

Oxford Handbooks Online

Ontological Dependence and Grounding in Aristotle

Phil Corkum

Subject: Philosophy, Classical Philosophy, Metaphysics Online Publication Date: Jun 2016

DOI: 10.1093/oxfordhb/9780199935314.013.31

Abstract and Keywords

The relation of ontological dependence or grounding, expressed by the terminology of separation and priority in substance, plays a central role in Aristotle's *Categories*, *Metaphysics*, *De Anima* and elsewhere. The article discusses three current interpretations of this terminology. These are drawn along the lines of, respectively, modal-existential ontological dependence, essential ontological dependence, and grounding or metaphysical explanation. I provide an opinionated introduction to the topic, raising the main interpretative questions, laying out a few of the exegetical and philosophical options that influence one's reading, and locating questions of Aristotle scholarship within the discussion of ontological dependence and grounding in contemporary metaphysics.

Keywords: Aristotle, ontological dependence, grounding, substance, metaphysical explanation, *Categories*, *Metaphysics*

Relations of ontological dependence or grounding play a central role in Aristotle's thought. For example, the ontology of the *Categories* is arguably structured by dependence relations. The discussions of demonstration in the *Posterior Analytics* and causation in the *Physics* draw heavily on kindred notions of explanation. A key question raised in the *De Anima* arguably is whether any part of the soul is independent of the body. And the *Metaphysics* is primarily concerned with questions of fundamentality. My aim in the following is to provide an opinionated introduction to the topic. I'll raise the main interpretative questions and lay out a few of the exegetical and philosophical options that influence one's reading.

1. Separation and priority

Separation and priority terminology often refers to notions of ontological dependence or grounding in Aristotle, and I'll begin with a few introductory comments on this terminology. Some of what follows rehearses material discussed at length in Corkum 2008, 2013a, and 2013b.

Ontological Dependence and Grounding in Aristotle

The Greek *chôris* and its cognates, when unqualified, typically in Aristotle refers to the separation that he ascribes to primary substances. (When qualified, the term can refer to other notions, such as local, temporal, or definitional separation.) Although it is controversial what substances are, and whether Aristotle holds a consistent view through the corpus, he appears to hold in the *Categories* that mid-sized ordinary objects—least controversially, individual living organisms—are primary substances. Aristotle does not define this notion of separation. But G. Fine (1984) persuasively argues from evidence such as 1217^b10–15 that Aristotle associates separation and the notion of priority in substance. One thing being separate from another and the second being inseparable from the first are jointly sufficient for the first to be prior in substance to the second. Aristotle characterizes such priority at *Metaphysics* 5.11 (1019^a1–4):

T1 Some things then are called prior and posterior ... in respect of nature and substance, such as those which can be without (*einai endechetai aneu*) other things, while the others cannot be without them.

This notion of natural priority, or priority in substance, needs to be distinguished from various other senses of priority, such as definitional priority, contrasted with priority in substance also in *Meta.* 5.11. For a discussion of these various senses of priority, see Cleary 1988. The relation between separation and priority in substance suggests a characterization of separation:

A is *separate* from B just in case A can be without B.

There are a variety of interpretative options for reading this characterization. But before canvassing a few interpretations, I will discuss the extension of the notions of separation and priority in substance.

Corkum (2008) argues that there is good reason to ascribe to Aristotle the following:

PRIMACY

individual substances are separate from, and prior to, both non-substances and universal substances, and both non-substances and universal substances are inseparable from, and posterior to, individual substances.

Aristotle claims, for example at *Physics* 185^a31–2 and *Meta.* 1029^a27–8, that substances, alone of the categories, are separate. He holds that substances are prior to non-substances. Consider *Meta.* 12.1 (1069^a20): “substance is first, and is succeeded by quality, and then by quantity.” This, along with the relation holding between separation and priority, suggests that non-substances are inseparable from substances. Furthermore, Aristotle holds in the *Categories* that individual substances are prior to, and so separate from, universal substances. At *Cat.* 5 (2^a11–19), he calls individual substances primary with respect to universal substances and universal substances secondary with respect to individual substances. And generally, Aristotle holds that the ontological status of all

Ontological Dependence and Grounding in Aristotle

other kinds of entity are somehow dependent on primary substances; for example, he claims at 2^a34–b7:

T2 All the other things are either said of the primary substances as subjects or present in them as subjects.... [C]olor is present in body and therefore also present in an individual body; for were it not present in some individual body it would not be present in body at all.... So if the primary substances did not exist it would be impossible for any of the other things to exist (*adunaton tôn allôn ti einai*).

I have followed the Ackrill (1963) translation in taking the Greek *einai* existentially. I will discuss in section 3 whether this is the right interpretation.

It is not uncontroversial whether Aristotle consistently endorses PRIMACY. For example, on some readings of *Metaphysics* Zeta, Aristotle abandons the thesis that individual substances are separate from universal substances. I will flag some of the consequences of this controversy below. For more details, see Corkum (2013a, 52–54). But if we can ascribe the thesis to Aristotle, then PRIMACY provides a condition of adequacy for any interpretation of separation and priority in Aristotle.

2. Modal-existential reading

I will discuss three interpretations of separation and priority. As will become clearer, one might view these lines of interpretations as viewing separation and priority along the lines of, respectively, a modal-existential construal of ontological dependence, an essential construal of ontological dependence, and grounding. Before I begin, I will address a concern. For one might question this approach. My aim here is to locate questions of Aristotle scholarship within the discussion of ontological dependence and grounding in contemporary metaphysics. Of course, I hope to avoid the imposition of anachronism. And I do not ascribe to Aristotle a contemporary interest in the *explication* of dependence and grounding. But I believe it is useful for the historian to appreciate our best current understanding of these issues, and for the contemporary metaphysician to appreciate the Aristotelian contribution to the debate.

Until recently, a standard formulation of ontological dependence was expressed in terms of existence conditions. Simons (1987), for example, holds that something is ontologically dependent on something else when the first cannot exist unless the second exists. One way of fleshing out this proposal is as follows:

One entity ontologically depends on a second entity just in case necessarily, if the former exists, then the latter exists.

An influential interpretation of separation and priority terminology in Aristotle follows the general lead of this formulation. The leading proponent is G. Fine; for other advocates,

Ontological Dependence and Grounding in Aristotle

see the discussion in Peramatzis 2008, 187–188 n. 2. G. Fine (1984) argues for the following:

EXISTENTIAL

A is *separate* from B's just in case A can exist without B's.

And on a corresponding condition for priority, A is *prior* to B's just in case A cannot exist without B's but B's cannot exist without A. Recall that in passages such as **T1**, Aristotle claims that what is prior can be without (*einai endechetai aneu*) what is posterior; and in **T2**, he claims that, if primary substances did not exist, it would be impossible for any of the other things to exist (*adunaton tôn allôn ti einai*). EXISTENTIAL takes the Greek *einai* in such passages existentially and the *endechetai* and *adunaton* modally. As we will see, this is not the only way to read the Greek, but, so read, ontological independence is taken to be a capacity for realizing a certain condition of existence.

EXISTENTIAL has met with recent criticism. Corkum (2003 and 2008) argues that EXISTENTIAL fails to meet the demands imposed by the condition of adequacy, PRIMACY. EXISTENTIAL is ambiguous between two readings, which resemble respectively rigid and general modal-existential construals of ontological dependence as discussed by Simons (1987), Correia (2008: 1015), and others.

EXISTENTIAL₁

A is *separate* from B's just in case, for any given B, A can exist without *that* B.

EXISTENTIAL₂

A is *separate* from B's just in case A can exist without any B whatsoever.

Neither reading conforms to PRIMACY. First, individual substances do not exhibit EXISTENTIAL₁ with respect to all kinds of non-substances. Consider *propria*, necessary but inessential properties. An individual substance cannot exist without its *propria*. A traditional example—not Aristotle's—of a *proprium* for humans is risibility. If risibility is indeed a *proprium* for humans, then Callias cannot exist without risibility. Consider also non-substantial universals such as color. It seems entirely plausible that substances cannot exist apart from such general properties: Callias cannot exist colorless. Individual substances also fail to exhibit EXISTENTIAL₂ with respect to non-substances. An individual substance such as Callias cannot exist denuded of all attributes whatsoever. Of course, one response for those who would continue to endorse a version of EXISTENTIAL is to reject PRIMACY. For discussion of this response, see Burnyeat et al. (1979, 4–5) and Corkum (2008, 73–74).

However, the question whether EXISTENTIAL is generally applicable to cases of ontological priority does not rest entirely on PRIMACY. Corkum (2008, 75) argues that in *Cat.* 12 (14^b10–22) Aristotle asserts that there are cases where what is prior in substance cannot exist without what is posterior. Peramatzis (2011, § 10) provides a host of other

arguments against EXISTENTIAL. For example, he argues that EXISTENTIAL is incompatible with **T1** when considered in its context in *Meta.* 5.

3. Essentialist reading

I turn to the second interpretation of separation. Frede and Patzig (1988), Spellman (1995), Peramatzis (2008, 2011), and (with a qualification mentioned later in this section) Beere (2009) ascribe to Aristotle an essentialist account of ontological priority. K. Fine has influentially argued for an account of ontological dependence in terms of essence, identity, and definition. An essence, as detailed in K. Fine (1994), is not a merely necessary attribute but a collection of propositions true in virtue of that entity's identity. An essence is expressed by a real definition. Unlike a nominal definition, which states what a competent speaker of the language understands, a real definition states what the defined object is. These considerations suggest the following formulation:

One entity ontologically depends on a second entity just in case the latter is a constituent in the former's essence—equivalently, just in case the latter is a constituent in a proposition that expresses a real definition of the former.

The leading idea of this formulation is that ontological dependence is a narrower relation than an incapacity for separate existence. Attributes do not depend on substances merely, since they cannot exist apart from some substance or other. Rather, a specification of what it is to be a certain attribute makes reference to substances. To illustrate, a specific color might be defined as a certain reflective property of the surface of corporeal substances. The definition of the color thereby would make reference to substance. Corporeal substances are necessarily colored. But the definition of any substance could be given without any reference to colors.

Recall from **T1** that Aristotle takes one entity to be prior in substance from another if the first "cannot be (*einai*) without" the other. G. Fine, we have seen, takes *einai* existentially. By contrast, essentialists take *einai* in the "can be without" formulation not existentially but essentially. That is, they read priority in nature and substance as entailing that just one *relata* can be what it is without the other. So, for example, Peramatzis (2008: 189) offers the following interpretation of ontological priority:

A is ontologically prior to B iff A can be what it is independently of B being what it is, while the converse is not the case.

Peramatzis cashes out independence in a thing's essence by appeal to non-reciprocal reference in a definition or account of what that thing is. This suggests the following account of separation:

ESSENTIAL

A is *separate* from B just in case an account of what A is makes no reference to an account of what B is.

Ontological Dependence and Grounding in Aristotle

And A is *prior* to B just in case an account of what A is makes no reference to an account of what B is, but an account of what B is makes reference to A. Several authors have raised worries for ESSENTIAL. Corkum (2013a, 51) finds that the account requires an implausible reading of the Greek expression *einai endechetai aneu*, translated as “can be without” in **T1**. And Witt (2012) and Corkum (2013a, 51) note that the account arguably conflates priority in definition and priority in substance; recall that Aristotle distinguishes these kinds of priority at *Meta*. 5.11 (1018^b30–37). Panayides (2014, 233) responds to this worry.

Perhaps most problematically, it seems that ESSENTIAL does not cover every relevant case of separation and priority in substance. Although the formulation may express, in Aristotle, the dependence of non-substances on substances, Corkum (2013a, 51–52) argues that it is less clear that the dependence of universal substances on individual substances is captured by ESSENTIAL. In the *Categories*, Aristotle appears to hold that items in the category of substance such as a genus are somehow ontologically dependent on those individual substances that are members of that genus. However, suppose that one entity ontologically depends on a second entity just in case the latter is a constituent in a proposition that expresses a real definition of the former. Then an individual substance, if definable, depends on the constituents of its definition: its species, genus, and differentia. So the ontological PRIMACY of individual substances may be violated by a definitional or essentialist construal of ontological dependence. As such, ESSENTIAL is inconsistent with PRIMACY. And indeed, Peramatzis (2011: §11) rejects PRIMACY: non-substances are ontologically dependent on individual substances, but universal substances are independent from individual substances. So again, the issue partly concerns the truth of PRIMACY. Malink (2013, 360) makes the similar point that Peramatzis’s proposal cannot explain Aristotle’s claim at *Meta*. 13.2 (1077^b1–9) that “non-substance attributes are not ontologically prior to accidental compounds (whereas substances are ontologically prior to them).”

However, the question whether ESSENTIAL is generally applicable does not rest entirely on PRIMACY. Corkum (2008, 75) notes that some ontological dependency relations are existential: for example, *Cat.* 12 (14^a30–35) concerns reciprocity of existence. And Malink (2013, 356) notes that Aristotle’s claim in *Meta* 9.8 (1050^b6–7) that eternal things are prior in substance to perishable things is standardly taken to be the claim that eternal things can exist without perishable things but perishable things cannot exist without eternal things. Beere (2009, 298) views priority in substance as corresponding occasionally to EXISTENTIAL and occasionally to ESSENTIAL. Witt (2012) also criticizes Peramatzis on the grounds that “ontological priority in Aristotle is a mélange of existential and essential dependency relations.” Panayides (2014, 235) aims to defend ESSENTIAL, responding that, in passages such as *Phys.* 8.7 (260^b15–29), Aristotle distinguishes existential priority from priority in substance. But Malink (2013, 357–358) argues that this passage concerns priority in substance, needs to be read along the lines of EXISTENTIAL, and so priority in substance is not generally ESSENTIAL.

4. Grounding reading

Now, the third interpretative line on separation and priority. It often happens in philosophy that we want a specifically metaphysical explanation. To repeat an example used by Bliss and Trogdon (2014) and others, Plato claims that an act is loveable to the gods in virtue of its being pious. The relation between an act being pious and its being loveable to the gods appears to be an explanation, but it is not one of a variety of common kinds of explanations. For example, the relation is not causal—being pious does not cause a thing to be loveable to the gods in the more restricted contemporary sense of causation, arguably a diachronic relation among events. Nor is the relation a generalization—being pious does not merely typically correlate with being loveable to the gods. Call our target relation *grounding*. The grounding relation is the converse of the *in virtue of* relation: A *grounds* B just in case B obtains in virtue of A.

It is increasingly standard in contemporary metaphysics to distinguish ontological dependence from grounding. As we have seen, ontological dependence is a relation by which the existence or identity of one relatum depends on that of the other. Such relations need not be explanatory. Tahko and Lowe (2015) argue that grounding is a notion distinct from ontological dependence, in part on this basis. To repeat their example, the existence of water *depends* on the existence of hydrogen and oxygen, but the mere existence of hydrogen and oxygen does not *explain* the existence of water. Although the distinction is not made consistently in contemporary metaphysics, a rough and ready contrast between ontological dependence and grounding is useful in characterizing the range of interpretation of separation and priority terminology in Aristotle scholarship. For example, one might say that G. Fine (1984) and Peramatzis (2011) are characterizing separation and priority in terms of, respectively, a modal-existential and an essentialist construal of ontological dependence. The third line of interpretation, developed in Corkum (2003, 2008 and 2013a), characterizes this terminology in terms of grounding.

Corkum (2008: 77) offers a condition on separation along the following lines. A is *separate* from B if A has the ontological status of a being independently of standing in some tie to B. And A is *prior* to B if A has the ontological status of a being independently of standing in some tie to B, but B has its ontological status in virtue of standing in a tie to A. So, if A is prior to B, B standing in a tie to A grounds B having its ontological status. I'll unpack the proposal momentarily, but first I'll note that the condition on being separate is ambiguous in the same way as EXISTENTIAL. Corkum (2008) argues that one disambiguation,

A is *separate* from B's if, for any given B, A has the ontological status of a being independently of standing in some tie to *that* B,

conforms to PRIMACY. For example, individual substances exhibit the condition. Individual substances are classified as beings independently of standing in any tie to anything else—independently, that is to say, of being *present in* or *said of* any other

Ontological Dependence and Grounding in Aristotle

beings. Universals and non-substantial individuals fail to exhibit the condition. Although generosity, for example, does not depend on Callias, the property would not have the ontological status it enjoys were there no generous people whatsoever. For the details concerning universal substances and non-substantial individuals, see Corkum (2008 and 2009).

Miller (2012, 329 n. 14) expresses concern with the resulting apparent lack of a modal feature to *chôristos*, and with the use of the “tie” terminology, in Corkum’s proposal. But for a discussion of the distinction between the state of separation and the capacity of separability, see Morrison (1985c) and Corkum (2008, 80 n. 13); and on the use of “tie,” see Corkum (2008, 77 n. 10).

Peramatzis (2011, 243 n. 11) and Koslicki (2013, 8 n. 6) understandably find it insufficiently specified in Corkum (2008) what constitutes the admission of an ontological status. The immediate aim in Corkum (2008) is to provide not a general account of all cases of metaphysical explanation in Aristotle, but a restricted account of the explanation of ontological status. On this line, the priority of primary substances and posteriority of universals and non-substances partly concern the provision of a rationale for inclusion in the ontology of the *Categories*. For example, redness has its ontological status (equivalently: it is an item of a certain category in the ontology) in virtue of there being red substances—or, more precisely, because there are red things that are primary substances to which it stands in a tie. It is because the color stands in a certain tie to the red things, and the red things are substances, that the color is included in the categorical classification.

Although the aims in Corkum (2008) are modest, the proposal may be developed into a more generally applicable account of metaphysical explanation. In some cases, the ground for the ontological status of an item can also ground its identity or definition, somewhat along the lines of ESSENTIAL. An account of what it is to be red—that is to say, *how* red is, and how it differs from, for example, other colors—references a way substances are. As we have seen, in other cases, the definition of the item does not seem to follow from the grounding of the ontological status of the item. For example, if PRIMACY is true, humanity is an item because there are humans who are primary substances. But what it is to be human is to be an animal of a certain kind, and an account of humanity does not make reference to individuals. Of course, much more work needs to be done to spell out the details. Corkum (2013a) makes a beginning on this work. The approach may be useful beyond Aristotle studies. For example, Thomas (2014, 189) adopts aspects of the proposal for the interpretation of Plato’s views on dependence.

5. Explanation

Let me make a few further remarks on explanation. Grounding, recall, is taken to be a specifically metaphysical explanation. Such explanations are not sensitive to aspects of our epistemic situation such as what we understand. However, other kinds of explanations are typically sensitive to requirements of the relevant epistemic agents, and

Ontological Dependence and Grounding in Aristotle

so governed are by values such as salience, fecundity, and conservativeness. One might wonder then in what sense grounding is a kind of explanation if it is not constrained in these ways. An attractive alternative is to view grounding as a relation which back explanations. See Ruben (1990) for such an approach to explanation generally, and Schaffer (2009), among others, for its application to grounding. Applying this line to Aristotle, a way a substance is, say, provides the basis for the explanation of a quality—or, rather, the basis for a range of explanations that vary according to differing epistemic situations and values.

Many contemporary metaphysicians hold that, since grounding is connected to explanation, the relation is factive. Sider (2012, chapt. 8) notes that an apple explains nothing, whereas the fact that it's red may do explanatory work. Koslicki (2015) also argues that grounding is a relation between facts or propositions. See Bliss and Trogdon (2014) for discussion of the issue. If grounding is indeed factive, then it may be unattractive to ascribe to Aristotle the view that, for example, substances ground non-substances. (Thanks to Kathrin Koslicki for the objection.) The proposal in Corkum (2008), however, is not that primary substances ground other entities, but that a primary substance's admission of its ontological status grounds the admission of the ontological statuses of other entities, and that this is sufficient for a primary substance to be prior to, and separate from, those other entities. To return and apply a similar line of thought to Tahko and Lowe's (2015) example, although H₂O depends on H and O, H and O do not ground H₂O. But H and O are key constituents in a metaphysical explanation involving H₂O. The *relata* backing explanations are not entities. It is not H and O that explain or back an explanation, but rather a proposition of the form *H and O are so-and-so related* that is the *explanans*, or that which backs an *explanans*. Likewise, it is not H₂O that can be explained; rather a proposition of the form *H₂O is so-and-so* is the *explanandum*. The *explanations* are factive or propositional, although the *relata* in the relation that backs the explanations are objects in the ontology. So, too, separation and priority relations relate items in the Aristotelian ontology when grounding relations obtain among certain propositions involving these items.

What are Aristotle's views on explanation? It may prove fruitful to incorporate Aristotle's discussion of demonstration in the *Posterior Analytics* and causation in the *Physics* and elsewhere. Demonstrations are syllogisms with premises that meet several requirements: for example, the premises are necessary, explanatory of, and prior to, the conclusion. Aristotle's four causes provide explanations broader than our notion of causation. For example, Aristotelian causal relations include both synchronic and diachronic relations, and unlike the standard view of contemporary causation, the *relata* are not restricted to events. Of course, to note that Aristotelian causation is an explanatory notion distinct from the contemporary notion of causation is not to say that Aristotelian causation is the distinctly metaphysical explanation targeted by most contemporary discussions of grounding. For example, K. Fine (2012) distinguishes metaphysical grounding from natural and normative versions, and we might view Aristotelian causation as better assimilated to one of these latter construals of explanation.

Ontological Dependence and Grounding in Aristotle

Many take the relation of metaphysical explanation to be irreflexive, asymmetric, transitive, and hyperintensional. See, for example, Schaffer (2009), Trogdon (2013), Audi (2012), and Raven (2013)—although Jenkins (2011) questions whether grounding is irreflexive. I have focused on only two of these features in the discussion of separation and priority in section 1. The upshot of the rejection of EXISTENTIAL is that priority in substance is hyperintensional—at very least for the *Categories* ontology. And PRIMACY asserts the asymmetry of priority in substance, again at least when the *relata* are items from the ontology of the *Categories*. An irreflexive, asymmetric, and transitive relation is a partial ordering, and so the grounding relation imposes structure on Aristotle's ontology. Aristotle holds that categorical propositions mirror ontology, and so this structure is reflected in Aristotle's semantics, and some recent work aims to describe the structural relations among categorical propositions. Malink (2009), for example, characterizes aspects of Aristotelian semantics in terms of preorders (irreflexive and transitive relations). And Mignucci (1996) and Corkum (2015) characterize Aristotelian semantics in mereological terms (the part-whole relation is arguably a partial order).

Is metaphysical explanation an unitary or variegated notion? Many today hold that grounding is unitary: see, for example, Schaffer (2009) and, for discussion, Bliss and Trogdon (2014). Koslicki (*forthcoming*) and Wilson (2014) argue for a kind of grounding scepticism on the basis of the premise that there is not a unitary notion embracing all cases of grounding, and so the alleged notion of grounding is none of species, genus, or determinable. For example, Koslicki contrasts various grounding relations within a case involving the determinable-determinate distinction and argues that there is insufficient commonality to the relations in this case to support the postulation of a relation of grounding embracing all relations of metaphysical explanation. M. Cameron (2014) investigates an alternative: grounding is a focally connected homonym. On this line, roughly, "grounding" is ambiguous among various senses, but there is a core sense operative in all cases. (I discuss homonymy further later in this section). Koslicki (*forthcoming*, n. 3) doubts that there is the core sense of grounding operative in all cases required to support Cameron's suggestion.

We have seen one kind of pluralism with respect to priority in substance: several scholars hold that priority in substance in Aristotle is variously EXISTENTIAL and ESSENTIAL. Corkum (2008, 82) canvasses a different kind of priority pluralism: there may not be anything common to the various ways in which one entity is separate from another, beyond conformity to such restrictions as PRIMACY. Similarly, Corkum (2013a, 58) notes that the observation that priority relations impose a partial ordering on Aristotle's ontology underdetermines the relation. And indeed, there may not be a unitary account of priority in substance beyond these formal characteristics shared among several distinct relations. The suggestion is that there may not be a relation of grounding over and above the extant relations recognized in Aristotle. Rather, certain of these relations can, in certain contexts, serve to ground—that is to say, to back—metaphysical explanations.

Ontological Dependence and Grounding in Aristotle

Even converse relations can serve to ground in different contexts. For example, Aristotle holds at *Meta.* 5.25–26 that the part-whole relation is said in many ways, including what became known as integral and distributive parts and wholes. Integral parts are posterior to their wholes. For example, the parts of an organic body are explained by reference to the whole. What it is to be a body part is to be something integrated with other parts and so capable of contributing to the activities characteristic of the living thing. Distributive parts, by contrast, are arguably prior to their wholes. Aristotle at least occasionally views universals as distributive wholes explained by reference to the individuals that constitute them. For discussion of this view of universals, see Tweedale (1987) and Corkum (2013a). Notice that this line of interpretation employs an unorthodox view of multivocality and its kindred notion of homonymy, central devices in Aristotle. On a standard view of these notions, Aristotle’s claim that “part” is said in many ways is the claim that “part” is ambiguous among several distinct senses, each picking out a distinct mereological relation. See Owen (1960) for the interpretation of homonymy in terms of senses; Irwin (1981) for an interpretation in terms of referents; and Shields (1999) and Ward (2007) for book-length discussions of homonymy. I find this view of the homonymy of parts difficult to understand. I believe that integral and distributive parts and wholes are neither distinct senses of “part” and “whole,” nor distinct relations. Rather, they are distinct explanatory roles for the part-whole relation. This suggests a non-standard view of multivocality as at least on occasion concerned not with distinct senses or referents but with distinct *roles*. Of course, more would need to be said to develop this line of interpretation. But metaphysical explanation in Aristotle may be a multifarious thing, and perhaps the foregoing is sufficient to indicate some of the ways one might cash out priority pluralism.

6. Conclusion

To conclude, I have presented three interpretative lines on separation and priority in substance. These three do not exhaust the options. (To give just one example of an alternative, Morrison (1985a and 1985b) takes one thing to be separate from another if the first is outside the “ontological boundaries” of the second. For discussion, see G. Fine (1985) and Corkum (2008, 82 and 2013a, 43–46).) However, I believe that the three interpretative lines canvassed in this article are the most promising. The choice among these options hinges in part on exegetical issues such as the truth of PRIMACY, and related interpretative questions such as a reading of the *einai endechetai aneu* passage within **T1**, and other passages such as **T2**, 14^b10–22, 260^b15–29, 1050^b6–7, and 1077^b1–9. And the choice among the options hinges in part on such philosophical issues as whether priority in substance is modal-existential ontological dependence, essential ontological dependence, or grounding; whether priority in substance is unitary or pluralist; what are its formal features; what is its relation to explanation; and what is its range of application. Ontological dependence and grounding in Aristotle raise interesting interpretative and philosophical questions; further investigation into Aristotle’s views may prove fruitful both for Aristotle studies and for contemporary metaphysics.

Works Cited

- Ackrill, J. L. (1963). *Aristotle's Categories and De Interpretatione: Translated with Notes and Glossary*. (Oxford: Clarendon Press).
- Audi, P. (2012). "Grounding: Toward a Theory of the In-Virtue-Of Relation." *Journal of Philosophy* 109: 685–711.
- Beere, J. (2009). *Doing and Being: An Interpretation of Aristotle's Metaphysics Theta*. (Oxford: Oxford University Press).
- Bliss, R. and K. Trogon. (2014). "Metaphysical Grounding." *The Stanford Encyclopedia of Philosophy* (Winter 2014 Edition), Edward N. Zalta (ed.), <<http://plato.stanford.edu/archives/win2014/entries/grounding/>>.
- Burnyeat, M. et al. edd. (1979). *Notes on Book Zeta of Aristotle's Metaphysics* (Oxford Study Aids in Philosophy).
- Cameron, M. (2014). "Is grounding said-in-many-ways?" *Studia Philosophica Estonica* 7: 29–55.
- Cleary, J. (1988). *Aristotle on the Many Senses of Priority* (Carbondale: Southern Illinois University Press).
- Corkum, P. (2003). "Ontological Independence in Aristotle's Categories." *Newsletter for the Society for Ancient Greek Philosophy* 4: 1–10.
- Corkum, P. (2008). "Aristotle on Ontological Dependence." *Phronesis* 53: 65–92.
- Corkum, P. (2009). "Aristotle on Nonsubstantial Individuals." *Ancient Philosophy* 29: 289–310.
- Corkum, P. (2013a). "Substance and Independence in Aristotle." in Hoeltje, M., B. Schnieder, & A. Steinberg (eds.).
- Corkum, P. (2013b). "Critical Notice of Michail Peramatzis, *Priority in Aristotle's Metaphysics*, Oxford University Press, 2011." *Canadian Journal of Philosophy* 43: 136–156.
- Corkum, P. (2015). "Aristotle on Predication." *European Journal of Philosophy* 23: 793–813.
- Correia, F. (2008). "Ontological Dependence." *Philosophy Compass* 3: 1013–1032.
- Correia, F. and B. Schnieder edd. (2012). *Metaphysical Grounding: Understanding the Structure of Reality* (Cambridge: Cambridge University Press).
- Fine, G. (1984). "Separation," *Oxford Studies in Ancient Philosophy* 2: 31–88.

Ontological Dependence and Grounding in Aristotle

- Fine, G. (1985). "Separation: A Reply to Morrison." *Oxford Studies in Ancient Philosophy* 3: 159–166.
- Fine, K. (1994). "Essence and Modality." *Philosophical Perspectives* 8: 1–16.
- Fine, K. (2012). "A Guide to Ground." in Correia and Schnieder, pp. 37–80.
- Frede, M. and G. Patzig. ed., trans., and comm. (1988). *Aristoteles: Metaphysik Z*, 2 vols. (Munich).
- Hoeltje, M., B. Schnieder, & A. Steinberg edd. (2013). *Varieties of Dependence: Ontological Dependence, Grounding, Supervenience, Response-Dependence*. Basic Philosophical Concepts. (Munich: Philosophia Verlag).
- Irwin, T. (1981). "Homonymy in Aristotle" *Review of Metaphysics* 34: 523–544.
- Jenkins, C. (2011). "Is Metaphysical Dependence Irreflexive?" *The Monist* 94: 267–276.
- Koslicki, K. (2013). "Ontological Dependence: An Opinionated Survey," in Hoeltje, Schnieder, and Steinberg, pp. 31–64.
- Koslicki, K. (2015). "The coarse-grainedness of grounding." *Oxford Studies in Metaphysics* 9: 306–349.
- Koslicki, K. (forthcoming). "Where grounding and causation part ways: comments on Schaffer." *Philosophical Studies*. 173 (1): 101–112.
- Malink, M. (2009). "A Non-Extensional Notion of Conversion in the Organon." *Oxford Studies in Ancient Philosophy* 37: 105–141.
- Malink, M. (2013). "Essence and Being: A Discussion of Michail Peramatzis, Priority in Aristotle's Metaphysics." *Oxford Studies in Ancient Philosophy* 45: 341–362.
- Mignucci, M. (1996). "Aristotle's Theory of Predication," in A. Ignacio and C. María edd. *Studies on the History of Logic. Proceedings of the III. Symposium on the History of Logic* (Berlin: Walter de Gruyter).
- Miller, F. (2012). "Aristotle on the separability of mind," in *The Oxford Handbook of Aristotle* ed. C. Shields (Oxford: Oxford University Press). pp. 306–339.
- Morrison, D. (1985a). "Separation in Aristotle's Metaphysics." *Oxford Studies in Ancient Philosophy* 3, pp. 125–158.
- Morrison, D. (1985b). "Separation: A Reply to Fine." *Oxford Studies in Ancient Philosophy* 3: 167–174.
- Morrison, D. (1985c). "chôristos in Aristotle," *Harvard Studies in Classical Philology* 89: 89–105.

Ontological Dependence and Grounding in Aristotle

- Owen, G. E. L. (1960). "Logic and Metaphysics in Some Earlier Works of Aristotle," in I. Düring and G. E. L. Owen, edd., *Aristotle and Plato in the Mid-Fourth Century (Göteborg)*, 163–190; reprinted in M. Nussbaum, ed., *Logic, Science and Dialectic* (Ithaca, NY: 1986).
- Panayides, C. (2014). "Review of Michail Peramatzis, *Priority in Aristotle's Metaphysics*. Oxford: Oxford University Press." *Mind* 123: 230–235.
- Peramatzis, M. (2008). "Aristotle's Notion of Priority in Nature and Substance." *Oxford Studies in Ancient Philosophy* 35: 187–247.
- Peramatzis, M. (2011). *Priority in Aristotle's Metaphysics* (Oxford: Oxford University Press).
- Raven, M. (2013). "Is Ground a Strict Partial Order?" *American Philosophical Quarterly* 50: 191–199.
- Ruben, D. (1990). *Explaining Explanation* (London: Routledge).
- Schaffer, J. (2009). "On what grounds what," in D. Chalmers, D. Manley, and R. Wasserman edd. *Metametaphysics* (Oxford: Oxford University Press).
- Shields, C. (1999). *Order in Multiplicity: Homonymy in the Philosophy of Aristotle* (Oxford: Oxford University Press).
- Sider, T. (2012). *Writing the Book of the World* (Oxford: Oxford University Press).
- Simons, P. (1987) *Parts: A Study in Ontology* (Oxford: Oxford University Press).
- Spellman, L. (1995). *Substance and Separation in Aristotle* (Cambridge: Cambridge University Press).
- Tahko, T. and J. Lowe (2015). "Ontological Dependence," *The Stanford Encyclopedia of Philosophy* (Spring 2015), Edward N. Zalta (ed.), <<http://plato.stanford.edu/archives/spr2015/entries/dependence-ontological/>>.
- Thomas, C. (2014). "Plato on Metaphysical Explanation: Does 'Participating' Mean Nothing?" *Studia Philosophica Estonica* 7: 168–194.
- Trogon, K. (2013). "An Introduction to Grounding," in Hoeltje et al., pp. 97–122.
- Tweeddale, M. (1987). "Aristotle's universals." *Australasian Journal of Philosophy* 65: 412–426.
- Ward, J. (2007). *Aristotle on Homonymy* (Cambridge: Cambridge University Press).
- Wilson, J. (2014). "No Work for a Theory of Grounding." *Inquiry* 57 (5–6): 1–45.
- Witt, C. (2012). Review of Peramatzis 2011. *Notre Dame Philosophical Reviews*. <http://ndpr.nd.edu/news/35538-priority-in-aristotle-s-metaphysics-2/>.

Ontological Dependence and Grounding in Aristotle

Phil Corkum

Phil Corkum is an Associate Professor of Philosophy at the University of Alberta. His areas of research are ancient philosophy and metaphysics. He is currently working on a monograph on metaphysical explanation in Aristotle. He has published in such journals as *Phronesis*, *Ancient Philosophy*, the *British Journal for the History of Philosophy*, the *Canadian Journal of Philosophy*, *Synthese*, and the *European Journal of Philosophy*.