the future

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- A. Presentism
- B. Time and Tense in Whitehead
- C. Presentism in Whitehead? – The *dunamis* test
- D. How to move forward into the future
- E. Conclusion

A. Presentism

Presentism is the doctrine that
to be = to be now

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Existential force of 'to be':
to exist = to exist now

Problem with Quine's reference of bound variables criterion: Aren't we committed to past entities when claiming that, e.g. Freud is as counterexample to the rule that nobody can analyse himself?

A. Presentism

Presentism is the doctrine that

to be = to be now

Existential force of 'to be':

to exist = to exist now

Veridical force of 'to be'

to be the case = to be the case now

Eleatic presentism I

Parmenides, fr. 8.5-6:

οὐδέ ποτ' ἦν οὐδ' ἔσται, ἐπεὶ νῦν ἔστιν ὁμοῦ πᾶν, ἓν, συνεχές·

("Neither was it once nor will it be, since it is now all together, one, continuous.")

With

it = [the totality of (?)] what is (*to eon*) – existential or veridical force

or

it = what can be spoken about, and can be thought of (fr. 6.1: *to legein te noein t'eon*)

Eleatic presentism II

Plato, *Parm.* 152e1-2:

... ἔστι γὰρ ἀεὶ νῦν ὅτανπερ ᾤ.

"... is always now, whenever it is";

Zeno in Aristotle, *Phys.* VI 9, 239b6-7:

ἔστιν δ' αἰεὶ ... ἐν τῷ νῦν

"... is always in the now"

A. Presentism

Eleatic presentism

- does not allow the "now" to be "other and other" (Aristotle, *Phys.* IV 218a10 etc.: *allo kai allo*)
- amounts to nontemporalism.

Presentist solipsism

COGITO\GOD

Descartes, *Meditationes*:

- no continuity of the cogito by virtue of self-awareness
- continuity of existence only secured by God

II 3: *hoc pronuntiatum: ego sum, ego existo, quoties a me profertur, vel mente concipitur, necessario esse verum.*

IV 31: *omne tempus vitae in partes innumeras dividi potest, quarum singulae a reliquis nullo modo dependent, ex eo quod paulo ante fuerim non sequitur me nunc debere esse, nisi aliqua causa me quasi rursus creet ad hoc momentum, hoc est me conservet.*

Sophisticated presentism I

involves a A-theory of time.

Augustine, *Conf.* XI

- Tenses refer to modes of aboutness inherent in the present:
tempora sunt tria, praesens de praeterities, praesens de praesentibus, praesens de futuris (20/26: "... the present being about what is past, ...")
- Temporal becoming is an activity inherent in the present:
praesens ... attentio ..., per quam traicitur quod erat futurum, ut fiat praeteritum (28/38)

Sophisticated presentism II

Prior, *Past, Present & Future*, OUP 1967, 12

$$x \text{ present} = x$$

Hence, on the one hand,

- tense logic has no operator to represent the present: it would be redundant.

On the other hand, since

$$Fp = Fp \text{ present},$$

$$Pp = Pp \text{ present}$$

- tenses are just special cases included in the present tense.

B. Time and Tense in Whitehead

Fundamental Entities: "actual occasions" = "actual entities"

Creativity:

"'Creativity' ... is that ultimate principle by which the many, which are the universe disjunctively, become the one actual occasion, which is the universe conjunctively. It lies in the nature of things that the many enter into complex unity." (*PR* 21.17-21)

"The many become one, and are increased by one." (*PR* 21.35)

Concrescence: "growing together" (*AI* 236, cf. *PR* 211.2 ff.)

B. Time and Tense in Whitehead

Process: "the becoming of actual entities" (*PR* 22.25) etc.

By contrast, "macroscopic process"

~ the becoming of the world as a whole (*PR* 214 f.)

Time: succession of actual entities.

PR 210.9-13:

"(T)he transition from particular existent to particular existent ... is the 'perpetually perishing' which is one aspect of the notion of time; and in another aspect [sc. of the notion of time, GH] the transition is the origination of the present in conformity with the 'power' of the past."

"perpetually perishing": Locke, *Essay* II xiv 1

B. Time and Tense in Whitehead

Order of succession:

- discrete (epochal theory of time):
"every act of becoming must have an immediate successor" (*PR* 69,18)
- partial ordering (positive and negative light cones)

So far: B-theory of time (?).

Process is described by Whitehead

- not in terms of temporal succession time, but
- as an undivided whole.

Temporal becoming

Actual entities

- are acts [i.e. processes] of becoming,
- occupy atomic positions in the temporal order.

Let e be any actual entity and t its position in the temporal order. The becoming of e involves three states each obtaining at t :

- that e is not (initial state),
- that e is (final state),
- that e is coming to be (intermediate state).

The states are incompatible with each other. Tenses are the respects the Law of Contradiction requires to be distinguished. When

- e **is** coming to be,
- it **was** the case that e is not, and
- it **will be** the case that e is.

B. Time and Tense in Whitehead

A-theory of time:

When e **is** coming to be,

- it was the case that e is not: actual entities presupposed by that initial state are in the **past**; and
- it will be the case that e is; entities presupposing that final state are in the **future**.

B. Time and Tense in Whitehead

Temporal becoming ~ subjectivity

- Actual (i.e. fundamental) entities are "acts of experience"
(*PR* 40.33, cf. 18.30 and passim)
- "(S)ubjective experiencing is the primary metaphysical situation which is presented to metaphysics for analysis"
(*PR* 160.24-5: "reformed subjectivist principle")

C. Presentism in Whitehead?

Whitehead isn't explicit concerning

- A/B-theory
- presentism

A/B: distinction of categories

- eternal objects --> non-temporal
- regions in the extensive continuum (*PR* part IV) --> temporal: B
- actual (i.e. fundamental) entities --> epochal/temporal: A

C. Presentism in Whitehead?

Presentism with respect to actual (i.e. fundamental) entities?

dunamis test of existence:

Λέγω δὴ τὸ καὶ ὁποιοανοῦν [τινα] κεκτημένον **δύναμιν** εἴτ' εἰς τὸ ποιεῖν ἕτερον ὅτιοῦν πεφυκὸς εἴτ' εἰς τὸ παθεῖν ..., πᾶν τοῦτο ὄντως εἶναι· τίθεμαι γὰρ ὄρον ὀρίζειν τὰ ὄντα ὡς ἔστιν οὐκ ἄλλο τι πλὴν δύναμις.
(Plato, *Sophist* 247d8-e4)

"I suggest that anything has real being that is so constituted as to possess any sort of **power** (*dunamis*) either to affect anything else or to be affected ... I am proposing as a mark of to distinguish real things nothing but power" (tr. Cornford, with modification)

cf. Whitehead, *AI* 129: "... the definition of being is just power"

C. Presentism in Whitehead?

Dunamis test (1st attempt):

- the present actual entity
is acted upon by past entities and has a power to act upon future entities,
==> exists
- past actual entities
have, and manifest a power to act upon the present entity, ==> exist
- future actual entities
have a potentiality to be acted upon, ==> exist.

Troubles with the future I

The *dunamis* test requires something to be specified to which it is applied. Actual entities are events. For events, to be specified in advance is to be determined in advance. Hence,

- for actual entities, to be specified in advance is to be determined in advance;
- denial of fatalism (and hence of determinism) requires that future actual entities events are denied
 - (1) to be specified in advance, and hence
 - (2) to be subjected to the *dunamis* test.

Troubles with the future II

A-theory + denial of fatalism + event ontology

==> the *dunamis* test doesn't apply to the future.

==> presentism (or, at least, growing block)

Hence, Whitehead's crucial question:

"Zeno: How are you going to move forward into the future? How is process possible? If you conceive it under the guise of a temporal transition into the non-existent, you can't get going. There is nothing you can point to into which there is a transition, or is there and then created."
(*Harvard Lectures for 1924-25*, ed. Ford, p. 277)

Whitehead's metaphysics is designed to answer that question.

D. How to move forward into the future

"Objective immortality" I

"(I)t belongs to the nature of a 'being' that it is a potential for every 'becoming'"

(*PR* 22.38 f.: "principle of relativity")

"An actual entity arises from decisions for it, and by its very existence provides decisions for other actual entities which supersede it." (*PR* 43.12-14)

Hence for an actual entity, to be completed, is

- to perish "subjectively" (i.e. as a subject enjoying "immediacy", *PR* 29.25.f)
- to become immortal "objectively" (i.e. as providing "a decision conditioning the creativity which transcends that actuality", *PR* 43.21)

and thus

- to "constitute()" efficient causation (*PR* 293.1)

D. How to move forward into the future

"Objective immortality" II

Actual entities do not just have powers, but

- survive as powers

which

- manifest themselves in the future

as

- the "datum" for and "primary phase" in the becoming of succeeding entities.

D. How to move forward into the future

"Objective immortality" III (1st "metaphysical assumption", *PR* II 2 ii)

Actual entities survive as powers which manifest themselves in the future as the "datum" for and "primary phase" in the becoming of succeeding entities.

"(R)elatively to any [sc. succeeding] actual entity, there is a 'given' world of settled actual entities and a 'real' potentiality,¹ which is the datum for creativeness beyond that standpoint.² This datum, which is the primary phase in the process constituting an actual entity, is nothing else than the actual world itself in its character of a possibility for the process of being felt.³" (*PR* 65.20-25)

Notes:

- 1) "'real' potentiality" – that is, combined "power" (in my *dunamis* test language)
- 2) "that standpoint" – that is, the standpoints of those settled entities
- 3) "felt" – that is, by that process.

D. How to move forward into the future

"Objective immortality" IV (2nd "metaphysical assumption, *PR* II 2 ii)

Actual entities survive as powers combinations of which provide "standpoints" within a gunky universe of mereological relations

"The real potentialities relative to all standpoints are coordinated as diverse determinations of one extensive continuum.'...

The reality of the future is bound up with the reality of this continuum. It is the reality of what is potential, in its character of a real component of what is actual." (*PR* 66.16-18, 41-44)

"actual"— that is, presently actual

D. How to move forward into the future

Succession

"Actual entities atomize the extensive continuum. ...

With the becoming of any actual entity what was previously potential in the space-time continuum is now the primary real phase in something actual. For each process of concrescence a regional standpoint in the world, defining a limited potentiality for objectifications, has been adopted." (*PR* 67.3, 10-13)

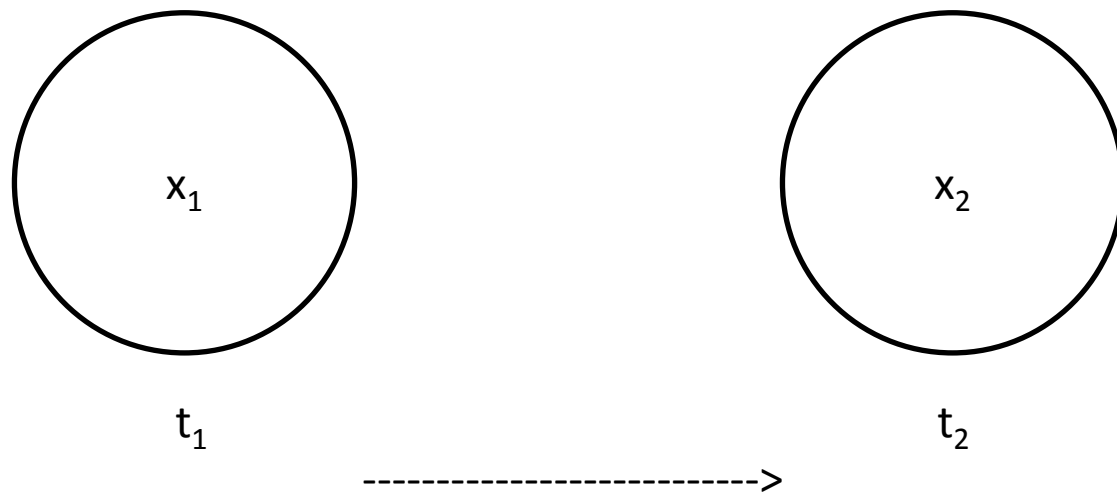
D. How to move forward into the future

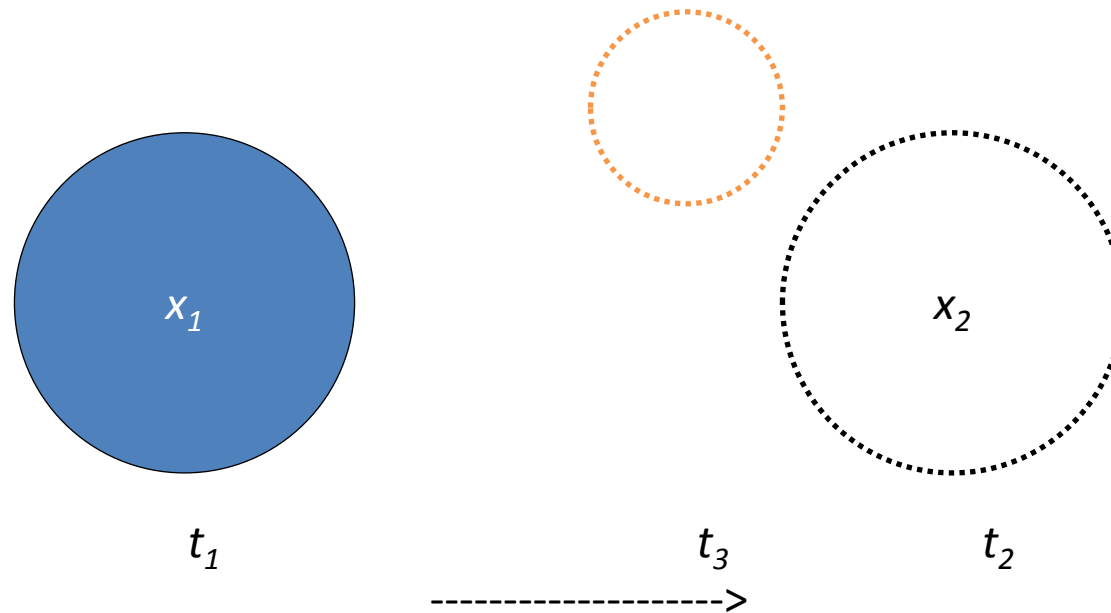
Succession – and lawfulness of succession

The succession of actual entities is effected

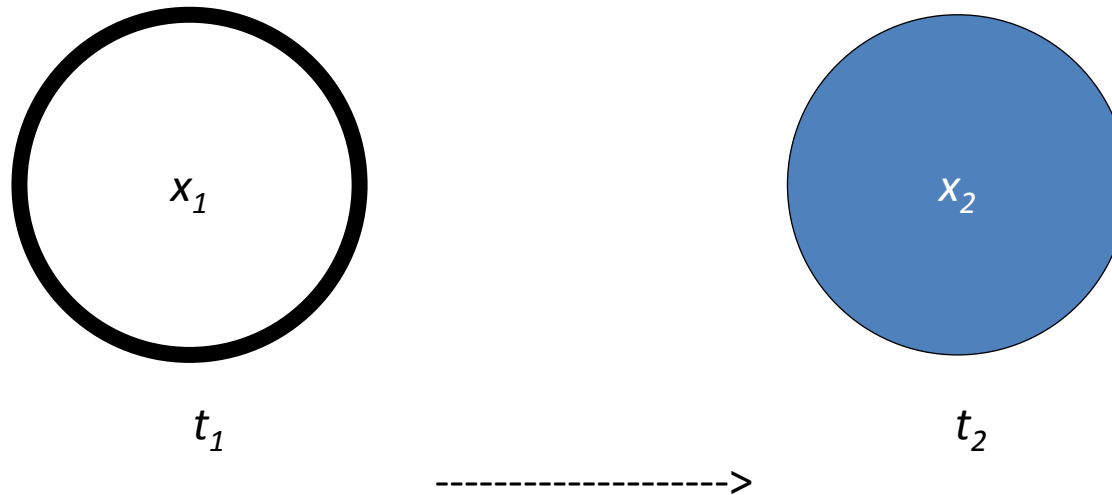
- neither by the "settled actual entities" (PR 65.21) which have contributed the relevant potentialities
- nor by the novel entity which, according to Whitehead, is *causa sui* only by virtue of its initial phase which, in turn, "is a direct derivate from God's primordial nature" (PR 67.20).

"The [sc. atomic] quantum is that standpoint in the extensive continuum which is consonant with the subjective aim in its original derivation from God. Here 'God' is that actuality in the world, in virtue of which there is physical 'law'." (PR 283.26-29)





- t_1 is present;
- x_1 exists;
- x_1 is "a potential for every becoming"; hence,
- it belongs to x_1 that, for all $t > t_1$, x_1 will exist at t as a power to be activated by novel actual entities;
- t_2 is just one potential division among others in the extensive continuum (not yet specified).



- t_2 is present;
- x_2 exist;
- x_1 has perished; but
- x_1 exists at t_2 as a power activated by x_2 (that is, as part of the datum from which x_2 originates).

E. Conclusion

- (1) The present actual entity survives as a potentiality, or power, that extends into the future.
- (2) In order to be manifested, that power must be triggered by an external stimulus.
- (3) The stimulus is provided, according to Whitehead, by the "primordial nature of God"
- (4) Hence, the present actual entity is
 - **internally** related to the potentialities in the future section of the extensive continuum, but
 - **externally** related to the actual entities that supersede it.

personal order only secured by God --> Descartes
- (5) Further, the present actual entity is
 - **internally** related to the settled actual entities that make up its past.

E. Conclusion

- (6) What is true about the past or about the future is true by virtue of the present (veridical presentism).
- (7) What is true about the future
 - does not refer to future events (that is, to what will actually happen), but
 - refers to the potentialities in the future section of the extensive continuum.