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THE PRIORITY OF THE PAST

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Abstract. This paper presents a criticism to Baron's (2014) *Priority Presentism* and proposes an alternative view, the *Priority of the Past*. Both theories are based on the application of metaphysical grounding to temporally located entities. In the first part, we define synchronic and diachronic grounding and then the corresponding notions of synchronic and diachronic fundamental and derivative. In the second part, we present three arguments for supporting the priority of the past: the ontological stability, the ontological dependency and the grounding the direction of time argument. Finally, we discuss a possible objection to our proposal.

Keywords: metaphysics • ontology • philosophy of time • grounding

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There are three main theories of time. *Presentism*, the main dynamic theory, postulates that only the present exists. Hence, any entity, in order to exist, must be located at the present. Future entities emerge to existence when they become present and abandon existence when they become past. This is, of course, its most orthodox form. There are versions of the theory in which both past and future exists alongside the present, but in a different manner, or in a lower degree of reality. Some of the most prominent defenders of this theory are Markosian (2003), Merricks (1999) and Prior (1968). *The Growing Block Theory*, on the other hand, postulates that both past and present exist, but the future is open and, therefore, inexistent. As the present moves towards the future, the universe grows because the inventory of existing entities also grows. Although this is another dynamic theory, it has some elements of Eternalism, namely the eternal and immutable character of the past. Two important defenses of the Growing Block can be found in Tooley (1997) and Broad (1923). Finally, *Eternalism*, the static model par excellence, is the ontologically most tolerant among the three theories: it equally accepts the reality of the past, the present and the future. In this conception, there is not a concrete present that moves from the past to the future: the *now* becomes a matter of perspective, a time indexical, very similar to what *here* means to space. Just as a specific place occupied by someone has no metaphysical priority over any other place, there is not a time position to be considered special, but only dependent of someone's perspective (Russell 1915). This way, past present

and future lose their absolute meaning. There are only permanent 2-ary relations, such that entities (facts, events, objects) can be *earlier*, *later* or *simultaneous* to each other. Some of the philosophers that defend this position are Sider (2001), Mellor (1998) and Lewis (1986).

1. Priority Presentism

Sam Baron presents and defends in his article 'The Priority of Now' (2014) a new form of Presentism, called 'Priority Presentism'. Priority Presentism may be characterized as the position according to which

(i) only present entities exist fundamentally and

(ii) past and future entities are derivative entities, grounded in the present (Baron 2014, p. 5).

According to priority presentism, there is only one fundamental moment: the present. This moment contains the ontological grounds for all past concrete entities, as well as any future concrete entities that one might be willing to countenance (Baron 2014, p. 6). Thus, the main difference to standard Presentism consists not simply in denying the existence of past and future entities, but in considering them 'merely derivative'.

The main novelty of this kind of presentism is the appeal to the notion of grounding. Ontological grounding is the relation of non-causal metaphysical determination, expressed by locutions like 'in virtue of', 'because' or 'grounds'. So, one may say that A grounds B, or, similarly, that B is the case because of A. For example, one may say that the fact that *John is in the room* grounds the fact that *there is someone in the room*. This notion of determination is very strict: if A grounds B, A being the case makes B being also the case. This formulation may suggest that grounding is simply modal determination, but this is not the case. Ontological grounding is much more fine-grained than modal necessitation. As is known, when A is a necessary entity (like the number 3) and B is contingent (like Socrates), it must be concluded that the existence of Socrates necessitates the existence of 3, since in all possible worlds in which Socrates exists, 3 also exists. Grounding offers a kind of *relevant* necessitation: when A grounds B, B is the case and relevantly related to A. Because of this, grounding locutions are supposed to be hyperintensional.

However, grounding has more logical features. It is usually supposed to be a strict order relation, i.e. it is irreflexive, asymmetrical and transitive.[1] Nevertheless, some (Schaffer 2012, Rodriguez-Pereyra 2015) have been arguing against this, showing that there are plausible counter-examples. There is no need to take a stance concern-

ing this issue. In any case, the grounding relation addressed in this paper is a strict order relation.

Another important feature of ontological grounding is its *factivity*: the relata of the grounding relation are always not merely possible (in the case of states of affairs or objects) or false (in the case of propositions), but always real or subsisting. This may be trivially derived from the mere form of expressing grounding: "*... is the case* in virtue of *... being the case*" (applicable for states of affairs), or "*... is true in virtue of ... being true*".

In order to characterize Priority Presentism, Baron must, firstly, clarify the temporal employment of the concept of grounding and, secondly, define which kind of entity will play the role of temporal absolute ground in his system. Although the classic examples of grounding are synchronic, there is nothing in its usual definition that forbids its extension in time. It is crucial to the priority presentist to define diachronic grounding and to establish the distinctions with synchronic grounding. Synchronic grounding is the grounding of an entity E at a time t by another entity E^* at the same time t. Diachronic grounding, on the contrary, is the grounding of an entity E at a time t by another entity E^* at a time t^* such that $t \neq t^*$. From these definitions we may derive the following distinctions (the definition below is intended to describe only entities located at times):

Synchronic

Fundamental$_S$ x is fundamental$_S$ $=_{df}$ If x is located at time t, then there is nothing at t that synchronically grounds x.

Derivative$_S$ x is derivative$_S$ $=_{df}$ If x is located at time t, then there is something at t that synchronically grounds x.

Diachronic

Fundamental$_D$ x is fundamental$_D$ $=_{df}$ If x is located at time t, then (i) x is fundamental$_S$ and (ii) there is nothing at any time t^* that grounds x.

Derivative$_D$ x is derivative$_D$ $=_{df}$ If x is located at time t, then there is something at a time t^* such that $t^* \neq t$ that diachronically grounds x.

Notice that it doesn't follow from the definition that a synchronic derivative is grounded by any diachronic fundamental. Another oddity is that nothing seems, in principle, to be diachronic fundamental, because every synchronic fundamental should become derivative when they are no longer present. But further on the paper, the picture becomes clearer: all past and future entities are derivative$_D$. Some of them are fundamental$_S$, but none is fundamental$_D$. Some present entities are derivative$_S$, some fundamental$_S$. And, as fundamentals of the present, these latter entities are

able to ground both the derivative entities of the present and all the other entities (fundamentals and derivatives) of the past and future, being the diachronic fundamental entities that appeared to be lacking before.

Baron adopts the following solution: presently instantiated tensed properties. The first use of such properties in the ontology of time can be found in Bigelow (1996), who employs them as truthmakers for propositions about the past. So, the proposition <dinosaurs existed>, which, in a classical presentist perspective, cannot use the actual dinosaurs as truthmakers, for they do not exist anymore, is made true by the present instantiation of a tensed property by the world itself: the world instantiates (now) the property of *having been such that there were dinosaurs* (Baron 2014, p. 8). In the Priority Presentism, dinosaurs are *synchronically* grounded by whatever is more fundamental (particles, fields, strings), but they are *diachronically* grounded by this special property possessed by the world. Therefore, in Baron's presentism, the flesh and bone dinosaurs of the past, and not merely truths about them, are grounded by these properties. Something analogous applies to the future.

Baron stresses that such properties of the world are not mandatory for Priority Presentism to ground the past and the future. But he maintains that some new entities must be introduced to do this job. Ordinary fundamentals, such as particles and atoms are not good candidates for diachronically grounding the past, given that in every world in which the relevant fundamentals exist, they would ground a derivative past. This odd conclusion follows, according to Baron, if one accepts the necessitation thesis:

Necessitation: If *x* grounds *y*, then necessarily *x* exists only if *y* exists.

Thus, Baron argues, grounding past and future in ordinary fundamental$_S$ would rule out many ordinary eternalist worlds in which the past, present and future exist, but the past and future are not grounded in the present. Since such eternalist worlds should not be ruled out so easily, entities that do the grounding work in priority presentist worlds should not exist in eternalist worlds. Therefore, it is better to postulate entities that appear only in presentist worlds to do the job of grounding past and future (Baron, 2014, p. 8). This is the main motivation to choose tensed properties of the world as the absolute ground in the priority presentism. Note that Baron considers that priority presentism is contingent and even uses the existence of eternalist worlds as a justification for what he should choose as the absolute ground of this presentist world.

Regarding the motivations to the theory itself, Baron's strategy is, basically, to argue that priority presentism, if not yet proven true, should, at least, be taken seriously. For that, the author considers that the motivations behind presentism are equally strong to support his thesis. These can be summarized in two: (i) the appeal to common-sense intuitions and (ii) the considerable parsimony in respect to

the amount of entities postulated, especially when presentism is contrasted to eternalism. Concerning the first motivation, it can be stated as follows:

Parity: The past, present and future are not metaphysically on a par; there is something special about the now (Zimmerman 2008, p. 211).

Reality: The present is more real than either the past or the future (Zimmerman 2008, p. 211).

Although most non-presentist theories satisfy the first intuition (eternalists see the *now* as a temporal indexical and growing blockers understand the present as the edge of existence), the second intuition is best captured by presentist theories. For the priority presentist, the present is more real because it is the place for the $\text{fundamental}_{\text{D}}$ entities, the only entities that can be absolute fundamentals.

The second motivation regards the ontological parsimony, which characterizes the presentist theories. According to the standard presentism, the ontological landscape is like a desert: only the entities of the present exist, for only one moment exists. The picture of the priority presentism is a bit different. Other times exist, but only one is the place for the absolute fundamentals. At first sight, the priority presentism fails in providing the desert landscapes of orthodox forms of presentism. The number of entities in the former vastly surpasses the latter, putting that theory in a bad position regarding ontological parsimony. However, following Schaffer (2010, p. 313), Baron argues that the number of entities should not be of concern to determine whether a theory is parsimonious or not. What should be taken in consideration is the number of *fundamental* entities. In this respect, priority presentism is, indeed, parsimonious.

2. The Priority of the Past

The notion of grounding is a welcome tool for the contemporary discussion about the metaphysical nature of time, as argued by Baron. In particular, the concept of diachronic grounding seems to capture many intuitions about the hierarchical structure of time. Nevertheless, as will be demonstrated in the remainder of this paper, the grounding direction defended in priority presentism seems to be wrongheaded. It is not surprising that the first objection Baron mentions against priority presentism says that the direction of grounding suggested is wrong. In fact, it seems natural to suppose that the past is more fundamental than present and future. This is exactly the stance to be defended in this paper. For it is not only much more according to natural intuition, but also theoretically far more convincing. The thesis defended here will be called "Priority of the Past". But it should be clear that "past" has no absolute, but only relative reference. Today is future relative to yesterday and past relative to tomorrow. Thus, "Priority of Before" would also be an appropriate label.

First, it is necessary to examine how Baron addresses this objection. According to him, the objection based on the direction of grounding is motivated by a confusion over grounding and causality. In general, it is assumed that past events cause present and future events. Now, Baron stresses that grounding is not a relation of causal dependency. Thus, the direction of causality should not be assumed as being the same as the direction of grounding; only the latter is relevant here.

However, this response certainly misses the point. It is fair to agree with him on the claim that one source for the intuitive motivation for defending the from-the-past-to-the-future direction of grounding may be derived from confusion over the notions of grounding and causality. However, two things can be said here. Firstly, Bolzano (1837, § 210), one of the pioneers of the contemporary notion of grounding, acknowledged that causation always goes together with true grounding statements in such a way that causation always correspond to true grounding claims.[2] Thus, one can insist in the from-the-past-to-future direction of grounding without being confused over both relations. She may argue that causation has this direction just *because* grounding also has. Secondly, and more important, even under the assumption that grounding and causality are different relations Baron's objection does not stand as it is. For to point to a possible confusion in the motivation for assuming the from-the-past-to-the-future direction is not enough to undermine the claim that also grounding moves from the past to the future, just like causality does. From the fact that R and R* are different relations it does not follow that both must have different directions, in particular not when one's intuitions about one emerge from a confusion with the other. And, as a matter of fact, although causality and grounding are different relations, both run from the past to the future—this is, at least, the argument to be presented now.

2.1. Ontological Stability Argument

According to Priority Presentism, the present is more fundamental than the past and the future. Take A, B and C as being respectively past, present and future fundamental entities. So, A existed at T-, B at T^0 and C at T+, where 'T- ', 'T^0' and 'T+' stand respectively to any past, present and future moment. For Baron, B is more fundamental than A and C. The peculiarity (or maybe oddity) of this theory is that as time goes by, the priority is dislocated: A is fundamental at T-, but no longer at T^0 and T+, B is derivative at T-, fundamental at T^0 and again derivative at T+. C is derivative at T- and T^0, and finally fundamental at T+ (but, of course, it will become derivative again at some more future point T++). As a result, priority presentism entails that entities change their fundamentality status along time. Entities are thus ontologically instable. This appears to be a highly implausible desideratum.

As seen before, the version of priority presentism suggested by Baron is unstable

in another implausible sense. Baron does not take a definitive stance about which entities are fundamental$_S$ (particles or fields or whatever). But in some passages (2014, p.8) he claims that mereological atoms at any T could be fundamental$_S$ at T. Therefore, dinosaurs at T- would be grounded$_S$ on atoms at T-. Following this, it would be natural to conclude that, at the present moment T, the fundamental present entities, the present atoms, ground the past atoms, which, on their turn, ground dinosaurs. So present atoms would indirectly ground dinosaurs. But Baron's appeal to tensed properties makes his decision for the alternative solution clear: dinosaurs at T- were synchronically grounded on atoms in T-, but as soon as times goes by, dinosaurs stop being grounded on atoms and start being grounded on the actual instantiation of the tensed property of *having been such that there were dinosaurs* by the world. Thus, it is not only the case that entities change their fundamentality status across the time, also the grounding relations between entities change. One and the same entity (dinosaurs) is grounded on different entities at different times (at T- on atoms, at T^0 on tensed properties). One could suppose this to be an obvious consequence of the first instability: since some entities change their degree of fundamentality across time, the relations between them must change. But this is not true. For the change of the priority status of some entities from fundamental to derivative does not necessarily have to change the grounding relation of derivative entities to their grounds, as the first option with atoms showed. The priority presentist should better assume that dinosaurs were continuously grounded on atoms, which are fundamental at T- but derivative at T^0.

One could argue that a stronger version of Priority of Now would be such that, in considering times in the past simply non-existent, the lucretian property of *the world being such that there were dinosaurs* would directly ground the dinosaurs of the past, avoiding the change of status in the lucretian property of the Jurassic period contemporary of the those animals, since they would vanish from existence with the passage of time, and also avoiding the indirect grounding: all the derivative entities would be, in this version, grounded directly, by this one grand fundamental entity. But there is a fundamental problem with this approach: Priority of Now rely on a version of presentism that consider other times as existent and as real as the present (although not on the same level of fundamentality). This way, the theory avoids some classical problems such as the *truthmaker problem*[3] and the *problem of cross-time relations*,[4] which only emerge in exclusionary forms of presentism. But, if we consider that with the passage of time, former Fundamental$_S$ should just disappear, that should happen also to the dinosaurs and all the past entities. So, what would be the point of having the difference between synchronic and diachronic fundamentals? Choosing such an approach would just completely dismantle the core of the theory, and still leave it with the classical problems faced by traditional versions of presentism.

The Priority of the Past Theory defended here differs radically: entities never

change their degree of fundamentality, nor do their grounding relations. Any given entity E will be less fundamental than prior entities and more fundamental than posterior entities. Taking the previous example: A grounds B, which grounds C, and this will never change.

One could see this as problematic, for presentism is essentially a dynamic conception of time—and it is proud of being it. Different conceptions of time try, by means of different strategies, to account for the dynamic character of the time passage. According to the *Growing Block Theory*, things get into existence and once they get this status, they never lose it. For the *Falling Branch Theory*, many possibilities fall at the line of present into non-Being forever. For *Moving Spotlight* all concrete entities instantiate, first, futurity, and then, for a short lapse of time, instantiate presentness and, finally, instantiate pastness for all the remaining eternity. All presentist conceptions account for the dynamic nature of time attributing some special status to the present. For Priority Presentism, this special status is fundamentality$_D$. According to it, some entities change their status from derivative$_D$, to fundamental$_D$, and then to derivative$_D$ again.

In fact, Baron (2014, p.10) recognizes that someone could consider suspicious the idea that things change their fundamentality across the time. But he argues correctly that any form of presentism must accept a kind of ontological change. Standard presentism defends the ontological change in terms of existence, priority presentism in terms of fundamentality. The important question seems to be, as he notes, the following: which is the more adequate candidate for explaining change: existence or fundamentality (or something else)? Baron closes the discussion remarking that no criterion has been offered, and, therefore, there is no reason for rejecting Priority Presentism.

As noted before, for the Priority of the Past theory, things never change their fundamentality status. The direction of time is conceived as a move in the hierarchy of fundamentality$_D$, from the more to the less fundamental$_D$. This may be considered a weakness, for it makes this kind of presentism very close to eternalism. Of course, whether one considers this is a weakness or strength will depend on how sympathetic one is to eternalism. In fact, that compatibility with eternalism can be seen as an advantage for the Priority of the Past.

However, there is an alternative view, which grants to the Priority of the Past another great advantage. It may be combined with the Growing Block forming an interesting theory according to which entities at a time t are grounded on entities at a time t* before t—but only concerning present and past times. Future entities are neither fundamental nor derivative—they simply do not exist at all. This is a *Grounded Growing Block* conception of time: the movement of the line of the present changes the parameter of existence, but not of fundamentality. New entities get into existence all the time, but they will never change the fundamentality status of the

past.

One could try to develop a Growing Block version of priority presentism, maintaining the thesis of the fundamentality$_D$ of the present, but accepting the existence only of past and present entities. However, this theory appears to be the worst possible one and as such highly uninteresting. It would have as a consequence the mentioned instability of fundamentality and additionally the direction of diachronic grounding would be restricted to the implausible present-to-the-past direction. Now, why is the present-to-the-past direction so bad? This is the topic of the next section.

2.2. Ontological dependence argument

Mary is Peter's mother. If Kripke (1972) is right concerning origin essentialism, Peter could not have another mother than Mary, for Peter is *essentially* Mary's son. This implies that Peter could not have existed without Mary existing, or, in terms of possible worlds: in every world in which Peter exists, Mary exists as well. The same does not hold for the opposite direction: Mary can exist without having any child, in particular not Peter. But the same holds, of course, for Mary in relation to her mother: Mary could not have existed in a world in which her mother did not exist. The same for Mary's mother, and so on.[5]

At this point, one must not confuse *grounding* with *ontological dependence* (see Schnieder 2020). In particular, if A grounds B, this does not entail that B is ontologically dependent on A. The fact that *John is in this room* grounds the fact that *there is someone in this room*, but the second does not depend on the first: there would be someone in this room if Peter instead of John were in here. But ontological dependence is correlated to grounding in an important way: when B ontologically depends on A, A's existence is the condition of the possibility of B. Note that the main interest here is the use of a notion of rigid dependence, as opposed to generic dependence.[6] Therefore, it can be said in this case that the *existence of A* grounds the *possibility of the existence of B* or, more exactly (using facts as relata): the fact that *A exists* grounds the fact that *B is possible*. This kind of reasoning may be generalized and thus fits perfectly well with our natural intuitions about all temporal events. The 20th Anniversary of the Fall of the Berlin Wall was only possible because the Berlin Wall fell, and the Fall of Berlin Wall was only possible because it was, first at all, build in 1961.

These are the general lines, but two qualifications are required. The first qualification is that this grounding relation *may be* (and probably is in most cases) only *partly grounding*. A partly grounds B when A does not determine B by itself, but only with some additional (also partly) grounds. In the previous example: Peter is the son of Mary with Paul, and origin essentialism (allegedly) also holds for the relation between Peter and Paul. Thus, also Paul's existence is a condition of the possibility

of Peter existing. Therefore, the existence of Mary just like the existence of Paul by itself only *partly* grounds the possibility of the existence of Peter, while the existence of both conjointly *fully* grounds it (excluding, for the sake of illustration, any other possible ingredients of Peter's existence).

The second and most important qualification concerns temporality. It is certainly not the case that whenever B ontologically depends on A, A must temporally precede B. Both may be simultaneous. (One could distinguish here synchronic and diachronic ontological dependence.) But it will never be the case that B precedes A. Now, if is true that whenever B ontologically depends on A, A's existence grounds the possibility of B's existence and it is also true that A is prior or simultaneous with B, it follows that any entity can only be the ground of the possibility of the existence of a simultaneous or future entity.

One could object at this point: Priority of the Past talks about future possible entities that may not be actualized. Wittgenstein is the (or: a) condition of the possibility of his son, and as such, he grounds the possibility of his son, who, as far as is known, does not exist. But in this case, is Priority of the Past not violating the factivity of grounding? For grounding is defined as a factive relation: the relata must be existing or true and never merely possible or false. How can a present entity ground something that may not exist? How can Wittgenstein ground his non-existing son?

The answer to this worry is a simple caveat. The formulation must be carefully made. Priority of the Past Theory does *not* claim that Wittgenstein grounds his son (or his existence), but strictly speaking that the fact that Wittgenstein exists grounds the fact that his son can exist (more natural: the fact that Wittgenstein existed grounded the fact that his son could have existed). And this fact—that Wittgenstein's son could have existed—is not merely possible, but actual. Thus, the second *relatum* of the grounding relation is an actual modal fact (or proposition). For it is a fact that Wittgenstein could have had a son. Factivity of grounding is not violated.

But are *modal* facts really facts? In particular, are they appropriate terms for grounding relations? There is no convincing reason for excluding them. Facts may be generally conceived as intrinsic constituents of worlds, in particular, as constituents of our world (and possible states of affaires as constituents of other possible worlds). Modal facts seem to be odd extrinsic constituents: the fact that Wittgenstein could have had a son is a fact of this world, which is made true by another possible world (one in which he does have a son). But, following modal realism, it is possible to claim that it is a property of the actual Wittgenstein to have the property of being possibly a father of a son, or the property of having a counterpart that has a son. Further, one may argue that like any other usual facts, modal facts correspond to true statements and have plausible truthmakers: the fact that it is possible that P is made true by any possible world in which P, and the fact that it is necessary P is made true by all possible worlds (and the fact that they are all worlds). Finally, if someone re-

mains unconvinced that modal facts are genuine facts and so inappropriate terms for grounding relations, there are alternative facts like dispositional facts or facts about the nature of the involved entities: Wittgenstein's nature is such that he could have had a son.

2.3. Grounding the direction of time

There is one last argument for the Priority of the Past. Contrary to Priority Presentism, the Priority of the Past offers as a desideratum a solution to (or, at least, a strategy for dealing with) the problem of the direction of time. There is a huge controversy about how to ground the direction of time (Dainton 2010; Mellor 2009; Callender 1997; Atkins 1986). Take T1, T2, T3, T4, T5... as a particular sequence of moments of time. Why does T5 come after T4, which comes after T3, and so on? Why does the line of present not jump randomly forwards and backwards? Since for Priority Presentism present entities ground future and past entities, the grounding direction runs in the line of time in both directions: to the past and to the future. Therefore, in the moment T3 is present, it grounds T2 and T4 (and others). When T4 is present, it grounds T3 and T5 (and others). And since the direction of grounding runs in both directions, grounding structure offered by Priority Presentism has no relevant correlation to the direction of time. Thus, there is nothing in this theory that could explain why the present line goes straightforward from T2 to T3 and then to T4 and so forth. In fact, this position is compatible with the randomly forwards and backwards jumping time. Priority of the Past offers a solution to this problem. Even accepting eternalism, a very static theory of the notion of time, under the supposition that, for any time T that is before that T*, T is more fundamental than T* generates a strict order which grounds the direction of time. Given T, T* and T**, if T grounds T* and T* grounds T**, we may derive that T is before T* which is before T**. Thus, the direction of time would be grounded in the grounding structure of reality. Of course, Priority Presentism is not intended as a theory for solving the problem of the direction of time. Therefore, it may be unfair to mention this problem as a weakness of the theory. But, if the Priority of the Past offers a plausible strategy for solving this additional problem, this must be seen as a considerable advantage.

3. Teleological objection

The most obvious objection against the priority of the past would be, of course, the demonstration of an inverted grounding relation in reality. But, is there such a case? In fact, some may see Aristotle's notion of *causa finalis* and any related teleological explanation as proposing such an inversion. There is a sense in which the final form

of a statue or the final functionality of an artefact is the ground for the existence of the statue or of the artefact. The sculptor shapes the stone on the ground of the perspective of the final desired form of the statue. Something analogous could be said about the creation of an artefact by an engineer, or even about the creation of the world by God. But as interesting as this way of describing the process of creation may be, as soon as the strict sense of grounding at stake here is understood, these cases may be dismissed as misguided. Grounding is, let us stress one more time, *factive* determination. But there is no future fact about the statue that determines its creation. Take A as an artefact and S as the individual or collective agent who creates A. Three facts follow:

1. S plans the creation of A at T1.
2. S accomplishes the (full) creation of A at T2.
3. A exists at T3.

It seems clear that neither does 1 ground 2, nor does 2 ground 3. Unless one defends a very radical form of determinism (which would trivialize grounding relation), the process of planning and creating S may be interrupted at any time. Thus, no one stage determines the next one. On the other hand, 3 seems to necessitate 2 or 1&2. And this looks like a case of backward grounding. Two things could be said here. Firstly, as unlikely as the image of the artefact A existing without having being created may be, in fact, the existence of A does not ontologically necessitate its creation by S. For, (i) it may have existed without any process of creation (as improbable as this may be), or, alternatively, (and most plausible), (ii) it may have been created by another agent S*. Therefore, fact 3 does not strictly ground fact 2. Secondly, even if it is true that in some very special cases only agent S could have created A (as plausibly is the case of the creation of the world by God), it is clear that in these cases there is a relation of necessitation, which is not grounding. Grounding is explanatory necessitation. Would someone really say that 'God creates the world at T2' *because* 'the world exists at T3', or that God creates the world at T2 *in virtue of* the world existing at T3'? It seems much more likely to accept that God creates the world at T2 *because* He considered at T1 the existence of world desirable and not because A exists at T3. And these are, of course, different facts. Furthermore, in the particular case of God, the purpose of creating the world is usually explained as occurring outside the dimension of time, what makes the application of diachronic grounding pointless. Finally, to say that one of God's acts is grounded in something extrinsic would be in conflict with most well-established theological theories about divine freedom and autonomy.

4. Conclusion

The main concern of this article was to demonstrate that, although the relation of grounding can be extended in time (and we totally adhere Baron's conception of diachronic grounding), the option taken by the priority presentism have to face serious difficulties. So, an alternative is presented: the Priority of the Past.

One of the main problems in Baron's theory is the direction of the grounding. When it comes to the grounding of entities of the past, Baron has to find some present instantiated entity that can provide the grounds to past. But despite the fact that he has a response to this, namely the suggestion that some intuitions about the direction of grounding come from the direction of causation, there are other issues that he may have not taken in consideration. Two of them were highlighted: the ontological stability and the ontological dependency argument. The former concerns the problem that priority presentism entails that entities change their fundamentality status along the time, which is certainly a weakness in the theory. The latter shows how the ontological dependency relation is connected with grounding. They are surely different relations, but ontological dependency is correlated to grounding in an important way: when B ontologically depends on A, A's existence is the condition of the possibility of B. So, a grounding relation could be phrased in this way: the fact that A exists grounds the fact that B is possible. And, if it is not always the case that if B ontologically depends on A, A precedes B, for they can be simultaneous, it is never the case that B precedes A. So, again, the direction of grounding in the priority presentism appears to be wrongheaded.

Later on, one advantage of the priority of the past over Baron's conception was presented: it provides an explanation for the direction of time. The arrow of time points in a direction because earlier times are more fundamental than later times. Finally, one possible objection was discussed: namely, the idea of a teleological explanation that could be a case of grounding where the ground is later than the groundee. But, if grounding is to be considered a form of factive determination, it would be implausible to suppose that something later could be a ground to a previous entity.

So, although Baron opens an important field when he develops the notion of diachronic grounding, it appears that priority of the past would be a much more viable option to connect grounding and time. This theory needs, of course, more developments, but it has promising resources and should be taken into consideration.

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Notes

[1]See Correia 2010 and Raven 2013.
[2]See more on this in Correia & Schnieder (2012, p.9) and Schnieder (2014).
[3]See Tallant 2009.
[4]See Crisp 2005.
[5]It is clear that some problems arise if one puts in the same place origin essentialism as Kripke formulates (which relies on modal notions) and any form of grounding determination of origin. Although they seem to be somehow related, it doesn't mean that the latter follows from the former.
[6]For further discussion, see Correia 2008.

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