Advice for Eleatics

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<u>Abstract</u>: Eleaticism ties ontology to causality by denying the impossibility of causally inert entities. This paper examines some challenges regarding the proper formulation and general plausibility of Eleaticism. After suggesting how Eleatics ought to respond to these challenges, I consider the prospects for extending Eleaticism from ontology to ideology by requiring all primitive ideology to be causal in nature. Surprisingly enough, the resulting view delivers an eternalist and possibilist metaphysical picture in the neighborhood of Lewisian modal realism.

§1. Introduction

Imagine a single particle hiding out somewhere in the universe. It is undetectable by any possible instruments. It figures in no physical laws, and has no mass, charge, or any other causally active properties. It has no role in the causal order of this world or any other possible world. It was not created and will not be destroyed. Now, is there any particle of this kind? Could there even be such a particle?

For some, questions about necessarily undetectable entities are properly dismissed as meaningless. If we assume, however, that the question is a meaningful one, how ought we answer it? Undoubtedly, most will answer in the negative, explaining that, although there could be such a particle, we are justified in rejecting it as a gratuitous theoretical posit. While this is surely a reasonable answer, a swifter, more decisive answer is tempting. According to some who surrender to this temptation, there is no lazy particle in our world, and, more strongly, there is no lazy particle in any possible world.² Their rationale: the imagined particle is causally inert and nothing can exist without participating in the causal order of the world. In slogan form: *to be is to have causal powers*. Those who answer in this way endorse a controversial thesis about the connection between causality and existence: Eleaticism.³

For Eleatics, causal activity is a necessary and sufficient condition for existence. Since Eleaticism precludes the possible existence of causally inactive entities, Eleatic arguments can be offered against the existence of a diverse class of entities including abstract objects, mereological composites, immaterial substances, and mental properties.⁴ In each case, the structure of the Eleatic Argument is the same: one premise denies the causal credentials of the entities in question, while a second premise affirms

¹ Forrest (1993: 458) dubs such particles *epiphenomenalons*, "that than which no more useless can be conceived of."

² Avowed Eleatics include Armstrong (1978: vol. 2 5) and Ellis (1990: 22). Field (1980) is plausibly interpreted as an Eleatic, but see Section Five for some complications.

³ Eleaticism is so-called by Armstrong (1978: 45-46) in honour of the Eleatic Stranger's remarks in Plato's *Sophist*. Eleaticism sometimes travels under the assumed name of "Alexander's Dictum."

⁴ See Colyvan (1998) for discussion of various Eleatic arguments. Not all defenders of Eleatic Arguments endorse the unrestricted version of Eleaticism. See Kim (1998: 119) for discussion (but not an endorsement) of the Eleatic Argument against mental properties.

the Eleatic criterion for existence. Unsurprisingly, evaluating the causal credentials of these and other entities is no simple matter, but it is clear enough that Eleaticism is of considerable metaphysical significance. If true, it not only settles nagging questions about causally inert particles, but also provides a direct argument for minimalist metaphysical theories.

For those of us sympathetic to doing metaphysics in the desert, Eleaticism is an especially attractive commitment. It would therefore be a welcome discovery if there were compelling arguments in its favour. Unfortunately, the case for Eleaticism is tenuous and underdeveloped. Worse still, the objections against it are frustratingly strong. For some of us, Eleaticism remains the kind of thesis we would welcome good reason to believe, but, given the balance of evidence, are required to withhold from endorsing.

My project in what follows is to show that, for those lucky few with the requisite metaphysical commitments, there is good reason to endorse Eleaticism.⁵ Moreover, a version of Eleaticism can be developed that is immune to the most pressing anti-Eleatic objections. Since this version of Eleaticism requires controversial background assumptions, it isn't for everyone. That said, these assumptions are all live options within their respective debates, so many will find Eleaticism closer at hand than they might initially suspect. The subsequent discussion will therefore proceed with an eye toward determining both the metaphysical views that provide the most natural setting for Eleaticism and the most plausible formulation of the central Eleatic commitment. And, after outlining what I take to be the most plausible version of Eleaticism, I conclude on a more speculative note by examining a heterodox form of Eleaticism that places a causal constraint on the ideology as well as the ontology of our metaphysical theories. On the resulting view, all metaphysical structure, whether ontological or ideological, is causal structure.

§2. Clarifying Eleaticism

In this section, I survey some preliminary issues that arise in the formulation and interpretation of Eleaticism. ⁶ To begin, we can take Eleaticism to be the following thesis:

Eleaticism: Necessarily, some entity *x* exists if and only if *x* is causally active.

Five brief points about this formulation are worth noting. First, this formulation entails that everything is causally active. And, since almost everyone accepts the right-left direction of the biconditional, the controversial status of Eleaticism owes to the left-right direction: that, for any entity to exist, that entity must have causal powers.⁷

⁵ Sadly, I cannot count myself among these would-be Eleatics, but, in what follows, I put myself in Eleatic shoes in order to give what I take to be the best advice possible.

⁶ On the issues that arise in formulating Eleaticism, see Oddie (1982: 286) and Hudson (2003).

⁷ Those most likely to reject the right-left direction: troublemaking presentists who ascribe causal powers to entities that existed but do not presently exist, and unrepentant Meinongians who claim causal powers for nonexistent objects.

Second, this formulation assumes Eleaticism is, if true, necessarily true and thus requires a metaphysically necessary connection between causality and existence. So understood, the absence of causally inactive entities from the actual world is a necessary but by no means sufficient condition for the truth of Eleaticism.

Third, *entity* is to be understood here as the most general ontological category, subsuming other ontological categories like *object*, *property*, and *event*. Weaker forms of Eleaticism can be formulated by placing restrictions on this most general formulation. For example, Concrete Object Eleaticism would be the thesis that a particular concrete objects exists if and only if it is casually active, while Substance Eleaticism would be the analogous thesis as applied to the ontological category of substances.⁸

Fourth, Eleaticism is intended as a substantive ontological thesis. The relevant sense of "causal activity" must therefore be a suitably robust one that avoids the threat of triviality. In particular, interpretations of "causal activity" that would take *existing* or *having being* to be a kind of causal activity are properly dismissed even while they would entail Eleaticism.⁹

Fifth, since Eleaticism is a maximally general thesis concerning all entities, we face several challenges in precisifying the relevant notion of "causal activity." Note, for example, that properties and objects are implicated in causal interactions in markedly different ways (e.g., by being causal *relata* rather than being instantiated by causal *relata*). For the moment, we can assume that "being causal active" is a disjunctive condition satisfied in different ways by different kinds of entities. And, while the nature of causal activity is discussed below, I assume here that both objects and properties are, at least in principle, capable of causal activity.

§3. Causality for Eleatics

Having addressed some preliminary questions about the formulation of Eleaticism, we can now take up a challenge regarding its proper interpretation. This challenge arises when we consider the metaphysical status of causal relations. Notice that, if Eleaticism requires that *everything* stands in some causal relations, then, in addition to causally active objects like electrons and properties like *charge*, the causal relations that hold between entities must also exist. But, given Eleaticism, these causal relations must therefore be causally active and stand in causal relations themselves. Moreover, if causal relations must instantiate their own causal relations, any instantiated causal relations will need to instantiate yet higher-order causal relations. For this reason, Eleaticism seems to generate an infinite regress, requiring an ascending hierarchy of *n*-level causal

⁸ See Hudson (2003: 174) for discussion of Concrete Object Eleaticism.

⁹ Not all ways of trivializing Eleaticism owe to implausibly weak senses of "causal activity." Suppose, for example, that, necessarily, all entities come into existence at some point in time and that coming into existence is essentially causal. If granted, Eleaticism is a trivial consequence of these claims; however, as I suggest below, Eleatics are best served to deny that all possible instances of coming into being are instances of being caused to exist.

¹⁰ On category-relative senses of causal activity, see Oddie (1982: 288).

relations bearing *n*+1-level causal relations upon pain of nonexistence. ¹¹ Since the resulting metaphysics of causal relations is ontologically profligate (and of dubious coherence), our first challenge for interpreting Eleaticism is to avoid the threat of this objectionable regress. Call this the *Regress Challenge*.

The Regress Challenge for Eleatics presupposes that causation is a relation in some familiar sense—i.e., that causal relations are ontological commitments like other properties over which we can quantify. There is, however, another way of understanding the metaphysical status of causal relations. On this alternative view, causation or causal necessitation is a primitive piece of theoretical ideology rather than an ontological commitment. So, while the ontology of a theory comprises the entities that fall within the domain of its quantifiers, the ideology of a theory is the stock of predicates and operators that, while not entities, are the elements of metaphysical structure required for the apt expression of the theory. By way of example, some presentists claim that the primitive tense operators of tense logic are irreducible ideological commitments, which are indispensible for describing the structure of reality. So, while some predicates and operators can be reduced to others (e.g., the interdefinability of various truth-functional operators), certain ideological primitives like the presentist's tense operators are plausibly held to resist reductive analysis.

Granted this distinction between ontology and ideology, the most hospitable setting for Eleaticism is within a metaphysics of causation according to which causal necessitation is an irreducible ideological primitive akin to the presentist's tense operators or the modalist's modal operators. Call this view *ideological causal realism*. For the ideological causal realist, the primitive ideology of causal necessitation is no part of our ontology even while it is an indispensable commitment of any perspicuous metaphysical theory. Ideological causal realism is therefore a form of realism about causal structure without realism about causal relations themselves. And, since Eleatics maintain that causal facts place robust constraints on ontological facts, this is a natural pairing. More importantly, ideological causal realism provides a swift resolution to the Regress Challenge. While we can retain loose talk of "causal relations," this is

¹¹ Oddie (1982: 290) raises this problem. Hudson (2003: 172) presents this problem in terms of causal powers bearing causal powers, which he takes to be impossible rather than the source of an infinite regress. I take the solution proposed below to resolve both ways of formulating this problem for Eleaticism.

¹² The ontology-ideology distinction traces back to Quine (1948). On the metaphysics of ideology, see Sider (2012).

¹³ On tense operators, see Sider (2003). On the modalist's modal operators, see Melia (2003).

¹⁴ Some might worry that a theory of causality without an ontology of causal relations is a kind of eliminativism. Against such views, notice that the modalist who holds modal facts to be expressible only by appeal to primitive modal ideology isn't a modal eliminativist; they're merely an anti-realist about merely possible worlds. Nor is a presentist who appeals to tense operators an anti-realist about tense; they're merely an anti-realist about other times. If one holds that "ideological" views are anti-realisms, their objection is with the present conception of ideology rather than the present view of causation.

misleading *façon de parler*. Properly understood, causal necessitation is not an entity "out there in the world"; it is a primitive structural feature of any apt metaphysical theory. And, since there is no entity that is *the* causation relation, there is no problematic entity that must stand in causal relations and serve as the source of an infinite regress of causal relations.

The role of the causal necessitation operator within our theories is broadly familiar. Where certain theories of causal-nomic necessitation posit a second-order relation that holds between universals, the ideological causal realist posits the operator, N, which occupies a structurally comparable role. By way of example, suppose that an object a's instantiation of a property F is the unique cause of a distinct object b's instantiation of G. Expressed using the ideology of causal necessitation, this causal claim looks as follows: N<Fa>, Gb>. In addition, more complex claims can be countenanced by allowing the N-operator to operate on a variety of events, or states of affairs. For example, N<Fa, Gb, Fa ab>, Fb is the claim that a's being F, a0's being G0, and a's bearing G1 to b caused a0's bearing G2. In this way, various constraints on the adicity of causal necessitation, when understood as a universal, can be rejected to accommodate more sophisticated views of the causal-necessitation operator.

No metaphysics of causation is entirely separable from the metaphysics of laws.¹⁷ Fortunately, the framework of ideological causal realism is compatible with a range of views about the nature of laws and causation.¹⁸ While these views will share a commitment to some primitive causal-nomic ideology, they will diverge most significantly on questions regarding the reducibility of nomic and causal facts. For example, according to *causal generalists*, causal facts supervene upon the distribution of the non-causal and nomic facts. In contrast, *causal singularists* hold that causal facts fail to supervene upon the non-causal and nomic facts. Singularists therefore posit a causal structure capable of independent variation over and above nomic and non-causal structure.¹⁹

¹⁵ I have in mind here the Dretske-Tooley-Armstrong approach and its variants. For discussion, see Tooley (1987).

¹⁶ A view of this sort naturally allows for the ideology of causal necessitation to mirror the structure attributed to the causal necessitation relation by contrastivists and others. On contrastivism, see Schaffer (2004).

¹⁷ The connection between causality and nomicality suggests a nomic analogue to Eleaticism, according to which some entity exists if and only if it is a part of the world's nomic structure. C.S. Peirce (1992: 278) seems to endorse just such a view: "The existence of things consists in their regular behaviour. If an atom had no regular attractions and repulsions... if it were at one time in one place and at another time in a dozen, such a disjoined plurality of phenomena would not make up an existing thing. Not only substances, but events, too, are constituted by regularities. The original chaos, therefore, where there was no regularity, was in effect a state of mere indeterminacy, in which nothing existed or really happened."

¹⁸ On the relation between laws and causality, see Tooley (1990).

¹⁹ Not only are there alternatives that fall within these roughly formulated views, there is a range of more or less extreme formulations of generalism and singularism depending on one's preferred understanding of global supervenience. Here, I leave aside these complications.

Ideological causal realism is compatible with causal singularism and causal generalism. And, while the supervenience of the causal upon the nomic and non-causal threatens to make primitive causal ideology a gratuitous posit for causal generalists, so long as she denies the reducibility of the nomic *and* the causal to the non-causal, the generalist is committed to primitive ideology in the form of either a primitive causal operator or a primitive nomic operator. Indeed, the generalist might naturally hold that the causal operator and the nomic operator are one and the same, since all fundamental laws are causal in nature. On views of this last sort, a single causal-nomic operator suffices to recover all requisite causal and nomic structure. ²⁰

In what follows, I make no attempt to decide between these views, but, for the sake of simplicity and neutrality, I assume causal generalism of the kind just suggested. In doing so, we can retain talk of a single causal-nomic necessitation operator, while remaining broadly neutral between views that accept primitive ideology at the level of laws, causation, or both laws and causation. On the resulting view, an entity is causally active if it is properly related to an event, property, or object that is causally necessitated. Existence is therefore fundamentally tied to facts about the causal structure of the world, and this structure is fixed by which events are linked via the causal-nomic necessitation operator.

Now, while the present view is neutral in certain respects, it should be clear that this kind of ideological causal realism is a highly partisan in other ways. For example, it parts company with various reductionist and anti-reductionist proposals that attempt to read off a theory of causality from our physical theories; it also sits uncomfortably with views that take causal notions from the special sciences to inform our best metaphysical theory of causality. ²¹ I take this commitment to an especially metaphysically heavyweight conception of causality to be part and parcel of Eleaticism. The advantage of this view is that it makes somewhat more plausible the metaphysically robust connection between existence and causation. The disadvantage, which likely sets Eleaticism against various forms of naturalism, is that a commitment to this view of causality finds only questionable support from our best scientific theories. The project of reconciling Eleaticism with other leading views of causation sits well outside the aims of the present paper, but I mark the Eleatic commitment to a highly controversial view of causality as a substantive assumption of what follows.

§4. Humeanism and Eleaticism

I have sketched a metaphysics of causation naturally suited for Eleaticism. The resulting picture is a partisan one, but this is unsurprising given the tension between Eleaticism and certain other views about causation. Most obviously, Eleaticism is incompatible with causal eliminativism, and would require a kind of idealism if paired with views

²⁰ See, for example, Armstrong (1983).

²¹ I discuss regularity-based theories below, but I leave aside discussion of non-reductionist proposals like the interventionism defended in Woodward (2003).

that deny the objectivity of causation.²² It is less obvious, however, why Eleaticism is at odds with Humean views of causation. In this section, I aim to answer this question by considering the prospects for Humean Eleaticism.

For Humeans, causal and nomic facts supervene upon the distribution of qualitative non-causal facts. In its most plausible form, Humeanism is coupled with the Best System approach to laws, according to which regularities are laws if and only if they are theorems of the best deductive systematization of true (non-nomic) claims about the world.²³ Crucial to the Best System approach is a commitment to better and worse systematizations, where the evaluation of competing systematizations turns, in part, on theoretical virtues like simplicity, strength, and informativeness.

There are a number of powerful objections against Humeanism and the Best System approach to laws. For some, the appeal to theoretical virtues in the Best System approach delivers an inherently subjective and therefore untenable account of laws.²⁴ Here, I set aside these concerns and assume that theoretical virtues are objective features of competing systems and that these features provide epistemic reasons for preferring various systems. Unfortunately, even setting this concern aside, there are three potential problems that arise from the combination of Humeanism and Eleaticism.

First, there is a general worry about extrinisicality that arises within the Best System approach. This worry arises because causal-nomic facts seem to depend upon global regularities rather than the intrinsic character of objects and properties. As Lewis (1996: 232), the leading defender of the Best System approach says,

Like any regularity theory, the best-system analysis says that laws hold in virtue of patterns spread over all of space and time. If laws underlie causation, that means we are wrong if we think, for instance, that the causal roles of my brain states here and now are an entirely local matter. That's an unpleasant surprise, but I'm prepared to bit the bullet.

For Eleatics, the extrinsicality of causal roles seems to entail that whether something is causally active is an extrinsic matter. This, in turn, suggests that Humean Eleatics are committed to something like the extrinsicality of existence, according to which an entity's existence depends upon global regularities and the virtues of competing systematizations. The severity of this problem is, I think, unclear and turns largely upon vexed questions about the status of existence as "genuine property," capable of being intrinsic or extrinsic. And, absent a settled view on these matters, I believe there are two more pressing concerns for the would-be Humean Eleatic.

The second objection to Humean Eleaticism concerns the metaphysical priority of causal and existential facts. Specifically, how could causal facts "constrain" what exists when the causal facts are derivative upon the non-causal facts in the way Humeanism

²² On eliminativism, see Russell (1912) and Field (2003). On the objectivity of causality, see Price and Menzies (2003).

²³ On Humeanism, see Lewis (1973) and Menzies (1999).

²⁴ On this concern, see Lewis (1996).

requires? This complaint has some intuitive pull owing to the dim notion that some hapless entity might exist, but, upon being written out of the Best System, be errantly "forced out of existence." Here, however, the Humean Eleatic must simply affirm a kind of brute metaphysical necessity: neither causal nor existential facts are prior to the other; there is simply a necessary concordance between facts about what exists and facts about what is implicated in our Best System. There is therefore no world where something could exist while falling outside of the Best System or *vice versa*. So understood, the Humean Eleatic can reasonably deny the coherence of the intuition that underlies this particular objection.

The third and most serious challenge for Humean Eleaticism concerns the threat of metaphysical indeterminacy. Recall that the Best System approach admits the possibility of equally good yet importantly different systems. In fact, tradeoffs between competing theoretical virtues all but guarantee that ties will arise. For example, systematizations equal with respect to simplicity might differ radically in their commitments by trading ontology and quantification for ideology and primitive operators. Given the inevitability of ties between theories, it is surprising that Lewis so swiftly dismisses this concern:

I used to say that laws are then the theorems common to both [tied] systems, which could leave us with next to no laws. Now I'll admit that in this unfortunate case there would be no very good deservers of the name of laws. But what of it? We haven't the slightest reason to think the case really arises.²⁷

For Lewis, worlds with ties between systems are worlds without laws, and such worlds, given our assumptions about causality and nomicality, are worlds without causal structure. For Eleatics, this Lewisian view requires that worlds without causal structure are either empty, containing no entities, or impossible. But, given the inevitability of ties between competing systems, the Eleatic is better served to adopt a more natural view: worlds with ties between competing systems are worlds where the nomic facts are indeterminate.

For Eleatics, nomic indeterminacy leads to an unwelcome commitment: the indeterminacy of existence. Since nomic facts are indeterminate at worlds with equally good best systems and causal facts supervene upon nomic ones, the causal facts prove to be indeterminate. But, if the causal facts are indeterminate, so, too, are the facts about what exists. The present objection therefore claims that nomic indeterminacy is a fact of life for Humeans. In turn, this inevitable nomic indeterminacy yields an objectionable and fundamental metaphysical indeterminacy. Those who are sympathetic to metaphysical indeterminacy will be unconvinced by this objection to Humean

²⁵ See Tulodziecki (2011) on ties between competing theories.

²⁶ On trading ideology for ontology, see Turner (2011) and Cowling (2013).

²⁷ Lewis (1996: 233).

Eleaticism. ²⁸ But, even for friends of metaphysical indeterminacy, *fundamental* indeterminacy regarding what exists is an uncomfortable, revisionary commitment to our metaphysics and logic. It is for this reason—i.e., the requirement of fundamental metaphysical indeterminacy—that Humeanism and Eleaticism are best left aside as an undesirable pairing.

§9. Temporal and Modal Eleaticism

The preceding sections clarified the content of Eleaticism and outlined an Eleatic-friendly metaphysics of causation. In this section, I consider the interaction between Eleaticism and the metaphysics of time and modality with the aim of addressing the *Modal Objection to Eleaticism*. The Modal Objection runs as follows: if Eleaticism is true, there are no worlds at which entities are causally inactive. But, intuitively, some actually causal active entities could be causally inactive. Consider, for example, a contraction of the actual world without any causal activity, containing only a single lonely point-particle. Since Eleaticism errantly deems this and other scenarios impossible, we ought to reject the Eleatic's causal constraint on existence.²⁹

To address the Modal Objection, it will be useful to begin by distinguishing two kinds of ontological questions. Some questions—absolute questions—concern whether certain entities fall within the domain of our unrestricted quantifiers. For example, when asked, unrestrictedly speaking, whether dinosaurs exist, eternalists answer in the affirmative, since they hold that past, present, and future entities fall within the unrestricted domain. Restrictedly speaking, however, the eternalist will deny that dinosaurs exist, since the contextually restricted quantifier ranges over only presently existing entities. In contrast, presentists hold that (unrestrictedly speaking) only present entities exist and must therefore deny that dinosaurs exist regardless of whether our quantifiers are restricted. Other questions—restricted questions—concern whether entities exist within specific restricted domains. Suppose, for example, that platonic properties exist. Even after settling this absolute question, a restricted question remains open: are platonic abstract entities included within the domain of presently existing entities?³⁰

Granted the absolute-restricted distinction, we can usefully consider the prospects for Eleatic answers to restricted questions about existence at a time and existence at a world. To evaluate these answers, two senses of "causally active" ought to

²⁸ Some are untroubled by metaphysical indeterminacy. See, for example, Van Inwagen (1990) and Williams and Barnes (2012).

²⁹ On the modal objection, see Oddie (1982). As noted above, we can assume that Eleaticism, if true, is necessarily true, so we cannot simply take the Modal Objection to show Eleaticism is contingent.

³⁰ The separability of absolute and restricted questions depends upon one's background commitments. According to the eternalist, questions about what exists and what exists at the present time are importantly distinct. But, given the presentist's denial that any non-present entities exist, the distinction between absolute and restricted questions collapses. For the presentist, questions about what exists at the present time are therefore equivalent to questions about what exists *simpliciter*.

be distinguished. According to the strong sense, an entity is causally active at a time (or at a world) if and only if (i) there is some instance of causal necessitation at that time (or that world) and (ii) the entity in question is appropriately related to one or more instances of causal necessitation (e.g., a property is appropriately related to an instance of causal necessitation when its instantiation causally necessitates or is causally necessitated by something). According to a much weaker sense of "causal activity", an entity is causally active at a time (or world) if and only if that entity is possibly appropriately related to an instance of causal necessitation. This weaker sense of "causal activity" requires only that an entity be possibly causally active in the strong sense. Intuitively, then, the former, stronger sense of "causal activity" concerns the manifestation of causal powers and is a relation to a time or world, while the latter, weaker sense concerns "causal activity" understood as a kind of potentiality. Having now distinguished these senses of "causal activity," I will intend the stronger sense unless otherwise noted. Accordingly, Eleatic answers to restricted questions are concerned with whether or not entities manifest their causal powers at a specific time or specific world rather than at any time or world whatsoever.

In addition to answering absolute questions, one might hold that Eleaticism also provides answers to restricted questions. Suppose, for example, the eternalist aims to answer the restricted question: "What entities presently exist?" According to a restricted Eleatic answer, all entities that presently exist are presently causally active. Put differently: at any time, the only entities that exist at that time are entities that manifest their causal powers at that time. Call this answer *Temporal Eleaticism*.

For eternalists, Temporal Eleaticism provides a recipe for settling restricted questions. For presentists, Temporal Eleaticism settles both absolute and restricted questions. Either way, Temporal Eleaticism has significant consequences. Most notably, Temporal Eleaticism is incompatible with the possibility of an object persisting through a period of causal inactivity. ³¹

Consider, for example, a world containing only three mereologically simple particles exerting some particular force upon one another. Suppose, at some time, two of these particles collide and cease to exist. If Temporal Eleaticism is true, then, once this third particle no longer causally interacts with other particles, it ceases to exist. In effect, the destruction of the colliding particles destroys the third particle solely by foreclosing the possibility of future causal interaction. Intuitively, however, it seems possible for the third particle to survive the destruction of the other particles. But, since Temporal Eleaticism precludes objects persisting through periods of causal inactivity, it entails an

³¹ Consider, for example, the status of a property that figured in the causal history of the world but that has not been instantiated by any object since the Big Bang. Such a property was causally active, but is not presently causally active. Similarly, consider a property that will figure in the workings of nature several millennia from now, but is presently uninstantiated. For presentists, Temporal Eleaticism therefore requires abandoning a familiar platonist conception of properties as eternally existing, necessary existents. Instead, the stock of properties in the world, like the stock of objects, is malleable, changing with facts about what properties are causally active.

implausible theory of persistence, according to which no entity can survive any period of causal inactivity.

Temporal Eleaticism has a modal analogue regarding existence at a world. According to *Modal Eleaticism*, at any world, the only things that exist at that world are the things that are causally active *at that world*.³² Intuitively, this requires that entities manifest their causal powers at a world in order to exist at that world. So, for possibilists who believe that both actual and merely possible entities exist, Modal Eleaticism supplies a necessary condition for inclusion within the domain of a world. But, for actualists who deny the existence of merely possible entities, Modal Eleaticism requires that, unrestrictedly speaking, there are no entities that are actually causally inactive.

Just as Temporal Eleaticism conflicts with plausible claims about persistence, Modal Eleaticism conflicts with plausible claims about plenitude. Recall, for example, the scenario noted above involving a contraction of our world containing only a single point-particle or, instead, a single temporal slice of Newtonian spacetime. ³³ Consider also the analogue of the temporal case above: a world containing only a single particle that is perpetually causally efficacious at some other world. In these and other cases, the relevant entities are causally inactive at the worlds in question, so, given Modal Eleaticism these worlds are ruled out as impossible. At the same time, plausible principles of plenitude and the apparent conceivability of these scenarios suggest that Modal Eleaticism simply delivers the wrong verdict here. Since some entities are only contingently causally active, there are some possible worlds at which entities like lonely point-particles are causally inactive. But, since the Modal Eleatic requires that every entity is essentially causally active, he delivers an implausibly small space of possible worlds. ³⁴

Given its incompatibility with plausible theses of plenitude, we ought to reject Modal Eleaticism. But, in distinguishing Eleaticism from Modal Eleaticism we have successfully disarmed the Modal Objection to Eleaticism presented above. Notice that the Modal Objection presupposes the Modal Eleatic requirement that an entity exists at a world only if that entity is causally active at the world. As we have seen, this requires an implausible constraint on plenitude. At the same time, this presupposition conflates the commitments of Eleaticism with the stronger commitments of Modal Eleaticism. Unlike the Modal Eleatic, the Eleatic is within her rights to deny that causal activity in the strong sense places a constraint on existence at a world. Instead, the Eleatic can hold that existence at a world requires only the weak sense of causal activity, where an entity is

³² Again, while these absolute and restricted questions are separable for possibilists, they coincide for the actualist, since an account of what exists at the actual world also provides an account of what exists *simpliciter* for actualists.

³³ Oddie (1982: 290) considers the more elaborate hypothesis of "[a] universe in which regularities occur by chance [that] is empirically indistinguishable from a universe in which the very same regularities are produced by causal connections"

³⁴ For example, even the weakest forms of combinatorialism will grant that if some region R is a proper sub-region of some possible region R*, then there is a possible world consisting of only R. On principles of plenitude, see Lewis (1986).

causally active by virtue of being strongly causally active at some world or other. Once this weaker constraint is adopted, the scenarios in question are no longer errantly deemed impossible, given that the point-particles and timeslices in question are causally active at some other worlds. Moreover, our rejection of Modal Eleaticism finds a parallel in the temporal case, since we ought to reject Temporal Eleaticism for its implausible constraints on persistence. And, once the Eleatic denies Temporal Eleaticism, we need no longer worry that Eleaticism implausibly requires that every entity is strongly causally active at all time at which it exists.

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Since Eleatics should reject both Temporal and Modal Eleaticism, the strong sense of "causal activity" no longer plays a substantive role in Eleaticism. Rather, the Eleatic requirement that every entity is causally active is properly interpreted as requiring the weaker sense of "causal activity,"—intuitively, potential causal activity. Since the timeslices and lonely point-particles mentioned above are causally active at other possible worlds, they are Eleatic-friendly posits even at worlds where they are denied the chance to flex their causal muscle. And, while this leaves open what exactly is required to exist at a time or a world, this merely shows that Eleaticism cannot be directly extended to provide an account of existence at a time or existence at a world. Instead, Eleaticism earns its keep as a thesis about what exists *simpliciter* and places only a necessary condition on existence at a time or world: that something is causally active in the weak sense.

Now, for those who might worry that this permissive form of Eleaticism is toothless, it is worth noting a few points. First, while the actual existence of epiphenomenal souls and other actually inert posits are compatible with this kind of Eleaticism, one need not be an Eleatic to reasonably reject these posits. After all, entities of any sort can still be rejected for flouting familiar requirements of parsimony. Second, this permissive form of Eleaticism still precludes the existence of essentially causally inactive particles like the one consider in Section One. So, while permissive Eleaticism finds fault with essentially inert entities, it doesn't hold their actual inactivity against them. Third, since permissive Eleaticism precludes the existence of necessarily causally inactive entities, it still provides a direct argument against platonic abstracta like sets and numbers, typically distinguished by their acausal nature. So, while permissive Eleaticism places a weaker causal constraint on reality, it still entails the nonexistence of certain paradigmatic abstract entities. Permissive Eleaticism therefore remains a powerful metaphysical thesis even while it avoids the immodest consequences of Modal and Temporal Eleaticism.

§5. Motivating Eleaticism

In the heyday of Harvard Nominalism, Goodman and Quine claimed nominalism required no defense and was "based on a philosophical intuition that cannot be justified by appeal to anything more ultimate." Since Eleaticism is a sweeping thesis rather similar to nominalism, some might be tempted to claim Eleaticism is a kind of "groundfloor commitment," requiring no argumentative support. Unsurprisingly, few will find this dogmatic "defense" satisfying. At the same time, genuine arguments for

Eleaticism are rather short on the ground. And, as Colyvan (1998) has shown, arguments that appeal to parsimony or causal constraints on explanation require theses at least as controversial as Eleaticism itself.³⁵ Even worse, as I will now argue, a familiar line of argument that is naturally thought to motivate Eleaticism is surprisingly ill-suited for this purpose.

The most notable kinds of argument against causally isolated entities are epistemic in character. These arguments, suggested but not endorsed in Benacerraf (1973), hold that causal interaction with an entity is a precondition for justified beliefs about that entity. So, if some entities are causally isolated, truths about these entities are unknowable. And, since positing entities we are irremediably ignorant of is bad business, we should deny the existence of any causally inactive entities.³⁶ At first glance, then, it would seem that Benacerraf-style arguments of this kind are a natural fit for those interested in defending Eleaticism.

There are many variations on the Benacerraf-style argument.³⁷ In perhaps its most familiar form it runs as follows: For Zeno to have justified beliefs about some individual, Melissus, the reliability of Zeno's beliefs about Melissus must be explicable.³⁸ But, since any explication of the reliability of Zeno's beliefs requires some kind of causal co-variation with facts about Melissus, no plausible epistemology can both deny Melissus' causal activity and affirm that Zeno has justified beliefs about Melissus. We should therefore deny that Melissus exists upon pain of positing an inherently mysterious entity.

Arguments from isolation raise some of the best questions about our epistemic access to the world. But, whatever their merits as arguments against causally isolated entities, they are not properly offered as arguments for Eleaticism. This is because arguments from isolation require us to deny the existence of entities to which Eleaticism, is in principle, committed. Suppose, for example, that reality comprises a plurality of causally disconnected realms each of which contains causally active entities. For proponents of arguments from isolation, this hypothesis must be rejected: there is only one realm and it is the realm with which we causally interact. Note, however, that Eleatics take causal *activity*, not *causal contact with us*, as a sufficient condition for existence. The causal isolation of certain entities therefore provides the Eleatic no grounds to deny the existence of causally disconnected realms. More importantly, while arguments from isolation entail that there are no causally inactive entities, they actually violate Eleaticism by denying that causal activity suffices for existence. For this reason, arguments from isolation cannot be used to defend Eleaticism.

³⁵ My survey of arguments is not intended to be comprehensive. See Colyvan (1998) for the authoritative treatment of extant arguments for Eleaticism.

³⁶ A semantic analogue of the epistemic argument from isolation takes issue with our ability to speak of causally isolated entities. See Jubien (1977). While I believe the merits of these arguments are rather different, the concerns below apply equally to the semantic argument from isolation.

³⁷ Cheyne (1998) defends the argument from isolation. See Liggins (2010) for a useful overview.

³⁸ I have in mind here the variation of the argument from isolation offered in Field (1989).

Since arguments from isolation are of no help to the Eleatic cause, an alternative line of argument is needed. In the next section, I consider one such line of argument and present an argument for Property Eleaticism, according to which there are no causally inactive properties. And, while Property Eleaticism is weaker than full-scale Eleaticism, I will argue in Section Seven that Property Eleaticism provides us with a plausible route for establishing full-scale Eleaticism.

§6. From Causal Essentialism to Property Eleaticism

Familiar forms of essentialism hold that entities *must* have certain properties. Socrates, for example, must be human, so it is impossible that Socrates exist without instantiating *humanity*. In contrast, Socrates need not be an Athenian, so *being an Athenian* is a mere accidental property of Socrates. Controversy abounds regarding the scope and nature of the essences of familiar objects like humans and tables.³⁹ At the same time, a less familiar debate concerns the essences of properties like *mass* and *charge*. Parties to this debate aim to settle modal questions about properties.⁴⁰ For example, does *mass* essentially resist acceleration? Does *charge* have its metric structure only accidentally?

Views about the essences of properties typically draw connections between property-essences and the role of properties in the causal-nomic structure of the world. Here, two views—quidditism and causal essentialism—seem most natural. According to quidditism, properties are individuated by quiddities—i.e., second-order identity properties like *being identical with charge*—rather than their causal-nomic roles.⁴¹ For most quidditists, the causal-nomic roles of *mass* and *charge* are accidental. As a consequence, properties like *mass* and *charge* could have occupied very different roles in the workings of nature. Most strikingly, *charge* rather than *mass* could have resisted acceleration in a world where *mass* and *charge* swap the causal-nomic roles they actually occupy.

Causal essentialists find these alleged possibilities incredible. According to causal essentialists, properties are individuated by their causal-nomic role rather than by metaphysically suspect quiddities. So, if any properties have the same causal-nomic role, they are identical, and, if properties differ in their causal-nomic roles, they are distinct. While incredulity regarding the possibilities accepted by quidditists helps motivate causal essentialism, some have offered epistemic grounds for causal essentialism. Most notably, Shoemaker (1980) argues that skeptical problems result from quidditism and are plausibly avoided by accepting causal essentialism. For others, causal essentialism is a direct corollary of a theory of properties as powers—i.e., as entities whose existence and identity are exhausted by their causal contribution to objects.⁴²

³⁹ Contrary to Fine (1994), I assume that the modal view of essence is correct.

⁴⁰ The relevant conception of properties in play here is a sparse one, according to which there are a vast plurality of predicates, but only some elite class of which express or correspond to genuine properties. The remaining merely abundant properties like *being a tugboat or a top hat* are merely sets or, for the Eleatic, constructions out of primitive predicational ideology.

⁴¹ On quidditism and causal-nomic roles, see Lewis (1998) and Schaffer (2005).

⁴² On causal essentialism and its rivals, see Hawthorne (2001).

Quidditism and causal essentialism are both controversial theses. Here, for the Eleatic's sake, I assume causal essentialism. Granted causal essentialism, we can now present a case for Property Eleaticism through an argument from casual essentialism.

According to Property Eleaticism, there are no causally inactive properties, so every property occupies some role in the causal-nomic structure of the world and whether a property is causally active depends upon whether its instantiation causally necessitates something or is causally necessitated by something. The argument from causal essentialism to Property Eleaticism is straightforward. If causal essentialism is true, properties are individuated by their causal-nomic role. If properties are individuated by their causal-nomic role, then no property that lacks a causal-nomic role can be individuated—i.e., bear relations of identity and distinctness. But, since all entities are individuated, all properties have a causal-nomic role, so all properties are causally active.⁴³

§7. From Property Eleaticism to Object Eleaticism

In the previous section, I argued that causal essentialists ought to be Property Eleatics. In this section, I argue that Property Eleatics should be Object Eleatics. Although various metaphysical theories posit ontological categories in addition to objects (e.g., events, states of affairs, and regions) I will assume here that *property* and *object* exhaust the world's ontological categories. In doing so, I take the conjunction of Property and Object Eleaticism to be equivalent to full-fledged Eleaticism. I will therefore talk of Eleaticism rather than the conjunction of Property Eleaticism and Object Eleaticism in what follows.

Since the following argument for Eleaticism turns on difficult questions about the metaphysics of objects, it will be useful to briefly review three competing views about the general structure of objects: bundle theory, substratum theory, and no-structure theory.

According to bundle theory, the metaphysical structure of objects is unary: the constituents of objects are drawn from a single ontological category, *property*. (Again, throughout this section, I intend sparse property when using 'property.') For bundle theorists, objects are maximal collections of mutually compresent properties. So understood, a given object is nothing over and above a collection of properties like *mass* and *charge* (or, more plausibly, their determinates) that bear the compresence relation to one another.

According to substratum theory, the metaphysical structure of objects is binary: the constituents of objects are drawn from the categories of *substance* and *property*. For

⁴³ One complication warrants comment: suppose there is a null causal-role—i.e., the role of bearing no causal-nomic relations. If so, there would be at most one causally inactive property. Against the possibility of a lonely idler, we can note, first, that there is no natural candidate for being the lonely idler, and, second, that causal essentialism is naturally understood as a thesis regarding properties with non-trivial causal roles. As such, the null causal role is just a terminological artifact. More generally, for those who endorse causal essentialism on the grounds that properties are essentially causal powers, this broader thesis provides reason enough to reject the existence of a lonely idle property.

substratum theorists, objects are "thick particulars": the sum of a substrate or "bare particular" and the properties that bear a primitive "non-relation tie" to that bare particular. Since bare particulars are the underlying substrate in which instantiated properties inhere, objects might instantiate all the same properties yet differ by virtue of having distinct bare particulars as constituents.

According to no-structure theory, bundle theory and substratum theory err by positing metaphysical structure where there is none. For no-structure theorists, objects are structurally atomic, lacking any internal distinctions like those between bare particulars and properties. 44 Since no-structure theorists reject primitive compresence and bare particulars, their preferred metaphysics of properties and predication differ significantly from bundle and substratum theories. While no-structure theorists might take objects to bear a primitive participation relations to platonic properties that exist outside of space and time, they might eschew properties instead. I discuss the resulting view, Ostrich Nominalism, and its relation to Property Eleaticism in the next section. But, for present purposes, it will suffice to note that whatever option the no-structure theorist prefers, objects will have no internal metaphysical structure.

Having canvassed the leading views about the metaphysics of objects, we can now present the argument from Property Eleaticism to Eleaticism. This argument relies on two plausible theses about the relationship between objects and properties:

Instantiation: Necessarily, every object bears at least one property.

Inheritance: Necessarily, every object that bears a causally active property is causally active.

Granted Property Eleaticism, Instantiation entails that every object instantiates at least one causally active property—i.e., a property the instantiation of which possibly causally necessitates something (or is possibly causally necessitated by something). From Inheritance, every possible object is causally active. And, if every possible object is causally active, Eleaticism is true: it is not possible that something exist without being causally active.

Inheritance is a plausible thesis regardless of one's preferred metaphysics of objects. Since properties confer their causal powers upon the objects that instantiate them, any object that instantiates a causally active property is therefore causally active in the weak sense required by the Eleatic. The more controversial thesis is Instantiation. And, as I will now argue, its plausibility depends greatly upon one's background commitments regarding the metaphysics of objects.

⁴⁴ Here, the denial of metaphysical structural complexity is not the denial that objects might have other kinds of complexity. Most notably, the no-structure theorist is not committed to denying that some objects have mereological structure—e.g., by having proper parts. This leaves open some difficult questions about the interaction of metaphysical and mereological structure—e.g., what, if any, correspondence holds between the mereological atoms that compose an object and the bare particulars or bundles that compose the relevant atoms? I set these questions aside here.

Of the competing views about the metaphysics of objects, only bundle theory immediately entails Instantiation. This is because, for bundle theorists, objects are nothing more than collections of compresent properties, so it is incoherent to suppose some object exists without thereby bearing one of its constituent properties.

For substratum theorists, Instantiation proves controversial. According to certain substratum theorists, absolutely bare particulars—i.e., bare particulars that instantiate no properties—are possible. ⁴⁵ For others, every object must comprise both a bare particular and at least one property, so absolutely bare particulars are impossible. Clearly, if absolutely bare particulars are impossible, substratum theory entails Instantiation. But, if such entities are possible, substratum theorists can reasonably deny Instantiation and thereby block the present argument for Eleaticism.

Should we believe in the possibility of absolutely bare particulars? Only if we can provide plausible examples of what such entities might be. For my part, I take abstract entities like sets or numbers to be the best candidates for being absolutely bare particulars. Since these entities instantiate no sparse universals, they are plausibly viewed as absolutely bare particulars, individuated only by their relations to other abstract objects. It would seem, then, that platonists have some reason to take absolutely bare particulars seriously, while nominalists—motivated by something other than Eleaticism—are well-positioned to reject the possibility of absolutely bare particulars and endorse Instantiation.

Bundle theorists must accept Instantiation, and certain substratum theorists are similarly committed. Our third view, the no-structure theory, is neutral on Instantiation. Since it is compatible with a range of views about the nature of properties, it is far less clear what no-structure theorists ought to think of the modal connection between objects and their properties. As a consequence, we have something like a lesson for Eleatic sympathizers: when it comes to the metaphysics of objects, bundle theory and certain versions of substratum theory make the move from Property to Object Eleaticism a natural one.

§8. Ostrich Eleaticism

For some, the appeal of Eleaticism lies primarily in its role as an argument for nominalism. Those so inclined will find the preceding argument for Eleaticism unsatisfying given its anti-nominalist commitment to the existence of properties. It is worth considering, then, whether those who deny the existence of properties can appropriate the preceding argument while avoiding commitment to properties. Specifically, it is worth considering whether "Ostrich nominalists" can offer a version of the argument for Property Eleaticism. Recall that for Ostrich nominalists there are no properties. Instead, our best theories include a plurality of primitive predicates that,

⁴⁵ Note that, given our attention to the sparse conception of properties, talk of absolutely bare particulars does not require that such entities like all properties, abundantly conceived. Such entities are still plausibly held to "instantiate" properties like *being a bare particular* and *being self-identical*. Their status as absolutely bare particulars owes instead to their lacking any sparse properties like *mass* and *charge*.

while true of objects, express no universals, tropes, or classes.⁴⁶ Like the causal operator of the ideological causal realist or the tense operators of the presentist, the Ostrich nominalist's "properties" are not ontological commitments; they are irreducible ideological commitments required to properly describe reality.⁴⁷

Since the argument for Property Eleaticism turns on a thesis about the individuation of properties, an Ostrich nominalist version of that argument would treat the individuation of primitive predicational ideology in parallel to causal essentialism. Specifically, it would require that each predicate, when true of an object, entails some distinctive causal facts about that object. For example, if *is negatively charged* is true of an object *A*, then it is true that *A* would repel another object which *is negatively charged* is true of. Intuitively, such a principle would require primitive predicational ideology to be "individuated" by its contribution to the causal facts concerning objects. Call this kind of view *Ostrich causal essentialism*.

If Ostrich causal essentialism is true, each primitive predicate makes a distinctive contribution to the causal character of objects and, in turn, the world's causal-nomic structure. Since each primitive predicate makes some contribution to the causal character of objects, there are no predicates that, when true of an object, fail to contribute to the causal character of that object. Such a view points toward the Ostrich nominalist analogue of Property Eleaticism: the view that there are no acausal primitive predicates. However, it remains unclear how the Ostrich nominalist might establish the relevant analogues of Inheritance and Instantiation to ensure the move from Ostrich "Property" Eleaticism to Object Eleaticism.

Perhaps the best place to start is with an ideological analogue of Benacerraf-style arguments: grasping a primitive predicate requires that the predicate in question, when true of objects, entails that object has certain distinctive causal powers. If a primitive predicate failed to confer causal powers upon an object, there would be no way to explicate our meaningful deployment of the predicate. Since predicates that fail to make causal contributions to objects are ungraspable, no successful theory of the world will invoke ungraspable, causally inert predicates. We are therefore rationally required to deny that predicates of this sort are true of objects. Furthermore, there are no conditions under which we would have grounds to include an object in our best metaphysical theories unless some primitive predicate was true of it. But, since any object worth including in our best metaphysical theories is the subject of some primitive predicate, our metaphysical theories will include only objects that are causally active.

Like Benacerraf-style arguments, the above argument faces several serious challenges. First, this proposed causal constraint on ideology is surely more controversial than our antecedent commitment to claims that involve apparently acausal predicates like *being even* or *being a member of*. For this reason, many will find this constraint simply implausible. Second, the realist about ideology who holds ideological

⁴⁶ On Ostrich Nominalism, see Van Cleve (1994).

⁴⁷ More accurately: certain predicates will be bits of primitive ideology, while some complex predicates will be definable in terms of these primitives.

structure to be importantly mind-independent might deny that our inability to grasp certain primitives suffices to show that there are no acausal predicates true of objects. It seems, then, that the Ostrich nominalist can appropriate the preceding argument for Eleaticism only by successfully extending the Benacerraf-style argument to the domain of ideological commitments. But, since the prospects for doing so are uncertain, the Ostrich nominalist will likely have to look elsewhere for an argument for Eleaticism.

§9. Ideological Eleaticism

In preceding sections, I've shown that, given certain background assumptions, Eleaticism is a plausible commitment. In this section, my aim is more speculative. I introduce and examine a novel metaphysical thesis, *Ideological Eleaticism*, which extends the Eleatic causal constraint on ontology to ideology by rejecting any primitive ideology that is not causal in character.

Ideological Eleaticism is most naturally understood within the context of two broader metaphysical commitments. The first, *sparse ontology*, investigates the minimal ontological commitments required for the provision of our best metaphysical theories. The second, *ideological realism*, investigates the ideological elements of metaphysical structure that are distinct from ontology. By extending the Eleatic causal constraint to the domain of ideology, Ideological Eleaticism presupposes ideological realism and therefore takes seriously the role of ideology within metaphysical structure. And, by paring away other ideological commitments, Ideological Eleaticism mirrors the methodological ambitions of sparse ontology by investigating the minimal ideological commitments required by our best metaphysical theories. Properly understood, Ideological Eleaticism is a thesis in *sparse ideology*, which investigates the minimal ideological commitments needed for a suitable metaphysical theory. ⁴⁹

For Ideological Eleatics, there is a unique fundamental metaphysical primitive: the causal-nomic necessitation operator. While commitment to this operator can be motivated in several ways (e.g., as means of providing an account of time's direction), the primary challenge for the Ideological Eleatic is making do without other familiar bits of primitive ideology. Here, I will assume that the Ideological Eleatic admits a broad range of logical resources, including plural quantification, and familiar truth-functional operators. Far more controversially, I will assume that these logical resources subsume mereology thereby allowing the Ideological Eleatic the resources of classical extensional mereology. In doing so, I take Ideological Eleaticism to be a thesis that concerns characteristically metaphysical primitives but does not extend to the domain of broadly logical primitives. The challenge for Ideological Eleaticism therefore turns on providing

⁴⁸ On ideology as a worldly matter, see Sider (2012).

⁴⁹ It is natural to view the Harvard Nominalism of Goodman and Quine as a project aimed at sparse ontology and ideology. Recall that Quine, when considering whether to deploy modal concepts to resolve challenges to finitism, says "the cure would be worse than the disease." So, while nominalism is typically understood as the ontological thesis that there are no abstract entities, Harvard Nominalism is a stronger thesis, rejecting both an ontology of abstract entities as well as any modal or intensional ideology. See Burgess (2008) for discussion.

a plausible metaphysical theory with these broadly logical resources as well as the metaphysical ideology of causal-nomic necessitation. As I will now suggest, the resulting view is controversial but leads to interesting metaphysical consequences.

Modal and tense operators are familiar ideological commitments. Moreover, as noted in Section Nine, they bear close parallels to one another: actualists accommodate the modal dimension of reality through commitment to primitive modal operators, while presentists accommodate the temporal dimension through the ideology of tense operators. Since modal and tense operators are distinct from the causal-necessitation operator, the Ideological Eleatic must eschew them. But, given the variety of modal and temporal facts, the Ideological Eleatic must therefore reject actualism and presentism and accommodate modality and temporality through modal realist and eternalist means—i.e., by quantifying over merely possible and non-present entities. ⁵⁰ A commitment to Ideological Eleaticism therefore requires the expansion of ontology in order to avoid illicit non-causal ideology.

Bundle theory, substratum theory, and the no-structure theory were surveyed above as competing views about the metaphysics of objects. Some of these come with ideological commitments that are incompatible with Ideological Eleaticism. For bundle theorists, the compresence relation that bundles together properties and individuates objects is an element of primitive ideology. For substratum theorists, the relation of instantiation that unifies properties with bare particulars is taken as primitive ideology, and, like the causal-nomic necessitation operator, it corresponds to no entity in the world. Since compresence and instantiation are not causal-nomic necessitation, Ideological Eleatics seem required to abandon both bundle and substratum theory in favor of the no-structure theory, which denies compresence or instantiation any place in the world's metaphysical structure.

Now, while Ideological Eleatics ought to be no-structure theorists, there is an apparent tension between Ostrich nominalism and Ideological Eleaticism. This is because Ostrich nominalism seems to require a widespread violation of Ideological Eleaticism. Note, for example, the most familiar version of no-structure theory is Ostrich Nominalism, according to there are no properties, but, instead, a plurality of primitive predicates that are true of objects. So understood, the no-structure theorist that endorses Ostrich Nominalism is thereby committed to an explosive and objectionable ideology of primitive predicates. And, since all of these predicates are distinct from the causal-nomic necessitation operator, no-structure theory coupled with Ostrich Nominalism seems at odds with Ideological Eleaticism. But is Ideological Eleaticism untenable given that primitives are unavoidable when providing a metaphysics of objects? Not really.

Recall that Ontological Eleaticism required careful attention to the relevant notion of causal activity required for ontological commitments. In a similar vein, Ideological Eleaticism is plausible only when we note that causal ideological primitives are of two kinds. Not only is there the primary ideological primitive of causal-nomic

⁵⁰ On the presentist/eternalist debate, see Sider (2001). On the possibilist/actualist debate, see Lewis (1986).

necessitation, there are also primitive predicates that, when true of objects, constrain the causal-nomic necessitation relations among those objects. On this broader understanding of causal ideological primitives, commitment to primitive predicates like *has n mass* or *is an electron* is consistent with Ideological Eleaticism, since these primitives make a causal contribution to the world by virtue of holding true of objects. Put differently: Ideological Eleatics can accept Ostrich Nominalism and no-structure theory so long as the only primitive predicates are those that a property realist would deem to be causally active properties. In this way, the Ideological Eleatic can reconcile her view with the no-structure theory and the nominalist metaphysics of objects Ontological Eleaticism requires. ⁵¹

As we've seen, Ideological Eleaticism has wide-ranging metaphysical consequences. In particular, I've argued that the Ideological Eleatic ought to be both and eternalist and a modal realist. This latter commitment is especially surprising and represents an odd intersection between Eleaticism and the ontological commitments defended in Lewis (1986). What is perhaps most striking is that the argument from Ideological Eleaticism is a novel route for defending modal realism that requires a kind of full-blooded realism about causality at direct odds with Lewis' reductionist views of causality and nomicality.

For the Eleatic, causality and ontology are inseparable. Above, I presented what I take to be the strongest case for the most plausible version of Eleaticism. After doing so, I've outlined a far more tentative proposal for how Eleaticism might be extended to the domain of ideology. On the resulting view, all metaphysical structure, whether ontological or ideological, is causal structure. And, whether or not Ideological Eleaticism is a tenable view, we've seen both that the commitments of Eleaticism can be extended beyond the domain of ontology and that the project of sparse ideology is fertile ground for novel metaphysical proposals.⁵²

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⁵¹ The consequences of Ideological Eleaticism extend considerably farther than those briefly noted above. For example, certain views about substantivalism that view occupation as a primitive piece of ideology are ruled out. Similarly, certain views of naturalness are ruled out if they are not suitably tied to the primitive ideology of causal-nomic necessitation. Additionally, the Ideological Eleatic might have to do without set theory unless it is reconstructed along the lines of the megethological structuralism presented in Lewis (1991). Thanks to Cameron Gibbs for discussion on these points.

⁵² For helpful discussion and comments, thanks to Ben Caplan, Christopher Daly, Dan Giberman, Cameron Gibbs, Barak Krakauer, Meg Wallace, and Kelly Trogdon.

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