

Dead Past, Adhocness, and Zombies

Abstract: The Dead Past Growing Block theory – *DPGB-theory* – is the metaphysical view that the past and the present tenselessly exist, whereas the future does not, and that only the present hosts mentality, whereas the past lacks it and is, in this sense, dead. One main reason in favour of this view is that it is immune to the now-now objection or epistemic objection (which aims, roughly, at undermining the certainty, within an A-theoretical universe, of being currently experiencing the present time). In this paper, I examine the additional arguments offered by P. Forrest and G. A. Forbes to back the DPGB-theory and show that they fail. Moreover, in line with D. Braddon-Mitchell and against Forbes, I argue that the DPGB-theory is indeed committed to the existence of zombies in the past. Being ad hoc and burdened by a very odd and counterintuitive commitment, the DPGB-theory turns out to be rather unpalatable.

Keywords: Temporal Ontology, Growing Block Theory, Dead Past, Zombies, Causation.

1. Introduction

The classic growing block theory of time – henceforth *CGB-theory* – consists in the conjunction of the following two theses:

- (i) *ontology thesis*: the past and the present tenselessly exist, whereas the future does not;¹
- (ii) *dynamicity thesis*: time passes, i.e., the universe undergoes a process whereby what is present changes, so that what is future becomes present and what is present becomes past.

In the CGB-theory, the passage of time involves the absolute coming into existence of temporal entities such as material objects and events (i.e., their becoming members of the ontological domain, i.e., of the extension of the predicate “tenselessly exists”), as they pass from being future to being

¹ A tenseless predicate is one that lacks tense and thus fails to qualify the attribute instantiation it expresses as past, present, or future. In this paper, tenseless predicates are marked as such (by the adverb “tenselessly”) only when the context might be not sufficient to convey their intended reading.

present, and their absolute remaining in existence (their remaining in the ontological domain), as they pass from being present to being past.² According to this theory, the universe is a four-dimensional block, extended both in space and time (from the beginning of the universe up to the present moment), that grows temporally larger as, instant by instant, new entities absolutely come to exist. The CGB-theory was first theorised by Broad (1923), and more recently by Tooley (1997), Button (2006), and Correia and Rosenkranz (2018).

The dead past growing block theory – *DPGB-theory* – differs from the CGB-theory by virtue of the following additional thesis:

(iii) *dead past thesis*: mentality – i.e., the whole of mental events such as episodes of being conscious, being sentient, having a perception, entertaining a belief, and so on – is confined to the present moment and the past is completely devoid of it and, in this sense, is dead.

Accordingly, in the DPGB-theory, mental events absolutely cease to exist as they cease to be present, whereas non-mental events absolutely remain in existence and simply go into the past. The DPGB-theory was first devised by Forrest (2004 and 2006) and then endorsed, with some elaboration, by Forbes (2016). Its main, and perhaps only, advantage over the CGB-theory is that it successfully dodges a very serious objection that has been directed against the CGB-theory – and in fact any form of the A-theory according to which mentality exists at times other than the present one – and is known as *the now-now objection* or as *the epistemic objection*. While this objection comes in a variety of formulations (Bourne 2002 and 2006: ch. 1; Braddon-Mitchell 2004; Merricks 2006; Tallant 2007; and Miller 2017), its gist can be briefly summarised as follows: on a CGB-universe (the universe depicted by the CGB-theory), all mental events that were once present exist in the past and they are exactly as they were when present (the passage of time does not alter their intrinsic qualities), and this means that people in the past (or past people’s temporal parts) tenselessly experience the times at which they happen to live just like everyone who lives in the current time – *this* time, the one you are reading these very words – is experiencing it; as a consequence, *if* this universe were a CGB-universe, we would not be justified in believing that the currently experienced time is the present time *even if we knew* that this universe is a CGB-universe: it could be instead a past time (although not a future one, because the future does not exist); even worse, we would be justified in believing that the currently experienced time is a past one,

² The absolute notion of coming into existence of an entity contrasts with its coming into existence in a relative sense, i.e., relatively to the temporal location of the entity. According to this relative sense, something comes into existence iff simply it does not exist *at some time* and it exist *at some later time*. The same distinction applies, *mutatis mutandis*, to going out of existence.

because there is only one present time, whereas there are many more, perhaps infinitely more, past times. Such a result – that the currently experienced time is almost surely not the present one – is clearly unacceptable for CGB-theory (in fact, for any A-theory of time).

While its success in dodging the now-now objection is hardly questionable, the DPGB-theory does not come without costs. Braddon-Mitchell argued that the theory encounters problems with the theory of relativity (2004) and is burdened by the odd commitment to the existence of zombies (2013). Heathwood (2005) and Miller (2017) highlighted its disadvantages in grounding the truths about the past. Miller (2017), in particular, argued that supporters of the DPGB-theory are faced with a dilemma between theoretical simplicity in truth-grounding and differentiation from presentist forms of truth-grounding.

In this paper, I have two aims. The first one is to point out a further major problem that afflicts the DPGB-theory at least in its current versions, namely the lack of (effective) justification apart from its success in answering the now-now objection. While the DPGB-theory seems to have been devised as a modification of the CGB-theory to the express purpose of evading the now-now objection, its supporters did put some effort in producing independent justifications for it. They did so by trying to connect in various ways mental events to kinds of entities that, in a growing block picture of the world, can be located only in the present; more specifically, by holding that mental events are causal activities (Forrest 2004), that they supervene on incomplete causal processes (Forrest 2006), or that they are causally dependent on ongoing processes (Forbes 2016). In §2 and §3 I put these attempted justifications under scrutiny and expose their flaws. My second aim in this paper is to show some flaws in Forbes's response to Braddon-Mitchell's zombie objection, and show that the DPGB-theory is actually committed to the existence of zombies. I do this in §4. In §5, I conclude that the DPGB-theory, in its current elaborations, turns out to be blatantly ad hoc, a circumstance which is all the more undesirable in consideration of the view's odd and counterintuitive commitment to the existence of zombies.

2. Mentality and causal activity

In Forrest's works elaborating the DPGB-theory we find two distinct accounts as of why mentality must be confined to the present time and lacking in all past ones: in his 2004 paper he holds that mental events are causal activities and causal activities occur only in the present; in his 2006 paper he holds that mental events supervene on incomplete causal processes and incomplete causal processes occur only in the present. Although compatible and apparently considered by Forrest as two ways of expressing one same view, the two accounts are in fact different; hence, I address them separately.

According to Forrest (2004: 359), a causal activity consists in the propensity of an event x of a certain type to “generate” an event y of a certain type, and it is possessed *only before* the effect y and the relational state of affairs of x causing y (the causal relation between x and y) have come to be. Here, “generate” is to be understood in the terms of *ontically productive causation*, meaning that the cause has its effect absolutely come into existence (and with the absolute coming into existence of the effect also the very causal relation between the cause and its effect absolutely comes into existence). On the DPGB-theory, just like on the CGB-theory, causal activities can occur only in the present, because the present is the temporal edge of the existent and thus the only time after which the absolute coming into existence may occur. Unlike causal activities, states of affairs can exist in the past too because they do not involve an absolute coming into existence of events or objects. Forrest tells us then that it is “intuitively plausible” that mental events (events of “life and sentience”) are causal activities, not states of affairs, and consequently, only the present can host mental events and the past must be devoid of them: in this way he justifies the passage from the CGB-theory to the DPGB-theory.

Forrest’s claim that mental events are causal activities can be construed in two different ways, only one of which is indeed “intuitively plausible”, but also unable to support the dead past thesis. Sure enough, unless one adopts some form of global epiphenomenalism about the mind, one must accept that *some* mental contents are *sometimes* constitutive of causal activities. We should certainly accept, for instance, that a person’s choice usually causes a corresponding bodily movement; that the sight of a big spider from very up-close can cause in some people a feeling of anxiety or revulsion; and that someone’s toothache can prevent them from enjoying a delicious meal. However, this does not apply to all mental contents all the time. For instance, my possessing the belief that $2^3 = 8$ or that my maternal grandmother’s name is Mary had no causal efficacy in my mental life or bodily behaviour while I was waking up this morning or crossing a busy road later this morning. Although our mind (or brain) is populated with a countless number of mental *contents*, only few of them can be constitutive at any given time of causal activities, while the great majority of them, *pace* Forrest, must be considered constitutive of causally inactive *states*. Hence, Forrest’s identification between mental events and causal activities is indeed intuitively plausible if we read it in the weak sense that *some* mental events are *sometimes* causally active, but extremely implausible if we read in the much stronger sense that *all* mental events are *always* causally active. However, the former reading, the only plausible one, is not enough to justify the dead past thesis: if mental events may be causally inert states, then they can also exist in the past. In this eventuality, the DPGB-theory would collapse into what might be called a *half dead* – or perhaps, *mostly alive, though not wholly* – growing block theory. This, surely, is only an eventuality: I have not argued that there is reason to think that mental states do exist in the past of the growing block; I have argued only that Forrest’s reasoning provides no sufficient support for excluding this eventuality.

But what if we concede that Forrest's argument or some other argument effectively supports the view that all mental events are in the present, whether they be causal activities or causally inert states? Would that lend any support to the DPGB-theory? No, it would not. Although Forrest (like Forbes) does not dwell on giving a positive characterisation of what the past consists of, it seems safe to assume that it is just like the present except it lacks mentality: the present is inhabited by entities belonging to both categories of the mental and the physical, whereas the past is merely physical. It is also safe to assume that if in the present there are causal activities, not all of them are of the mental kind: there are merely physical activities as well. (It must be so: otherwise, there would not be causation where there is no mentality, and there would not have been causation before mentality came to be.) Since the rationale Forrest offers for believing the dead past thesis is that mental events must be only in the present because they are causal activities, then the same should be thought of merely physical causal activities: they can only exist in the present and must absolutely cease to exist as they go into the past. But then it is not only mental events but also merely physical events that absolutely cease to exist in passing from being present to being past. Think, for example, of the falling of a raindrop at time t_1 causing the motion of a grass blade at time t_2 . According to the DPGB-theory, the motion of the grass blade at t_2 is absolutely brought into existence by the falling of the raindrop at t_1 . However, if the falling of the raindrop counts as a causal activity, it cannot absolutely remain in existence as it is no longer on the temporal edge of the universe. The problem, however, seems even more radical, because the very persistence of material objects is plausibly construed as a causal process: the existence of a certain object at a time is what causes the existence of that very same object at some later time, and this means that the existence of material objects is itself a causal activity. If so, however, no material object can pass from being present to being past without absolutely ceasing to exist. This means that the logic of Forrest's justification of the dead past thesis actually makes the DPGB-theory collapse into presentism.

3. Mentality and process

In his 2006 paper (162), Forrest offers a different justification of the dead past thesis. There, he does not identify mentality with causal activity, but instead claims that mentality supervenes on "incomplete causal processes", i.e., on "the occurrence of suitable causes without the occurrence of the corresponding effects", so that a mental event absolutely ceases to exist as soon as the effect of the underlying cause has absolutely come into existence. To explain the view, Forrest gives an example: "the conscious awareness of a previously unconscious mental state supervenes upon the incompleteness of an act of recording that state in the memory"; however, he soon warns us to be not committed to the correctness of this precise example, but "only to something or other like the example". Although the new account of mentality appears to be compatible with the previous one (that

mental events are causal activities and supervene on incomplete causal processes seems to be a consistent view) and Forrest appears to consider them equivalent, they are clearly different: saying that mentality is a causal activity is not tantamount to saying that it supervenes on incomplete causal processes and neither view obviously entails the other.

By way of justification of the dead past thesis, the view that mentality supervenes on incomplete causal processes falls very short. While the previous view that mental events are causal activities was at least supposed to be intuitive (and, as seen, on one interpretation it really is), this view does not look very intuitive at all and Forrest, who himself acknowledges that it is an “highly controversial thesis” (2006: 162), does not engage in any argumentation in its favour. So, we are left wondering what reason there are to accept this account besides its suitability as a response to the now-now objection.

Forbes (2016) espouses a rather similar account but puts a bit more effort in arguing for it. It relies on a distinction between *finished processes* and *ongoing processes*: a finished process is a process that is embedded in the past and is therefore succeeded by further processes and events; an ongoing process is a process the most recent phase of which is in the present and therefore is not succeeded by anything (here “is succeeded” is to be understood as expressing the instantiation of a *relation of succession*). Apparently, Forbes’s ongoing processes are quite like Forrest’s incomplete causal processes, except they are not explicitly qualified as causal. Forbes does not identify mentality with an activity or with a process; he confines himself to claiming that mentality “is dependent on all sorts of processes as sustaining causes” (§3), where – as in other places in his paper – “processes” is elliptically taken to mean *ongoing processes*. To explain the point, Forbes also offers an example of the sort of processes on which mentality relies: “Unless oxygen is supplied to the brain, for example, consciousness in general, and speculation about one’s objective presentness in particular, are not possible” (§3). Since oxygen supply to the brain and other ongoing processes are only in the present, the past lacks mentality.

It is obvious (at least for those who do not endorse dualism about the mind-body relation) that mentality (causally) depends on processes occurring in the body, such as oxygen supply to the brain; however, it is not obvious that the existence of mentality should be considered dependent specifically on *ongoing processes*. Why could mentality not be dependent *generically on processes – be they ongoing or finished*? Finished processes, within a growing block picture of the world, would seem perfectly apt to support the existence of mental events: for example, just like an ongoing process of oxygen supply to the brain, a finished process of oxygen supply to the brain is still a process and it still involves oxygen and a brain – it just lies wholly in the past. If it is granted, however, that mentality depends simply on processes, not specifically on ongoing ones, then the DPGB-theory collapses into the CGB-theory.

On the other hand, if we concede to Forbes that mental events depend on are ongoing processes and not finished ones, then we may rightly ask: why could we not admit the same for any *physical items* that depend on processes? Say, for human bodies: they surely depend on the supply of

water to the various organs and if the water supply process on which they depend is an ongoing one and not a finished one, then the past should be devoid of human bodies. The same should apply to instantiations of any physical property that is dependent on any kind of processes. For example, a light bulb being on depends on electric current being supplied to it; but if electric current supply to a light bulb must be an ongoing process, then light bulbs can be on only in the present. To sum up: if human bodies and physical property instances are causally dependent on ongoing processes, then they cannot exist in the past and the DPGB-theory seems again to collapse into presentism. Of course, Forbes does not hold this view: according to him, *only* mentality depends on ongoing processes and thus only mentality absolutely ceases to exist as it passes from being present to being past. However, if mental events and physical items of the world (human bodies and physical property instances) meet such different fates in passing from being present to being past, this difference must be duly justified.

4. Commitment to Zombies

The adhocness of the DPGB-theory in its current elaborations stands out even more when considered along with another noticeable feature of the theory: its commitment to the existence of zombies (in the philosophical sense of the term): creatures that are physically and behaviourally like humans while lacking consciousness – a commitment which was emphatically pointed out by Braddon-Mitchell (2013). But Forbes (2016) rejects this construal of what past people are as a misinterpretation and claims that, according to the DPGB-theory, past people are not zombies because they do not only lack consciousness, but they also are not Φ ing, i.e., *doing anything: engaging in activities, undergoing processes, or exhibiting any behaviour whatsoever*. But why should we accept this view? First Forbes holds that past people are not doing anything “on account of being dead”, a circumstance that he believes to offer “a reasonable excuse” for someone’s inactivity (§1); then he gives a fuller justification: “a necessary condition on Φ ing is being succeeded by no events” (§2), i.e., on the growing block view of the world, being temporally placed in the present time (of course, in the reported quote from Forbes, “being succeeded” expresses a relation of succession).

Let us first consider the first part of Forbes’s justification: past people are not Φ ing because they are dead. Is this a reasonable excuse for not be Φ ing? Not necessarily, since both the predicate “is Φ ing” and the term “dead” are ambiguous. In the context of temporal ontology, “is Φ ing” may be taken to mean either *is presently Φ ing* or *is tenselessly Φ ing*, and in the context of the DPGB-theory, “dead” can be understood either in the ordinary sense, as describing the state of a person after the cessation of the biological functions of their body, or in the technical sense distinctive of the DPGB-theory, namely as describing the condition of lack of mentality in a person, or person temporal part, at a time at which they, or a temporal part of them, had mentality when that time was present. Now, surely a person who

is already dead in the ordinary sense is not presently Φ ing; for instance, surely it is false that Marie Curie is presently Φ ing: she is not presently alive, and so she cannot be presently Φ ing. But is it also obvious that Marie Curie, being dead in the technical sense at some past time, is tenselessly not Φ ing *at that past time*? Not so much. Although Forbes' is oddly reluctant to offer a more substantial positive characterisation of the past (see end of §3), it seems that, by DPGB-theory's own standards, the past must be taken to include not only all physical objects (or object-stages) that were once present but also all *processes, events, actions, and behaviours* that were once present: it is just that while they were once *ongoing* (when present), they are currently *finished* (and embedded into the past). Forbes himself admits the existence of finished events and processes in the past (§3); however, the same must apply to actions and behaviours, both of which are, at bottom, instantiations of physical properties through time. But if past Marie Curie tenselessly exists in the past and the past is populated by finished processes, events, actions, and behaviours, how could it be denied that she, at past times, is tenselessly undergoing processes, participating in events, making actions, and having behaviours? If an event of Marie Curie's working in her chemistry laboratory tenselessly exists at some past time (i.e., if the property of *working in a chemistry laboratory* is tenselessly instantiated by Marie Curie at some past time), how could not be the case that she is tenselessly working in her laboratory at that time? So, it does not seem false that she is tenselessly Φ ing in the past.

But here the continuation of Forbes's justification must be considered: past people are not (tenselessly) Φ ing because they are not on the temporal edge of the universe, which is the only temporal location where any Φ ing is possible since it is the point in time which is followed by nothing. It seems to me that Forbes's view ultimately relies on the unexpressed assumption that Φ ing – *doing anything* – necessarily involves in one way or another *ontically productive causation*, which in turn only occurs at the temporal edge of reality. But why accepting this assumption? It seems perfectly fine to me, within the DPGB-theory, to claim both that I am tenselessly writing at the present time (or more briefly, *presently writing*) at my computer and that Marie Curie *is tenselessly working* in her laboratory at some time in the past, although only the former case does, on the DPGB-theory, involve some form of productive causation. I do understand that a doing that involves an absolute bringing something into existence might be considered as a metaphysically eminent form of doing; however, I see no reason to acknowledge it as the only form of doing. But even if we followed Forbes in denying that, within the DPGB-theory, past people are tenselessly Φ ing, we would still have to acknowledge that they are tenselessly involved in finished processes, executors of actions, and exhibiter of behaviours – and this appears already enough for them to deserve the qualification of zombies. Lastly, Forbes's view that Φ ing and, in particular, *having any behaviour whatsoever* can occur only in the present appears to be also self-defeating. If zombies are creatures that lack mentality but behave like humans, presumably humans are creatures that have mentality and... behave like humans. However, if *having any behaviour whatsoever*

occurs only in the present, the past should be devoid not only of zombies but of humans as well (in other terms: if *having any behaviour whatsoever* is an essential feature of both zombies and humans, things that do not possess it can be neither zombies nor humans). This is, I submit, a rather unwelcome result.

4. Conclusion

I examined the arguments offered by Forrest and Forbes for accepting the DPGB-theory in addition to the one relying on its immunity to the now-now objection and showed that they do not work. I argued that those arguments do not effectively support the thesis that the past lacks mentality and that, if we concede that they support this thesis, then they support also the thesis that the past lacks certain types of physical items (physical events, material objects, in particular human bodies, and physical properties) that, presumably, are supposed to be included in the past of the DPGB-theory. It follows that the DPGB-theory is, in its current elaborations, decidedly ad hoc. Being ad hoc is not ideal for any philosophical theory, especially for those having odd or seriously counter-intuitive commitments; and the DPGB-theory, I argued in line with Braddon-Mitchell and against Forbes, really features a commitment to zombies, which is decidedly an odd and seriously counterintuitive commitment.

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