



Existential inertia and the Aristotelian proof

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Received: 7 January 2020 / Accepted: 26 August 2020
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Abstract

Edward Feser defends the ‘Aristotelian proof’ for the existence of God, which reasons that the only adequate explanation of the existence of change is in terms of an unchangeable, purely actual being. His argument, however, relies on the falsity of the Existential Inertia Thesis (EIT), according to which concrete objects tend to persist in existence without requiring an existential sustaining cause. In this article, I first characterize the dialectical context of Feser’s Aristotelian proof, paying special attention to EIT and its rival thesis—the Existential Expiration Thesis. Next, I provide a more precise characterization of EIT, after which I outline two metaphysical accounts of existential inertia. I then develop new lines of reasoning in favor of EIT that appeal to the theoretical virtues of explanatory power and simplicity. Finally, I address the predominant criticisms of EIT in the literature.

Keywords Existential inertia · God · Aristotelian proof · Sustaining causation

Introduction

Edward Feser (2017) argues for the God of classical theism as follows. Nothing can be reduced from potency to act except by some causal actualizer in a state of actuality. But any substance that is a composite of act and potency is, at any moment at which it exists, reducing from potentially existent to actually existent and hence requires a concurrent sustaining actualizer of its existence. This hierarchical or per se chain of sustaining actualizers cannot be infinite, in which case it must terminate in a purely actual, unactualized actualizer (i.e. God).

Premise seven of Feser’s argument is that the “existence of S at any given moment itself presupposes the concurrent actualization of S’s potential for existence,” where S is some substance that is an admixture of potency and act (Feser 2017, p. 35). This premise amounts to a rejection of the Existential Inertia Thesis, according to which

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concrete objects tend to persist in existence (once in existence) without requiring a sustaining cause.¹

Despite its relevance to some of the most rigorous arguments for God's existence,² there has been surprisingly little discussion of existential inertia in metaphysics and philosophy of religion.³ This paper is meant to fill this lacuna and inspire greater discussion of the issue.

Before characterizing existential inertia in greater detail, it is worth considering the dialectical context in which it arises. The first thing to emphasize is that there are at least two competing theses in debates concerning persistence and divine causal sustenance:

Preliminary Existential Inertia Thesis (P-EIT): Necessarily, temporal objects will continue to exist in the absence of causally destructive factors.

Existential Expiration Thesis (EET): Necessarily, temporal objects will cease to exist (by means of instantaneous annihilation) in the absence of causally sustaining factors.

To fully capture the relevance of these to the dialectical context, a few notes are in order. First, because existential inertia and existential expiration are (or would be) such broad, foundational metaphysical features of reality, it seems that they would *necessarily* obtain if they obtain at all—they wouldn't just *happen* to obtain in this world (hence the necessity operators).

A second reason for the inclusion of necessity operators is that the success of Feser's argument presupposes that temporal objects (and, more broadly, act-potency composite objects) *of necessity* require sustaining causes of their existence (lest they be instantaneously annihilated). For suppose that there genuinely could be act-potency composite objects that exist of their own accord without requiring a sustaining cause of their existence (call objects of this type *unsustained composites*). If that is true, then the inference from the finitude of per se causal chains to a purely actual being is undermined. It is precisely because any act-potency composite would require a sustaining cause that the *first, unsustained member* of any such per se chain would have to be purely actual. By contrast, if unsustained composites are genuinely possible, then the terminus of a per se chain of sustaining causation of other act-potency composites need not be a purely actual being but could instead be an

¹ Roughly, x is a sustaining cause of y's existence provided that (i) y's existence causally depends on x's causal activity at any moment at which y exists, and (ii) x's moment-by-moment causal activity is a *necessary condition* for y's moment-by-moment existence.

² The arguments to which I refer include (but are not limited to) four of the five proofs explored in Feser (2017), wherein Feser concludes to a purely actual, absolutely simple being whose essence and existence are identical by arguing that each of the following require sustaining causes of their existence: (i) changeable beings; (ii) composite beings; (iii) beings with essence-existence distinctions; and (iv) contingent beings.

³ The only explicit treatments of which I'm aware are Beaudoin (2007), Feser (2011), and Audi (2019). But see Kvanvig and McCann (1988) for treatments of related topics such as divine creation, conservation, and explanations of persistence. See also Oppy (2019) wherein existential inertia is (briefly) leveled against the Aristotelian proof.

unsustained composite. It follows, then, that Feser's argument requires the necessity operator within EET.⁴

With the aforementioned notes out of the way, we can return to the first point of emphasis concerning the dialectical context. Consider again P-EIT and EET. In particular, notice that they exactly parallel one another. Their ontological commitments are exactly parallel (each committed to a particular kind of tendency within temporal objects), and their modal status (due to the necessity operator) is identical.⁵ But given that the two theses exactly parallel one another, the appropriate epistemic stance towards them a priori is agnosticism. Absent further considerations, to favor one over the other would amount to metaphysical prejudice. This is important because it shows that the default epistemic stance is *not* acceptance of Feser's premise seven. Rather, the default stance is agnosticism.

Let's turn now to the second point of emphasis concerning the dialectical context. In particular, P-EIT and EET reveal that Feser's premise seven is *not* adequately justified solely by rejecting P-EIT. For the denial of P-EIT simply amounts to its *not being necessary* that temporal objects persist without causal sustenance. But this neither means nor entails EET. All it means is that it is *possibly false* that temporal objects persist of their own accord—and this doesn't entail that things *of necessity* will be instantly annihilated in the absence of existential causal sustenance.

The final point of emphasis regarding the dialectical context is that Feser is leveling a *positive argument* for God's existence—an argument one of whose premises presupposes the falsity of P-EIT and the truth of EET. Because his argument presupposes the falsity of P-EIT, if one can show that such a presupposition is not adequately justified, this will sufficiently undercut the argument. It follows, then, that if there aren't good reasons to deny P-EIT (to which we turn later) and affirm EET, Feser's Aristotelian proof will be unsuccessful. And this is so even if the considerations favoring P-EIT fail.

Characterization

As I characterize it, EIT is:

Existential Inertia Thesis (EIT): Necessarily, concrete objects (i) persist in existence (once in existence) without requiring a continuously concurrent sustaining cause of their existence and (ii) cease to exist only if caused to do so.⁶

⁴ Feser, who accepts DDC, concurs: "The Doctrine of Divine Conservation (DDC) holds that the things that God has created *could not* continue in existence for an instant if He were not actively preserving them in being" (emphasis added) (Feser 2011, p. 237).

⁵ Indeed, the tendencies are simply opposites. For P-EIT, it is to continue to exist; for EET, it is to cease to exist.

⁶ An alternative formulation quantifies not over concrete objects *simpliciter* but instead on a subset of them—the fundamental, underlying physical stuff of the material world (whatever its intrinsic nature). Under this formulation, the inertialist holds that there is *something* possessing existential inertia out of which the composite physical objects of the world are constructed.

In simpler terms, concrete objects must (once in existence) continue to exist of their own accord, and they cease to exist only when causally destroyed.

It is necessary to alleviate some immediate, potential counter-examples to EIT. Consider first a violinist's musical sounds. If the violinist stops playing, presumably the musical sounds stop existing as well.

This, however, is not a counter-example. First, arguably this case is a *process* of playing music and hence is not a concrete object. Second, the removal of the violinist does *not* cause the sound to cease, since the mechanical sound waves continue to exist as compressions and rarefactions of air molecules that can be heard after the violinist ceases to exist.

At best, this is a case of a *continually perpetuating*, rather than *sustaining*, cause—a cause such that its instantaneous removal (i) does *not* necessitate the instantaneous removal of the effect, but (ii) contributes to the removal of the effect after a (sometimes short) duration of time.

Another purported counter-example to consider is the laboratory-synthesized heavy elements that exist for a very short amount of time. The first response to this proposal is that their cessation of existence is not the robust kind required by EET, since the heavy elements do not, along with their parts, instantaneously *annihilate*. Second, we have no reason to think these have sustaining causes of their existence as opposed to generating causes that are (also) continually perpetuating. Third, the facts concerning the cessation of existence of such elements are fully consistent with EIT. This is because such quick cessations of existence are not utterly inexplicable (for that would destroy the possibility of their scientific study). Rather, they are *caused* to cease to exist, either by their intrinsic nature/character or by environmental conditions uncondusive to their perpetuation. But that means such elements are not counter-examples to EIT, since they could easily be such that they persist of their own accord for that short span of time and are interrupted in such persistence by sufficiently destructive internal or external causal factors.

Even though we have a more precise characterization of EIT resistant to immediate counter-examples, we still have the question: in virtue of what does EIT obtain (if it obtains at all)? It is to this question that I turn next.

Metaphysical accounts

Before considering two metaphysical accounts of EIT, it will be useful to examine Beaudoin's account. For Beaudoin, the world's continuance is explainable not in terms of causal factors but "by reference to the facts (i) that the only power capable of annihilating the world's fundamental material has so far gone unexercised, and (ii) that this material has no inherent tendency to just spontaneously disappear..." (Beaudoin 2007, p. 88).

As it stands, however, this account is incomplete. Recall from section one that the mere fact that objects lack a tendency to persist neither means nor entails they they possess a tendency to expire. By parity of reasoning, Beaudoin's second condition is insufficient; merely lacking a tendency to expire neither means nor entails having a tendency to persist. The problem lies in the distinction between *not having a*

tendency to expire versus *having a tendency not to expire* (i.e. having a tendency to persist). The former neither means nor entails the latter, just as *not being aware of x* neither means nor entails *being aware of ~x*. For all Beaudoin's second condition specifies, the material of which he speaks simply lacks a tendency *either way*—neither a tendency to persist nor a tendency to expire.⁷

Beaudoin's account, then, is inadequate. Instead of characterizing it in negative terms, we need positive characterizations of EIT. It is to such characterizations that I turn next.⁸

First account

The first account is:

- (1) For concrete object *O* and times t_{-1} and t (where t_{-1} is immediately temporally prior⁹ to t), the existence of *O-at-t* is explained¹⁰ by the conjunction of (i) the state and existence of *O-at- t_{-1}* and (ii) the absence of any sufficiently causally destructive factors acting on *O-at- t_{-1}* and through t .

One may worry that (1) falls prey to a sort of vicious circularity. For how could the immediately temporally prior state and existence of *O* explain the present existence of *O* if *O* itself had no ability to persist through time from the prior state to the present state? After all, if *O* had no such ability to persist from the prior state to the present state, then clearly *O-at- t_{-1}* won't be able to explain *O-at-t*. But that means that (1) cannot *explain* persistence through time since it *presupposes* such persistence. In short, (1) cannot *explain* *O*'s persistence from t_{-1} to t , since the account needs to *presuppose* *O*'s persistence from t_{-1} to t in order to allow *O-at- t_{-1}* to explain *O-at-t*.

A number of things can be said in response. First, this criticism, if correct, applies to any account of persistence. For if *O* genuinely *couldn't* persist from t_{-1} to t , then clearly God couldn't *bring it about* that *O* persists from t_{-1} to t , and hence any explanation of *O*'s ability to persist from t_{-1} to t in terms of God's causal activity will itself *presuppose* that *O* could persist from t_{-1} to t . The theist may respond that *O by itself* lacks such an ability, and that *God* could provide the ability. There are, however, two problems with this. First, it just pushes the problem back a step, since now the account merely *presupposes* that God is able

⁷ Beaudoin does not specify how his first condition—in conjunction with neither a tendency to persist nor a tendency to expire—could account for the world's continuance. Absent a tendency to persist, (for all Beaudoin's account shows) things could instantaneously annihilate without there being an annihilating power exercised such as that specified in (i).

⁸ I leave open (for conservatism) which of the accounts is correct.

⁹ If time is continuous, consider the temporal state immediately prior to t as some suitably small finite interval of time with t as its later-than bound.

¹⁰ Two notes. First, the phrase '*O-at-t*' is non-committal about its being (i) an enduring object wholly present at t versus (ii) a temporal stage of a four-dimensional object. Second, the account remains neutral on the type of explanation at play. Depending on one's other metaphysical commitments, it could be causation, grounding, counterfactual dependence, or a host of other forms of explanation.

to bring it about that O persists from t_{-1} to t rather than explaining this ability. Second, if such a response is legitimate, it can equally be applied to (1): although O-at- t_{-1} *by itself* is not sufficient for securing O's persistence to t , it is nevertheless sufficient in conjunction with the further fact of there being no sufficiently causally destructive factors present.

Moreover, (1) is not meant (by itself) to be an explanation of persistence *simpliciter* but is instead meant to explain O's existence at t . Because it explains (or seeks to explain) O-at- t instead of O's persistence, allegations of presupposing the prior possibility or actuality of persistence are misguided. An explanation of O's persistence *simpliciter* arises with the conjunction of all the applications of the explanatory schema outlined in (1) to every t at which O exists (except for whichever t^* is such that O begins to exist at t^*). Of course, this explanation of persistence *simpliciter* still leaves open the question of why O exists in the first place. It only purports to answer why, once brought into existence, O persists without requiring a concurrent sustaining actualizer of its existence.

We also have to distinguish between presupposing the prior *possibility* of the *explanandum* as opposed to presupposing the prior *actuality* of the *explanandum*. Any proposed explanation of x must presuppose x is possible in the first place—after all, if x is genuinely impossible, explanations of why x is the case cannot succeed. And while (1) presupposes that O *can* persist, it doesn't presuppose that O in fact *does* or *must* persist. All it states is that the following two conditions are explanatorily sufficient for securing O's existence at t : (i) the state (including the operation) and existence of O-at- t_{-1} , and (ii) there being no sufficiently causally destructive forces present. Although it presupposes the prior *possibility* of O's persistence from t_{-1} to t , it provides a *mechanism* by which such a possibility can obtain in reality.

Finally, it is simply false that part of the *explanans* in (1) is that O persists from t_{-1} to t . The *explanans* is solely the conjunction of (i) and (ii) as mentioned above, neither of which presuppose the prior reality of O's persisting from t_{-1} to t .

Having responded on (1)'s behalf to the charge of vicious circularity, I will turn next to the most important objection to (1). Adequately examining this objection, however, will require a sub-section in its own right.

Past explanations

If presentism is true, only present things exist, and surely only things that exist can have explanatory efficacy. Hence, O's existence at t cannot be explained by the past state and existence of O, since such a state simply doesn't exist.

In response, it is worth noting first that the objection remains conditional: if presentism is true, then the account fails. The antecedent requires justification. Second, presentists are in general content with past states explaining present states. After all, it's quite difficult to reconcile our ordinary, common sense explanatory practices—as well as our standard scientific practices—with a view according to which past states have no explanatory force whatsoever. In general, although under presentism past states don't exist, they *used* to exist—and that suffices in many philosophers' eyes for legitimizing their explanatory efficacy.

Because it forms the explanatory bedrock of (1), it is worth dwelling further on the explanatory efficacy of past states. In particular, I will offer five arguments for the legitimacy of earlier states' explaining (causally or otherwise¹¹) later states.

First, it seems there is a presumption in favor of the common sense position that earlier states can and do have causal and/or explanatory influence on later states. This shifts the onus of justification to those who restrict any and all causes and explanations to presently existing ones. If such a restriction is insufficiently motivated, we have reason to favor common sense.

The primary motivation for this restriction is that C, the causal relation, is an existence-entailing relation. When x stands in C to y, the relata must exist. Combining this with presentism entails that only present things stand in causal relations.

This argument, though, founders on an ambiguity concerning the term 'existence'. For why would we need to hold that C is an existence-entailing relation in the sense of existence *simpliciter* rather than an existence-entailing relation in the sense of existence *at some time or other* (past or present)?

As Feser points out,

Both sides would agree that there is a *sense* in which the relations in question entail existence. For example, both sides would agree that unicorns cannot cause anything, because they don't exist and never did. But the presentist would say that some relations (such as *a is earlier than b*, and *a causes b*) require only that the relata *did* exist at some time, whereas the critic of presentism insists that the relations require something else (Feser 2019).

But if the requirement is that one of the relata exist at t whereas the other exist at t*, where t* < t, but where both t* and t are equally real, then this is flatly question-begging against the presentist who accepts transtemporal causal connections. And if the requirement is existence *simpliciter*, then this "is simply not one that the presentist would accept in the first place," for to insist "that relations within the temporal realm must involve things that exist simpliciter (as opposed to existing *now* or being the sort of thing that *used to* exist) is simply to beg the question against presentism" (Feser 2019).

With these insights in mind, the presentist can coherently hold both (i) that past events and objects serve as causes and explanations, and (ii) the causal relation is existence-entailing in the sense of existence *at some time or other* (past or present). The argument from common sense, then, survives this philosophical attack unscathed.

Second, presuming we have some causal, perceptual contact with the external world, past states' explanatory efficacy seems to follow straightforwardly from the facts that (i) our perceptual experiences are explained by the extramental objects themselves (even if our contact with them is indirectly mediated), and (ii) the photons that mediate our sight take time to travel from extramental objects to our retinas. Together these entail that, although our *experience* of an object temporally lags

¹¹ While some of the following arguments solely reference causation, they are aimed more broadly at explanations *simpliciter*. Again, (1) is cast solely in terms of explanation.

behind the object itself, the object itself nevertheless *explains* our experience. And this, in turn, entails that earlier states explain later states.

Third, consider that, for any discursive chain of reasoning (i.e. reasoning premise-by-premise to a conclusion), there not only needs to be a rational or justificatory link between our thoughts of the premises and our acceptance of the conclusion, but there also needs to be a *causal relation* between them. In other words, not only does the consideration of the premises need to be the *reason* or *justification* for our accepting the conclusion; it also needs to *cause* our acceptance of the conclusion. Absent the former condition, we merely come to the conclusion mechanically like a computer—without any understanding or justification. Absent the latter condition, our belief in the conclusion is not relevantly connected to the justification for the premises so as to generate knowledge. In such a scenario, our acceptance of the conclusion either springs into being uncaused or else is caused by factors extrinsic and accidental to the rational grounds for the conclusion in question (such as a scientist arbitrarily stimulating a pattern of neurons).

It seems, then, that a necessary condition for knowledge gained by discursive reasoning is the causal efficacy of past mental states, since there needs to be both a *rational-justificatory link* and *causal link* between our consideration of the premises and our acceptance of the conclusion. Moreover, the mental states involved in considering premises are *temporally prior* to the mental state involved in accepting the conclusion, as our discursive reasoning processes are extended through time.¹²

Fourth, it seems that if the states and existence of an object at different times are causally and explanatorily disconnected, diachronic identity collapses. Consider the instantaneous annihilation and replacement of a tree with a qualitatively identical copy. In this case, there is spatiotemporal continuity, sameness of essence (*tree-ness*), and so on—yet, intuitively, the tree didn't survive the change. Here is a necessary condition of diachronic identity that accounts for this intuition: there must be relevant transtemporal causal or explanatory connections among the states and existence of the object.

Fifth, it seems that attributions of moral responsibility presuppose that past things explain present things. It seems plausible, for instance, that an agent's past intentions and means (moral object) explain present moral blame or praise.

Given the above arguments, it seems clear that past things can and do legitimately explain the existence of present things. The significance of this result is paramount. For if it is true, there seems to be no principled, non-question-begging way to deny (1) as an adequate explanatory account of the persistence of objects in existence. And if that is the case, EIT constitutes a forceful objection to Feser's Aristotelian proof.

¹² Perhaps one way to avoid this conclusion is to hold that our grasping of the connection between premises and conclusion is not extended through time but is rather done in a single, all-encompassing mental act. I would aver, however, that this contravenes not only my phenomenological evidence of discursive reasoning but also the evidence of the correlation between temporally extended brain states and discursive reasoning processes.

One last thing before we transition to the second account. Feser may respond to all the aforementioned arguments as follows. Although past things can cause/explain present things, this is only the case for accidentally ordered causal series.¹³ However, a causal chain involving the very existence of concrete objects would constitute a hierarchical or per se chain of causes and therefore could not be adequately explained by citing past factors.

This response, however, begs the question. For whether the existence of concrete objects constitutes a per se series *depends* on whether they wholly derive their (present) existence from a continuously concurrent sustaining cause. But that is the *very question at issue* in (1). This first account can rightly be interpreted as the very denial that explanations of existence constitute a per se chain, precisely because the account explains O-at-t by O-at-t₁ instead of explaining O-at-t by a concurrent sustaining cause from which O-at-t derives existence.

Second account

Let's turn to a second account:

(2) Existential inertia is a basic, primitive, foundational feature of reality.

A number of notes are in order. First, primitive features of reality are neither analyzable into nor obtain in virtue of more fundamental/basic facts. One may object: doesn't that mean it lacks any explanation altogether?

In response, note first that even if it lacks explanation, that would not by itself invalidate an explanation of persistence in terms of EIT. As Beaudoin points out, "[I]t is not a condition on legitimate explanation that a deeper explanation for every statement in the *explanans* always be ready to hand, or even that it exist at all" (Beaudoin 2007, p. 89).

Note second that merely from the fact that something does not obtain in virtue of any deeper facts, it doesn't follow that it is utterly devoid of explanation, since (plausibly) some things are explained in virtue of the metaphysical necessity of their obtaining.

Recall that I characterized existential inertia as a necessary feature of any reality. Any objection along the lines of (2)'s lacking an explanation, then, must assume that (i) necessary facts require explanations, and (ii) existential inertia is not (adequately) explained by the very fact of its own necessity.

There are a number of principled reasons for holding that the first assumption is suspect. First, necessary things don't seem to call out for explanations the way contingent things do. Contingent things, precisely because they genuinely could have

¹³ An accidentally ordered (*per accidens*) series is contrasted with an essentially ordered (or per se) series. In a per se series, each member wholly derives—right now—the relevant causal power from prior members of the series. In a *per accidens* series, by contrast, each member is such that it can exhibit the relevant causal power independently of prior members. Per se series only exist insofar as the relevant causal power is continuously and concurrently conjoined to the members with derivative power.

been on either side of the dichotomy between existence and non-existence, demand an account as to why they fall on one side of the dichotomy as opposed to the other. Necessarily existent things, by contrast, couldn't possibly fall on the non-existence side of the dichotomy. Second, as Pruss (2006) points out, we simply don't possess an adequate understanding of the nature of explanations of necessary facts, propositions, and so on.¹⁴

This brings us to assumption (ii). In particular, if we allow that some necessary truths are (or can be) self-explanatory (e.g. mathematical ones), then we open the door to other necessary facts and truths being self-explanatory. We might think that x 's being necessary is itself an explanation for why x exists (is true, obtains, etc.). But if this is true, then we have an undercutting defeater for (ii): existential inertia may, after all, be explained by the very impossibility of its failure to obtain.

As a third note in response, arguably a primitive element in the ultimate explanatory terminus of persistence is unavoidable. Consider the following dialogue:

Smith: Why does God persist in existence?¹⁵

Jones: Because God is purely actual.

Smith: But what feature of reality makes it be the case that God is purely actual? What explains that?

Jones: It is metaphysically necessary that this is the case.

Smith: But why is it metaphysically necessary?

Jones: Well, *it just is*.

As the above dialogue suggests, ultimately we seem to hit a primitive metaphysical necessity under any account, including divine sustenance, with respect to persistence in existence. If that is the case, it seems that the least arbitrary stopping point for the regress of explanations of persistence is the first step: simply hold that persistence in existence (i.e. existential inertia) is a primitive necessity.

Indeed, here is a path that might make EIT *more plausibly* primitive than Feser's theistic account. Before considering it, though, we need to precisely characterize Feser's account:

Theistic Sustenance Thesis (TST): Necessarily, (i) EET is true, and (ii) a necessary condition for temporal objects to avoid existential expiration at t is God's causal sustenance *ex nihilo*.

¹⁴ One illustration of this derives from (necessary) mathematical propositions. There are, for instance, different logically equivalent axiomatizations for mathematical theories, so there is no uncontroversial and non-arbitrary way to determine which mathematical propositions are more basic so as to ground or explain less basic propositions. Second, there are unprovable mathematical truths, in which case it is unclear what their explanation could be.

¹⁵ One might think talk of God's persistence is inappropriate if God is timeless. If so, the argument is unaffected since the following will remain true: (i) the ultimate explanatory terminus of persistence on the divine sustenance account is God, and (ii) God will nevertheless have primitive existence (if not primitive persistence).

With TST characterized, here is a reason to think EIT is more plausibly primitive than TST. It stems from the following principle: *do not multiply primitives beyond necessity*. It seems that TST requires at least two primitive metaphysical necessities in accounting for persistence, whereas EIT only requires one.

To see this, consider that if EIT is primitive, then it is plausible that EET is primitive as well (since the two theses exactly parallel one another). If there is some feature of reality in virtue of which a tendency to expire could obtain, it seems that there is nothing in principle incoherent about a similar feature of reality grounding the obtainment of a tendency to persist.¹⁶

But if this is true, then TST introduces *two* primitive necessities in accounting for the persistence of concrete objects: God's persistence (as the Smith/Jones dialogue illustrates) and EET. By contrast, EIT only introduces a single primitive necessity. Parsimony therefore favors EIT.

Now, one might think God could explain why EET is true by creating things with the tendency to expire. This, however, does not make EET non-primitive.¹⁷ For it fails to specify what, precisely, in virtue of which things have the tendency (merely stating God creates them with the tendency is a *descriptive* rather than *explanatory* account of the tendency).

Overall, then, the charge of lacking an explanation is misguided.¹⁸

Importantly, I do not affirm that these accounts are exhaustive. How one conceives EIT ultimately depends on deeper metaphysical commitments. These two accounts, however, suffice for present purposes.¹⁹

¹⁶ Of course, EIT and EET couldn't *both* obtain—the point is that a proposed grounding for EET seemingly could equally well be a proposed grounding for EIT (e.g. if natures ground the expiration tendency, it seems natures could equally well ground the persistence tendency).

¹⁷ Even if it did, it would seem to introduce other primitives as well. For instance, it will simply be a primitive or basic necessary truth that God's willing *x* brings *x* about (e.g. God's willing objects to have a tendency to expire brings it about that objects have such a tendency). Likely, TST also introduces brute contrastive facts concerning God's freely willed actions (why did God choose to sustain *x* rather than *y*, or sustain *x* for duration *d* rather than duration *d**?).

¹⁸ Here is another reason supporting (2). Arguably, existence itself is a basic, primitive feature of reality. After all, any explanation of why there are existing things could only be in terms of an existing thing, in which case it presupposes the prior reality of the very thing to be explained. And while existence's being primitive does not by itself entail that *persistence* in existence is primitive, intuitively it gives us at least *some* reason to expect it.

¹⁹ Here is a suggestion for a third account: adopt Feser's attempts at reconciliation (Feser (2013)) between the Aristotelian act-potency causal principle and mechanical inertia. Feser writes:

[W]e could take seriously the idea that inertial motion is a state, involving no real change and thus no actualization of potency. In this case, the question of how the principle of motion and the principle of inertia relate to one another does not even arise... (Feser 2013, pp. 250–251).

Similarly, we can hold that *persistence* is not itself a change but rather the absence of change—and hence the Aristotelian principle Feser employs to justify the requirement of sustaining causes is inapplicable. More can be said, but this suffices for a footnote.

Theoretical virtues

EIT enjoys a number of theoretical virtues. Before considering the first virtue of EIT, however, let's consider the following question: why does anything exist at all? Why isn't reality just blank? Here is a simple answer: something exists rather than nothing because it is *metaphysically necessary* that something exists. This answer nicely explains why there is something rather than nothing: it is simply metaphysically impossible for there to be nothing.

A similar question arises with respect to concrete objects' persistence. Why do objects, once in existence, persist in existence instead of being instantly annihilated or annihilated at random, arbitrary points during their existence? EIT provides a simple answer: objects persist rather than succumb to instant or random annihilation because it is metaphysically necessary that they do so (absent causally destructive factors). This answer, analogous to the one concerning existence *simpliciter*, nicely explains why objects persist rather than chaotically being annihilated: the latter is simply metaphysically impossible. We can see, then, that EIT provides a nice explanation for the data of persistence.

EIT also explains why, in our experience, we only see objects cease to exist when some causal factor impinges on them in a destructive way. This is precisely what EIT predicts: objects must continually persist in existence and can only cease to exist when some causal factor destroys them. On the other hand, if it is genuinely possible that objects be instantly (or randomly) annihilated, then we have a puzzle: why does nothing in reality behave this way? Why don't such chaotic ceasings-to-exist pervade reality?

What's more, EIT best explains why we don't observe sustaining causes in the world around us.²⁰ Consider your present existence. Do you have a sustaining efficient cause?

You may think God is just such a thing. In response, (i) this causal dependence is certainly not manifest or evident to the senses (i.e. it is compatible with my claim that we don't observe sustaining causes), and (ii) this causal dependence claim is question-begging in the dialectical context wherein God's causal sustenance is the very question at issue.

But perhaps you think oxygen, heat, air, and so on are present sustaining causes of your existence, or that the fact that this computer is three feet above ground is presently causally dependent on the table. "But," notes J.H. Sobel,

I am dependent on these things only eventually for my future existence... Take away oxygen and I am dead, not now, however, but only shortly. Take away heat from my environment, plunge it to absolute zero, and I am gone more

²⁰ Objection: This would only be true if TST predicts the observability of sustaining causes. Response: First, all it requires is that, under TST, the probability of observing sustaining causes is not low. So, if (say) there is no reason to expect—either way—whether sustaining causes would be observable under TST, then the conditional expectation of their observability would be 0.5, whereas it is much lower for EIT. This alone would provide evidential confirmation of EIT vis-à-vis TST. Second, Feser explicitly attempts to identify observable cases of sustaining causal actualizers.

quickly, but again not immediately. Take away the sun, and the heat, most of it hereabouts continues for eight minutes or so, so the sun is no part of its efficient sustaining cause. Oxygen and the like are at best not sustaining, but *perpetuating*, and so not necessarily *concurrent* efficient causes of people (Sobel 2003, p. 177).

If oxygen, heat, and so on were sustaining causes of my existence, then I would instantly die in their absence. But upon removing oxygen, heat, and so on, I do not die instantly but only after a short period of time. Therefore, oxygen, heat, and so on are not sustaining causes of my existence.

In fact, even if oxygen *were* such a sustaining cause, it's very unclear whether there is anything distinct from oxygen that causally sustains its being. Hence, even if we *could* pinpoint a few examples of sustaining causes of existence, they are rare—which, again, is precisely what we would expect under EIT. Finally, the causal activity of the table is nothing to the very *existence* of my laptop. The table does not sustain my laptop as an efficient cause of its very being. This example, then, also fails.

Feser himself attempts to provide examples of existential sustaining causation:

The potential of the coffee to exist here and now is actualized, in part, by the existence of the water, which in turn exists only because a certain potential of the atoms is being actualized, where these atoms themselves exist only because a certain potential of the subatomic particles is being actualized (Feser 2017, pp. 26–27).

Notice here that Feser is citing *parts* of the coffee as sustaining causes of the coffee's existence: water is *part* of the coffee, the atoms are *parts* of water, the subatomic particles are *parts* of the atoms, and so on. Because of this, however, these examples fail. There are two reasons for this.

First, it is plausible that *parts* of substances are only intelligible with reference to the *substances* they compose. Thus, the identities of the parts are determinate and intelligible only in light of the identity of the whole substance. Their existence *qua* the things they are, then, presupposes the (ontologically) prior existence of the substance and hence cannot causally explain its existence. Indeed, arguably a *part* of a substance efficiently causing the existence of the substance amounts to self-causation, since if *x* causes *y* to exist, *x* causes the parts of *y* to exist *qua parts of y*. Hence, if a part causes its substance to exist, then it causes *itself* to exist *qua part* of the substance, which is absurd.

Second, Feser actually agrees that *parts* of substances do not exist actually (and hence only exist potentially): “the hydrogen and oxygen are in the water only *virtually* rather than *actually*. This is evident from the way water behaves... Something similar can be said of the other chemical elements, and of quarks and other particles present in inorganic and organic substances” (Feser 2014, p. 197). Indeed, Feser reasons, such parts cannot be present in actuality since their essential properties are not present when they are part of the substance. But since (per one of Feser's premises) only actual things can actualize something's potential for existence, it follows that the parts Feser adduces cannot causally actualize the existence of the substances they compose.

Overall, then, we lack any good experiential reason to affirm the existence of sustaining causes of existence—precisely what we would expect if EIT were true.

EIT also makes good sense of our ordinary, everyday explanatory reasoning as well as our scientific reasoning. Why did the banana remain on the table (and in existence) from yesterday to today? Because (i) it was on the table yesterday, (ii) no one moved it off the table, and (iii) nothing came along to destroy it. This seems like a perfectly adequate explanation, and it has as a (tacit) component that the banana persists in existence so long as nothing destroys it. We rarely cite (or even see any need of citing) sustaining causes of existence to explain why objects persist. EIT makes the best sense of such explanatory practices. For if objects genuinely would utterly annihilate absent existential causal sustenance, any adequate explanation must take into account such causal sustenance—and the fact that we *seem* to provide adequate explanations without adducing existential causal sustenance is defeasible evidence that we *do*, in fact, provide such adequate explanations and hence is defeasible evidence in favor of EIT vis-à-vis EET and TST.

Furthermore, EIT enjoys both quantitative and qualitative simplicity. This is because it not only posits less entities but also less *kinds* of entities (namely, it postulates neither the kind *sustaining cause of existence* nor a qualitatively different kind of entity (God) existentially sustaining things).

EIT, therefore, explains and unifies a whole host of disparate phenomena: (i) why objects persist, (ii) why objects cease to exist only when causally destroyed, (iii) the dearth of observational evidence of sustaining causes, and (iv) the legitimacy of ordinary and scientific explanation. It also enjoys both quantitative and qualitative simplicity.

Diachronic identity

Here is yet another virtue of EIT vis-à-vis TST: it better accounts for diachronic identity. Indeed, it is unclear that TST can even account for diachronic identity in the first place.

Consider Edvard Munch's pastel painting *The Scream* (call this particular painting 'S'). Suppose there exists a machine, M, that can instantaneously produce an exact (qualitatively identical) duplicate of any painting. Suppose that M instantaneously produces an exact duplicate S* of S at t while S exists at t. It seems evident that S* and S are distinct (i.e. not numerically identical). But suppose there exists a machine, M*, that can instantaneously annihilate any painting in existence, and suppose M* had instantaneously annihilated S at t while M still produced S*. Suppose further there is a third machine, M**, that can coordinate M and M* so as to ensure that S* is wholly spatiotemporally continuous with S. Suppose that M** had performed such an operation. In such a scenario, is S* numerically identical with S?

It seems evident that it is not. Even though the change would be wholly indistinguishable by observers, it seems evident that S did not persist *qua* S* but rather was *replaced* with S*. How could the mere addition of M* and M** (and their activity) make a difference with respect to the identity conditions of S*? Moreover, spatiotemporal location is an extrinsic feature of things, and it is unclear

how such an accidental and extrinsic feature could ground the intrinsic nature and identity conditions of S^* and S . Identity, moreover, is necessary (and so couldn't hold in some worlds—like ones where M^* and M^{**} malfunction—but not others). It seems, then, that S did not persist.

But now consider Feser's TST as an account of persistence. *Prima facie*, Feser's account is almost identical to the scenario involving M^{**} . On Feser's account, God does not act *on* a previously existent concrete object to conserve it in existence, preserving its original constituents. Instead, God *wholly reconstitutes* concrete objects from utter non-being at each and every moment. For Feser, at each moment non-God concrete objects transition from potency to act with respect to their very *existence*, and at each moment God is the ultimate actualizer of such transitions. Indeed, the case of God's causal sustenance may even threaten persistence in a deeper way than the M^{**} scenario. For at least in the M^{**} scenario, M presumably utilizes previously existent pastels, canvasses, and so on. In the case of divine causal sustenance, by contrast, God does not act on or utilize any previously existent concrete objects in his creative actualization. He actualizes each object completely *ex nihilo* at any moment at which the object exists.

The heart of the issue is adequately accounting for the distinction between instantaneous replacement and genuine persistence. Feser's account seems to lack the resources to distinguish between a successive series of numerically distinct but qualitatively similar simulacra (on the one hand) and genuine persistence (on the other).

Let's explore Feser's options in response. First, Feser may respond that genuine persistence requires relevant causal continuity between the distinct temporal moments of an object, such that the later existence of the object at least partly causally or explanatorily depends on the earlier state(s) and existence of the object—something lacking in cases of instantaneous replacement.

But if the past states and existence of O (prior to t) can legitimately explain O 's existence at t , what explanatory need is there for a concurrent, sustaining actualizer of O 's existence at t ? If we are genuinely allowing that the past states and existence of O can explain the present state and existence of O such that it could (partially) ground diachronic identity, what reason do we have to demand an existential sustaining cause?

Feser might respond that while O 's past states and existence explain O 's present state and existence, this would only constitute a necessary condition for identity over time. God's causal sustenance is also required. However, it's unclear that there is any independent motivation for this move apart from a prior acceptance that things require sustaining causes of their existence.

Here is a second response on behalf of Feser. Perhaps O -at- t is identical to O -at- t^* , $t^* < t$, in virtue of their having the same essence.

This response, however, is inadequate. Essences are common kinds that multiple, numerically distinct individuals can possess (at least under Feser's account). For instance, you and I both possess the essence *rational animality*, and we are individuated by our matter and our various accidental features. But if that is the case, then merely appealing to O -at- t 's possessing the same essence as O -at- t^* will underdetermine whether O persisted from t^* to t or whether O is a new, distinct individual.

We might instead suppose that O-at-t possesses a haecceity or individual ‘this-ness’ which is identical to the haecceity possessed by O-at-t*, and it is (partially) in virtue of this individual essence or haecceity that O persists from t* to t. But this seems merely to *describe* rather than *explain* the identity of O-at-t with O-at-t*. After all, claiming the two have the same haecceity *is just to claim that they are identical individuals*. It seems, then, merely to describe *that* they are the same individual without explaining *in virtue of what*, precisely, they are identical. For we can equally ask: in virtue of what is the haecceity of O-at-t identical to the haecceity of O-at-t*? The appeal to haecceities alone cannot resolve this puzzle and hence cannot account for O’s diachronic identity.

Feser’s third response might be: God (or God’s causal activity) is that in virtue of which O-at-t is identical to O-at-t*.

But God can only make x be the case if x is possible in the first place; for if x is impossible, then clearly God cannot make x obtain. But that means that God’s making x cannot be *that in virtue of which* x is possible, since God’s making x presupposes x is possible in the first place. There must exist (as it were) a pre-established realm of possibilities and necessity not grounded in God’s making things be the case.

But now we seem to have a fatal problem for the view that O-at-t is identical to O-at-t* in virtue of God’s making them identical. For facts about identity are necessary facts, meaning whichever answer to the question is correct (either identity or non-identity), it will be a fact in the pre-established realm of possibilities and necessity. To put it another way, if O-at-t and O-at-t* are not identical, then clearly God cannot even make it be the case that they²¹ are identical. Their being identical, then, cannot presuppose God’s making them identical, since whether God can make them identical in the first place *presupposes* the prior necessity of their being identical.

We can see, then, that the defender of TST has two options: either accept the causal continuity partial grounding of diachronic identity, or deny it. If it is accepted, there seems to be no principled way to deny account (1) as a satisfactory account of persistence. If it is denied, then it seems diachronic identity is not adequately grounded. EIT, by contrast, is not afflicted by the dilemma and hence is more theoretically virtuous than TST.

I turn next to the primary criticisms of EIT in the literature.

Criticisms of EIT

Criticism Feser’s central argument against EIT derives from the Principle of Proportionate Causality (PPC), according to which a total cause cannot give to an effect what it does not have to give in the first place. More precisely, the PPC holds that whatever exists in an effect E must exist in the total cause of E in some manner (formally, virtually, or eminently). With this principle in hand, Feser argues:

1. A cause cannot give what it does not have to give.

²¹ ‘They’ rigidly designates O-at-t and O-at-t*.

2. A material substance is a composite of prime matter and substantial form.
3. Something has existential inertia if and only if it has of itself a tendency to persist in existence once it exists.
4. But prime matter by itself and apart from substantial form is pure potency, and thus has of itself no tendency to persist in existence.
5. And substantial form by itself and apart from prime matter is a mere abstraction, and thus of itself also has no tendency to persist in existence.
6. So neither prime matter as the material cause of a material substance, nor substantial form as its formal cause, can impart to the material substance they compose a tendency to persist in existence.
7. But there are no other internal principles from which such a substance might derive such a tendency.
8. So no material substance has a tendency of itself to persist in existence once it exists.
9. So no material substance has existential inertia (Feser 2011, p. 258).

Assessment There are at least four worries for this argument. First, it presupposes a controversial metaphysical account of the nature of substances. Indeed, the argument—if successful—establishes that “whether it [hylomorphism] is correct depends in part on whether things have existential inertia in the first place,” for if they have existential inertia, then (per Feser’s argument) hylomorphism is false (Audi 2019, p. 7).

Second, consider chemical reactions in which two reactant species are each (individually) necessarily and essentially colorless, but yet when mixed together produce a vibrant red color. Although each individual thing within the total cause of the vibrant red color is essentially colorless, the combination of the individual things within the total cause nevertheless produces a vibrant red color.

This is not a proposed counter-example to the PPC. Instead, it reveals that there are ways that features can be present in total causes that Feser’s argument neglects. In particular, features can be present within total causes in a way I shall term *conditional potencies*. O possesses a conditional potency for F provided that O, when conjoined with some other condition or thing O*, gives rise to a system (O–O*) that manifests F. The red was not actually or formally present in the total cause (the two chemical species), but it was nevertheless present in the total cause as a conditional potency of each reactant species. The first reactant species had the conditional potency, when combined with the second species, to produce red; likewise with the second species.

We can now apply this to Feser’s argument. Specifically, merely from the fact that neither prime matter nor substantial form (of themselves) can have a tendency to persist in existence, it does not follow that their composition cannot have a tendency to persist in existence—any more than the fact that neither of the two reactant species can (of themselves) manifest redness entails that their composition cannot manifest redness. In the case of the chemical species, their composition can manifest redness precisely because each component has the conditional potency to manifest—when combined with the other—redness. Similarly, Feser’s argument neglects the fact that a form-matter composition may be able to manifest a tendency to persist

in existence because each component has the conditional potency to, when combined with the other component, manifest such a tendency. By illegitimately presupposing that neither form nor matter could have such a conditional potency, Feser's argument does not succeed.

Third, *depending on how we understand 'principle'*, premise seven is arguably question-begging in this dialectical context.²² For whether or not there is an additional 'principle' of material substances (namely, existential inertia or a tendency to persist in existence) is precisely what is at issue. It is precisely the question at hand whether or not form and matter are the sole principles of material substances, since it is precisely the question at hand whether there is an additional principle (existential inertia) which accounts for the persistence of things in existence. Hence, Feser's argument seems question-begging.

Fourth, the argument (if successful) does excessive damage, as it entails the falsity of EET. Consider the following parallel argument. The only two principles of material substances are form and matter. But by itself, matter is pure potentiality and so doesn't actually exist, in which case it cannot—of itself—impart any tendency to expire. And by itself, form is a mere abstraction and so doesn't actually exist, in which case it cannot—of itself—impart any tendency to expire. From this, it follows (per Feser's understanding of PPC) that no material substance has a tendency to expire. But such a tendency is *precisely* what Feser's Aristotelian proof requires!

Feser may respond that EIT *just is* the absence of a tendency to persist, and hence establishing that things lack such a tendency vindicates EET. There are two problems with this response. First, we already established in section one that this is false. Second, an exactly parallel reply can be given on behalf of EIT. In particular, the parallel argument showed that no material thing possesses a tendency to expire. So if Feser claims EET is vindicated by the absence of a tendency to persist, it will follow that EIT is equally vindicated by the parallel argument that things have no tendency to expire.

Criticism Feser's second main criticism of EIT is form-matter interdependence. "For since in purely material substances matter depends on form and form depends on matter," writes Feser, "we would have a vicious explanatory circle unless there was something outside the form/matter composite which accounts for its existence" (Feser 2011, pp. 247–248).

Assessment First, the argument is quite dialectically limited insofar as it rests on a hylomorphic account of temporal, material objects.

Second, even if it is true that, because they depend on one another for their actual existence at each time t at which they are conjoined, form and matter at t require an explanation outside themselves for their actual compositional existence, this is compatible with my accounts of the metaphysics of existential inertia. Consider the account according to which O -at- t_1 explains the existence of O -at- t . In this case, we avoid vicious explanatory circularity, since we are not explaining the form of O -at- t by the matter of O -at- t (or vice versa); instead, we

²² Unfortunately, Feser does not define or explicate the notion (indeed, it seems to be a conceptual primitive in the Aristotelian framework).

are explaining O-at-t by O-at- t_{-1} , which amounts neither to self-causation, nor to self-explanation, nor to vicious explanatory circularity.

Third, vicious causal/explanatory dependence for existence is metaphysically impossible *regardless* of whether there is something extrinsic that accounts for the viciously intertwined things. If x causes/explains the existence of y, and y causes/explains the existence of x, then x is both *prior* to y (on account of causing/explaining y's existence) and *posterior* to y (on account of being caused/explained by y), which is a contradiction. But contradictions are impossible irrespective of something extrinsic that allegedly grounds their obtaining. This is not an argument against EIT, then; it simply imputes to material objects an impossibility from the get-go.

Finally, consider again conditional potencies. Arguably, although form and matter may interdepend with respect to the beginning of a substance's existence (i.e. with respect to the origination of the form-matter composition), it does not follow that they thereby interdepend at every moment at which they exist. This is because—for all Feser has shown—there may very well be a conditional potency within each that accounts for why, when combined with the other, they are able to manifest some further feature (namely, a tendency to persist). Consider again the case of the chemical species. The first species will not manifest redness unless the second is present, while the second will not manifest redness unless the first is present. But all this demands is an explanation for why they combined in the first place, since that original composition is what actualized the conditional potencies to transition into a state of actuality. And once the composition's components have their conditional potencies actualized in the first place, they remain in a state of actuality unless separated by (say) some chemical or physical process.

"But," one may object, "surely that is the very question at issue—namely, whether conditional potencies, once actualized, remain in a state of actuality with respect to one another." This is true. But this shows that we cannot (in a non-question-begging manner) assume from the get-go an answer *either way*. In particular, we would beg the question if we assumed from the get-go that conditional potencies, once actualized, do *not* remain in a state of actuality. But such a presupposition is precisely what Feser needs for his form-matter interdependence argument to succeed. For if form and matter interdepend but also (individually) have the conditional potency to persist in existence once combined, and if conditional potencies, once actualized, remain in a state of actuality, then it is simply false that vicious circularity ensues in our explanation of the present existence of some substance. This is because the explanation of the present existence would not be in terms of form's dependence on matter and matter's corresponding dependence on form. Rather, the explanation would be in terms of (i) the cause of the origination into existence of the substance (and thereby the composition of the matter and form), (ii) the actualization of the requisite conditional potency within form and matter, (iii) the nature of conditional potencies (namely, to remain in a state of actuality once actualized), and (iv) there being no sufficiently destructive causal factors operative.

Conclusion

We first examined the significance of EIT and situated it within the dialectical context involving Feser's Aristotelian proof and EET. After precisely characterizing EIT, we found two primary metaphysical accounts that have a number of advantages over Feser's TST. Account (1) deeply accords with the reality of past explanations, while account (2) minimizes primitives vis-à-vis TST. We then saw that EIT enjoys a host of theoretical virtues, most notable among which are explanatory power and simplicity. Next, we saw that TST has difficulties distinguishing between instantaneous replacement and genuine persistence. We then discovered that the most powerful criticisms of EIT can all be met. It is my hope that this article spawns greater dialogue and unity between both proponents and opponents of existential inertia.

Acknowledgements I am grateful to Joshua Rasmussen for his gifts of time and energy as well as his role in cultivating my interest in philosophy. I also want to thank my parents for their love and support.

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