The Hegemony of Form and the Resistance of Matter

Christopher P. Long

Introduction

At the beginning of his book, Methode und Beweisziel im ersten Buch der "Physikvorlesung" des Aristoteles, Johannes Fritsche announces that the theme of the work is to be more or less Aristotle's Physics. It is to be less about the Physics insofar as it treats only two sentences of its first book—the first sentence of chapter one (184a10-16) and a sentence taken from its decisive seventh chapter (190b17-30). It is to be more about the Physics insofar as it explicates these two sentences in order to establish the principle according to which the entire Physics is constructed. Fritsche's book is impressive both in its breadth and its depth. He situates his own position within a broad historical tradition by addressing both ancient commentators, like Simplicius and Philoponus, and modern commentators, like Wieland and Guzzi. He argues, however, the unpopular position that the books of the Physics do have a systematic relationship to one another, that they are not merely an amalgamation of individual thoughts on the general subject of natural philosophy. One of the most intriguing aspects of Fritsche's account is his suggestion that the main goal of the first two books of the Physics is to establish the condition for the possibility that there are principles of natural beings. In this, he distinguishes his own position from many in the tradition who claim that Aristotle assumes the existence of such principles without ever actually arguing for them.

With this in mind, it may be said that the theme of the present essay itself is to be more or less Fritsche's book, Methode und Beweisziel. It will be less about the book insofar as I will explicitly address only its second part, the part that treats the decisive sentence from Physics A.7. It will be more about the book insofar as it employs certain elements of

This paper was originally presented at a conference on the work of Johannes Fritsche held at the New School for Social Research in January 1998.
one of Fritsche's central arguments—that Physics A.7 establishes the condition for the possibility that there are principles of natural beings—in order to elucidate a fundamental shift in Aristotle's thinking about the nature of change and identity. Further, it will be more about Fritsche's thought in general insofar as my thinking throughout the essay is determined by one of the most important things I have learned from him: that even the most theoretical questions also have ethicopolitical underpinnings and overtones. In order to bring out this dimension of Aristotle's seemingly abstract theoretical discussion of form and matter, the itinerary of what follows will involve Heidegger, whose reading of Aristotle's Physics elucidates the ethicopolitical ramifications of what I consider to be a fundamentally misguided and indeed pernicious way of understanding the ontological relationship between form and matter.

By means of an investigation into the nature of the being of τὰ φυσικὰ (natural beings) in the first two books of the Physics, Aristotle begins to develop a conception of ontological identity based on the relationship between form and matter. For Heidegger, any analysis of natural beings in terms of form and matter betrays a loyalty to a way of thinking he calls “productive comportment”: all being is understood from the horizon of production, as a standing-reserve to be manipulated. This productive attitude towards beings is, for Heidegger, symptomatic of the epoch of metaphysics, which finds its most extreme and dangerous expression in modern technology. Thus, the dichotomy between form and matter is already caught up in a pernicious metaphysical mode of thinking. Nowhere is this more perspicuous than in a passage found in The Basic Problems of Phenomenology:

The concepts of matter and material, ὑλή, that is, the counter-concepts to morphe, form, play a fundamental role in ancient philosophy not because the Greeks were materialists but because matter is a basic ontological concept that arises necessarily when a being—whether it is produced or is not in need of being produced—is interpreted in the horizon of the understanding of being which lies as such in productive comportment.

For Heidegger, the concept of matter arises necessarily when being is interpreted exclusively in terms of production. Thus, the concept of matter, not that of form, is ultimately responsible for the emergence of a productive conception of being. Matter inaugurates the epoch of metaphysics.

There is, however, another way to read the development of the distinction between form and matter in Aristotle’s thinking. It is based on a more involved story about the difference between the position offered in the Categories and that introduced in the Physics and ultimately developed in the Metaphysics—it is the story of the development of a dynamic conception of ontological identity grounded in the relationship between form and matter. Although it would be impossible to trace the entire transformation here, I will focus on a decisive moment along the way, namely Physics A.7. There Aristotle introduces a new way of thinking about identity based on a consideration not of production (παράγειν), but of generation (γενέω). In Methode und Beweisziel, Fritsche suggests that this new theory of identity depends upon the establishment of the priority of form over matter, a priority that runs the risk of privileging the process of the universal over that of the individual. However, at the end of Physics A.7, Aristotle remains uncertain as to whether the form or the ἐντομομορφόν, which is there understood as the underlying material principle, most deserves to be called “ὄοικα” (191a19-21). This ambivalence haunts Aristotle’s mature ontology and is symptomatic of a thinking intent on holding onto the tension between opposites. His refusal to reject the material principle altogether leads directly to the discussion of the nature of ὄοικα in the middle books of the Metaphysics where Aristotle sets for himself the difficult task of thinking identity in terms of the relationship between form and matter.

Heidegger, on the other hand, refuses to think identity in terms of the relation between form and matter; instead he explicitly argues for the absolute priority of form over matter in order to develop his own mystical understanding of being as ἀληθής. In the only essay exclusively dedicated to Aristotle published in his lifetime, Vom Wesen und Begriff der φύσις in Aristoteles, Physik B.1, Heidegger attempts to retrieve something pre-Socratic, and therefore non-metaphysical in Aristotle. What he ostensibly retrieves is precisely a conception of being as ἀληθής. This “aesthetic” understanding of being rejects the equi-originality of form and matter and instead argues for the absolute priority of form over matter. In the course of Heidegger’s φύσις essay the power of matter is increasingly denigrated in order to establish a “pre-metaphysical” conception of being first as ἐμφάνις, then as φύσις and ultimately as ἀληθής.

In what follows I lay out the basic development of Physics A.7, in which Aristotle establishes the important new role form plays in accounting for ontological identity. Second, I show how Heidegger maximizes and fetishizes what should be considered a moment in the development of Aristotle’s ontology by arguing that it is precisely by privileging the power of form over matter that Aristotle remains faithful to the great, original, and non-metaphysical thoughts of the pre-Socratics. Third, drawing on hints Fritsche offers at the end of Methode und Beweisziel, I suggest that Aristotle does not, and indeed cannot, reject
matter altogether—for, at some level, he must recognize the necessity of matter. Although Aristotle seems to arrive at this conclusion with a great deal of ambivalence, his ultimate unwillingness to reject matter in his account of sensible ovca is of the utmost ontological as well as political and ethical significance.

**Physics A.7**

To understand the importance of chapter seven of the first book of the *Physics*, it is helpful to situate it in relation to the ontological account found in the *Categories*, where Aristotle thematized concrete individuals, like “this man” or “this horse,” as the primary beings, the beings upon which all else depended. A primary being was there understood as an underlying subject (υποκειμένου) capable of receiving contrary qualities without losing its identity. Thus, if, while talking for long hours in the hot sun, Socrates changed from being pale to being tan, the change did not threaten his identity, for his substance was a υποκειμένου, an underlying subject secure and unchanging. Thus, the *Categories* affirmed a three-principle model of change in which the main principle, the υποκειμένου, remained constantly present as one principle (being pale) was replaced by another (being tan). Such a conception of change is fundamentally static insofar as it depends on the constant presence of the υποκειμένου. In the *Categories*, this static position was sufficient to account for the diachronic identity of an individual because Aristotle avoided addressing any changes more radical than accidental alteration. However, once the more problematic question of substantial generation is considered—as it is in the seventh chapter of the first book of the *Physics*—a more sophisticated conception of identity is required.

*Physics A.7* begins with what may be considered a rehearsal of the *Categories* account of accidental change. Here, however, the question arises as to whether the three-principle structure of accidental change can be extended to account for change in general. At first, Aristotle seems to believe it can, arguing that all change, including generation, seems to involve an underlying subject and two determinate contraries, ivaR. I emphasize “seems” here because Aristotle himself expresses a certain level of trepidation:

However, it may become (γύνοντο ἄν) evident on further examination that also substances and all other unqualified beings are generated from some underlying subject, for there is always something underlying from which the thing has come to be, for example, plants and animals from seed. (190b1-5)

In Greek, the optative mood may be used potentially to indicate future possibility and to suggest the relatively uncertain status of the statement. Here the use of the potential optative (γύνοντο ἄν) suggests a hesitancy on Aristotle’s part; it points to what may be a presentiment of the inability of the model of accidental becoming to explain the structure of substantial becoming. Aristotle’s uneasiness is implicitly expressed both by the use of the potential optative and by the introduction of the new example of the seed. Here, there is a fundamental shift in Aristotle’s thinking. The seed does not seem to underlie change in the same way as, in the *Categories*, a man is understood to underlie the alteration of accidental qualities. The seed is not something constantly present through the change, rather, it is its own form.

Thus, in considering the ontological problems surrounding the question of generation, there emerges a shift in Aristotle’s understanding of the υποκειμένου. This shift should not, however, be considered an outright rejection of the theory of the *Categories*, but rather a deepening of it. The υποκειμένου is no longer conceived simply as an immediately and unproblematically present object such as “this individual man.” Rather, in the *Physics*, the υποκειμένου is itself shown to have an internal structure—it is, in short, thematized as a οὐσθέτον, a composite:

So it is clear from what has been said that the thing in generation is always a composite (οὐσθέτον), and there is that which is generated, and what comes to be that is something else, and this in two senses, either the underlying subject or the opposite (υποκειμένου).

By the opposite’ I mean, for example, the unmusical; by the underlying subject’ I mean the man; and the shapelessness and the formlessness and the disorder are opposites, while the bronze and the stone and the gold are underlying subjects. (190b11-16)

This passage marks both Aristotle’s dissatisfaction with the theory of the *Categories* as well as his reluctance to jettison it altogether. His dissatisfaction is indicated by the introduction of the term οὐσθέτον to refer to generated beings. Here, Aristotle suggests that the primary ovca of the *Categories* are in fact composite substances. Thus, their immediate identity, which had simply been assumed in the *Categories*, is now called into question. By thematizing the individuals of the *Categories* as composites, Aristotle develops a deeper level of investigation according to which the internal structure of a being is called upon to account for its identity. Thus, there is a shift in the focus of the ontological investigation. Aristotle no longer emphasizes the immediate presence of objects, but rather, he stresses the process by which such objects come into being. With this however, there is also a shift in the meaning of the υποκειμένου, for the constant, static presence of the
... for [Aristotle] the alternative is that either all moments of becoming are also principles of becoming and being, or none are. For the moments of becoming and correspondingly, the moments of being, can only be named principles when all moments of becoming and only these, are moments of being, that is, of the being having become. (MB 137)

According to Fritsche, the need to establish an isomorphism between the principles of being and those of becoming is what drives Aristotle to replace the three-principle model of change with the two-principle model hinted at by the shift in meaning of the ὑποκεῖσθαι and ἀνυποκεῖσθαι mentioned above. Establishing this isomorphism of principles is of vital importance: for, as Fritsche suggests, only when all the moments of being are also moments of becoming, that is, only when the same principles are capable of accounting for both the being and the becoming of natural beings, can we be sure that the principles we have in view are capable of providing an adequate account of ontological identity. The precise place in the chapter where this isomorphism is established is the core of book A, chapter seven: 190b17-23.

Turning, then, to this passage, we find Aristotle introducing the concept of form (μορφή) in order to account for substantial as opposed to accidental becoming:

Thus if (ἴσημα) of things by nature, there are causes or principles of which those things are composed primarily and from which they come to be not accidentally, but come to be what each of them is called according to its substance, then everything which is generated is generated from a subject (ὑποκεῖσθαι) and a form (μορφή); for the musical man is composed, in a sense, of a man and the musical, since one would be analyzing the formula of the musical man by giving a formula of each of these two. Clearly, then, things in generation come to be from these. (190b17-23)

Although the use of the example of the musical man suggests that Aristotle still conflates two distinct understandings of the ὑποκεῖσθαι, this passage indicates the move from the three principle model of accidental change to the two principle model of substantial becoming. Furthermore, Fritsche’s suggestion that Aristotle’s concern in the first book of the Physics is to establish the conditions for the possibility that there are principles of natural beings seems to find some justification in the emphasis on the “if,” at the beginning of this passage. If we give this “if” (ἴσημα) a strong emphasis, as the Greek texts suggest we should, then it can be said that Aristotle is indeed attempting to establish the condition for the possibility that natural beings have principles and causes. The condition for this is that the principles of being and those of becoming must be the same—that one set of principles can be
established that accounts for both the being and the becoming of natural beings. But this is precisely what the three principle model of the Categories had been unable to establish; it therefore did not attempt to account for substantial becoming at all.

In order to establish the requisite isomorphism of principles, Aristotle develops a powerful new theory of form. This is announced in the following passage:

We have stated, then, the number of principles concerning the generation of physical objects and how they are so many, and it is clear that there must be something which underlies the contraries and that the contraries are two. Yet in another sense this is not necessary, for one of the contraries is sufficient to produce the change by its absence (στασις) or presence (προσομοιος). (191a4-7)

Here, both Aristotle's recalcitrant dedication to the three-principle theory of the Categories and his impulse to reject it is manifest. On the one hand, he still seems to hold to the idea that there must be something which underlies all change, and that change occurs when one determines contrary is replaced by another. On the other hand, he admits that there is another sense in which this is not necessary because one of the contraries is sufficient to produce the change by its presence or absence. Here, "στασις" (absence) corresponds to the term "στασις" (privation) which Aristotle also introduces in this chapter to further clarify the significance of the sense of the υποκειμενον as formlessness, shapelessness and disorder. Both στασις and υποκειμενον point to the power of the presence of form, for as Aristotle suggests, the presence of form is enough to produce the change. With this, there is a fundamental shift in perspective. The power of the υποκειμενον is replaced by that of the form which is given the name "μορφή" as well as "εἴδος" in this chapter.

The form is particularly well suited to fulfill this role of establishing and maintaining identity because it is thought to be intransient. In the Categories, the υποκειμενον had secured the identity of the individual by means of its constant presence. It was responsible for continuity through change. With the shift in perspective announced by the introduction of the example of the developing seed, a different principle of continuity is required. Thus, in what can only be seen as a gesture to his teacher Plato, Aristotle turns to the εἴδος for precisely such a principle of continuity. The difference is that unlike Plato, Aristotle's εἴδος is immanent: the form is not understood to exist in strict separation from the individual in which it inheres. It does, however, offer Aristotle a way to account for the order of natural generation—the fact that, as Aristotle likes to put it, a man generates a man. For, while it can no longer be said that an οὐσία retains a material continuity through change by means of the υποκειμενον, continuity is secured by the εἴδος, which is now beginning to be conceived as the active principle by which each being achieves and maintains its identity.

It is no surprise that in the second book of the Physics Aristotle criticizes the position of Antiphon, the Eleatic sophist who held that φύσις is essentially earth, water, air and fire—that is, the material elements (193a10ff.). The critique of Antiphon must be seen within the context of the larger development of Aristotle's ontology. Antiphon's position bears a striking resemblance to the position Aristotle himself had developed in the Categories and the first part of Physics A.7. With the introduction of the new role of form, however, Aristotle finds it necessary to distance himself from Antiphon's materialism, although it is important to recognize that Aristotle never rejects Antiphon's view outright. Instead, and this is typical of Aristotle, he says that Antiphon's position is in one way correct, but in another incorrect. Antiphon's position is correct in that it recognizes the importance of matter. It is incorrect insofar as it does not recognize that the concept of φύσις is not exhausted by that of the υποκειμενον, but rather, that the shape (μορφή) or form (εἴδος) is in fact part of the formula of φύσις. Aristotle then goes on to emphasize the importance of this overlooked dimension of φύσις. It is in this context that Aristotle writes "form is more φύσις than matter" (193b8).

Thus, the direction of Aristotle's argument comes into focus: the investigation has exposed the inadequacy of a theory of generation based on the three-principle model of the υποκειμενον. Once the example of the seed is introduced, the static nature of the υποκειμενον is undermined. With this, Aristotle must look to a principle other than that of the υποκειμενον if he is to secure unity through change. This leads him, in turn, to emphasize the role of form over that of matter. Therefore, revising his theory, he suggests that a more adequate account can be given if the concept of the εἴδος is given a more powerful role. However, there are important and wide-ranging ramifications of such an affirmation of the priority of form over matter. Fritsche suggests that the effect is twofold:

On the one hand, the individual is saved, on the other hand, it is cheated. It is saved because as a single being, it belongs to an universal species, which is embodied in it and in which it has its identity with itself and with others, an identity unlike that of θεῖον which merely negates all differences. Further, the single being is saved as an individual because it is essentially for the sake of the process of the continuation of the unmoved species. It is, however, cheated because it should only be taken seriously as an individual instan as it is an instance of the transportation of the universal, which has no being outside of the individual. (MB 132)
Thus, on the one hand, by affirming the power of form, the individual is saved: the abstract negation endemic to the model by which matter is understood merely as that which receives one contrary and another is transformed into the determinate negation by which the relationship between form and matter constitutes the very identity of the individual. On the other hand, by affirming the priority of form, the individual is cheated: it is reduced to a mere means for the preservation of the species. When seen from this perspective, Aristotle's hesitancy to reject the material principle altogether takes on enormous significance. There is something rather pernicious at work in the attempt to establish the absolute hegemony of form over matter, for it is precisely the domination of form that subverts the individual, reducing it to a mere vehicle for the happening of the ἐidoς, the species.

**Heidegger, φύσεις as ἀλήθεια**

It is precisely Aristotle's affirmation of form over matter that Heidegger wants to retrieve as genuine, original and non-metaphysical. This is clearly the main direction of his essay, "Vom Wesen und Begriff der φύσεις," where he argues that there is a remnant of something pre-Socratic, and therefore great, in Aristotle's conception of φύσεις. This essay, perhaps better than any other, indicates Heidegger's ambivalent attitude towards Aristotle. On the one hand, Heidegger sees in Aristotle a master of the tradition, a co-founder of the epoch of metaphysics, and therefore, one of the fathers of the "forgetfulness of Being." In this respect, Aristotle is one of the primary targets of Heidegger's destruction of the history of being as metaphysics. On the other hand, Heidegger discerns in Aristotle's conception of φύσεις something pre-metaphysical, an echo of an earlier age, when being was truly understood, indeed, when being was understood as truth, ἀλήθεια.

One way to approach "Vom Wesen und Begriff der φύσεις" is from the perspective of matter. The basic direction of Heidegger's argument in this essay may be expressed in the following equation: μορφή is φύσις is ἀλήθεια. Heidegger retrieves an echo of original Greek thinking in Aristotle by interpreting φύσεις exclusively in terms of form. In so doing, he systematically purges the structure of the happening of being of its material moment thus reducing it to a single principle. To be sure, Heidegger dubs this single principle zweifach, "twofold," in order to stress its dynamic nature (WB 364), but this duality is fundamentally non-arabic—it is not the genuine duality endemic to the relation between form and matter, but rather, form's doubled relation to itself.

Early in his essay, Heidegger does recognize the importance of matter when he establishes a distinction between that which lives (das Lebendige) and that which is made (das Gemachte). This distinction is based on the specific role that matter plays in each kind of being. Things fabricated, Heidegger tells us, have their matter only accidentally: whether this bed is made out of wood or stone or steel is of no real consequence (WB 323-4). Living beings, on the other hand, require a definite kind of matter: a human being could not remain what s/he is without the particular matter s/he has: flesh and bone. Heidegger captures the importance of matter with a masterful neologism, one with significant new dimensions gained in translation. Appealing to Aristotle's example of the doctor healing himself in order to establish the distinction between the ἄρχη of τῆς φύσεως and that of φύσεως, Heidegger writes the following: "Being a doctor is not the origin and ordering of becoming healthy, rather being a human is, and this only insofar as the human is a ζώον [animal], that is, a living being which only lives in that it 'bodies' [. . . das nur lebt, indem es 'lebt']" (WB 326). One of the primary ways living beings differ from things fabricated, therefore, lies in the necessary relationship living beings, τὰ φύσικα, have to their matter: to live is "to body," or perhaps more precisely, "to matter." Heidegger's insightful formulation, however, is not permitted to hold sway in his interpretation of φύσεις in Aristotle. It is far more the case that it marks only the starting point of Heidegger's discussion, a discussion which will conclude with the establishment of the conception of φύσεις as ἀλήθεια and the complete rejection of the role of matter in the dynamic of being.

As mentioned, at the beginning of his investigation into the meaning of φύσεις in Physics, book B, Aristotle considers the view of Antiphon. Heidegger designates the position established by Antiphon as a "decision of the greatest significance" (WB 326). By holding firmly to the material principle and arguing that things are only to the extent that they include some constant matter that underlies the various forms they may receive, Antiphon determines the meaning of being in a very definite, and static, manner. Heidegger characterizes Antiphon's position this way:

If, however, the 'elementary' is being to the highest degree, then this interpretation of φύσεις in the sense of being the primary form—less which sustains everything formed, posits at the same time that a decision has been made about the interpretation of every 'being', and that, conceived in this way, φύσεις is equated with being as such. In this, however, the essence [Wesen] of φύσις—constant becoming present [ständige Anwesenung]—is established in a fixed and determinate direction. According to this interpretation of essence, all things—be they growing or fabricated—never truly are, and yet they are not simply nothing; thus, they are non-being, not fully sufficient for beingness, in contrast with these non-beings,
only the 'elementary' qualifies as the essence of being [das Wesen des Seins]. (WB 337)

For Heidegger, Antiphon's position is inadequate and must be rejected for four reasons: first, "it does not consider that a being from ϕύς is in movement, that is, that being-moved [Bewegtheit] constitutes the being of these beings"; second, it grasps beingness [Seiendheit] in terms of constancy, and it does so one-sidedly by affirming only that which always lies under; third, it omits the most decisive factor in the original Greek conception of ϕύσις—becoming-present [Anwesenheit], and instead affirms a conception of ϕύσις as presentness [Anwesenheit]; finally, Antiphon's position is oblivious to the ontological difference—it understands the being of τὸ ϕύσις by way of an investigation into beings rather than into being itself. This final flaw is what generates the first three misunderstandings, which, in Heidegger's view, remain undressed throughout the 2400-year history of metaphysics. At various places throughout his corpus, Heidegger holds Aristotle himself responsible for eschewing the ontological difference. In the ϕύσις essay, however, Heidegger is concerned to retrieve a certain pre-metaphysical conception of being in Aristotle. Therefore, here, Aristotle's own position is not identified with that of Antiphon, nor is it understood exclusively from the perspective of Being and Time which sought to situate Aristotle at the beginning of the metaphysical epoch in order then to initiate the "destruction" of the tradition. Rather, Heidegger shows how Aristotle appeals to Antiphon in order to place matter on an ontological par with μορφή, form.

This move to maintain the ontological equity of form and matter is, for the Heidegger of the ϕύσις essay, both "astounding" and revealing. It is astounding insofar as it does not immediately appear to entail the outright rejection of Antiphon's position (WB 343). It is revealing insofar as it "moves the question concerning ϕύσις to a completely new level, a level upon which the unasked question about the χώρας-character of ϕύσις is answered, and where ϕύσις is adequately grasped for the first time as ϕύσις, a sort of becoming-present [Anwesenheit]" (WB 343-4). It is, however, somewhat odd that Heidegger should be "astounded" by Aristotle's reluctance to reject Antiphon's position, for Aristotle rarely ever rejects the positions of his predecessors without qualification. Indeed, given Aristotle's attitude towards his predecessors in general and more specifically, given the deep affinities between Antiphon's position and the theory he himself presents in the Categories, it would not be unwise to expect Aristotle to accept Antiphon's position to a certain extent. In fact, as mentioned, his unwillingness to completely reject Antiphon's radical materialist posi-
tion lends support to the theory that Aristotle was reluctant to eschew the material principle altogether. Be that as it may, however, Heidegger's amazement at Aristotle's failure to reject Antiphon unequivocally lends insight into Heidegger's own attitude towards Aristotle here. As an "original" Greek thinker, Aristotle can be expected to quickly and decisively reject the sort of static understanding of being underlying Antiphon's affirmation of matter. The fact that Heidegger is astounded by the lack of an outright rejection indicates that, here at least, Heidegger is taking Aristotle not as the founder of the metaphysical epoch, but rather, as a thinker who still has access to the pre-metaphysical understanding of being endemic to the pre-Socratics.

The interpretative gymnastics Heidegger must go through in order to bring Aristotle's position in line with his own peculiar understanding of being as ἄληθες are, however, astounding. He argues that there is something revelatory in Aristotle's failure to reject Antiphon completely, but it is not, as one might think, to suggest that matter is an irreducible principle of being. Rather, by placing form on an equal footing with matter, Heidegger suggests that Aristotle opens up the possibility "of constructing a double concept [Doppelbegriff] of ϕύσις" (WB 343). Ironically, for Heidegger, this double concept of ϕύσις does not entail the relation between form and matter, μορφή and ἄληθες, but rather, the doubled nature of μορφή itself, abstracted from its relation to matter or any principle of difference. According to Heidegger, Aristotle's affirmation of Antiphon is only a moment in the development of his conception of ϕύσις. Ultimately, Heidegger tells us, despite the initial appearance, Aristotle sharply rejects Antiphon's materialist position (WB 344). The double concept suggested by Aristotle's critique of Antiphon—namely, the conception of the equi-originality of form and matter—is transformed by Heidegger into the doubled nature of ϕύσις understood exclusively in terms of μορφή. In this manner, Heidegger is able to locate the essence of Aristotle's conception of ϕύσις in his own conception of ἄληθες.

Heidegger further develops this position by thematizing the difference between the artifact and the living being in terms of the distinction between ϕύσις and γένεσις, making and generation. Here, however, Heidegger's position already deviates from Aristotle's, for unlike Aristotle, Heidegger believes that any conception of becoming-present that includes the distinction between form and matter is automatically a ϕύσις. As mentioned, for Heidegger, the distinction between form and matter is acutely "metaphysical"; it implies that the process under consideration is understood from the beginning from the horizon of productive comportment. Heidegger's interpretation of γένεσις in Aristotle,
GRADUATE FACULTY PHILOSOPHY JOURNAL

therefore, is designed to avoid the form/matter paradigm of becoming-present:

In γένος understood as placing, production is through and through the becoming-present of the appearance itself without any help from outside—which is the case with all ‘making’. That which produces itself in the sense of placing does not need a making. If it did, that would mean that an animal could not reproduce itself without mastering its own zoology. All of this indicates that μορφή, not only more than ὅπερ, but indeed, alone and completely, is φύσις. (WB 360)

As will be shown below, a more un-Aristotelian thought can hardly be imagined, for μορφή alone is utterly incapable of generation. However, this passage clearly indicates the basic trajectory of Heidegger’s thinking in this essay: μορφή or form, “completely” and “alone,” that is, without matter, is shown to be φύσις. This conception of φύσις, purged of its material principle, is the core of Heidegger’s attempt to retrieve the great pre-Socratic dimension of Aristotle’s thinking.

Heidegger determines the real meaning of this identification of μορφή and φύσις in his interpretation of στάσις, privation. He employs this concept to elucidate the decisive link between Aristotle’s φύσις and his own peculiar understanding of ἀλήθεια as the process of revealing-concealing. Thus, he writes:

στάσις as becoming-absent [Abwesen] is not simply absence [Abwesenheit], but rather a becoming-present [Anwesen], namely, the becoming-present in which precisely the becoming-absent (but not the absent thing) becomes present.

Heidegger then expressly suggests how this should not be understood:

Today we are all too inclined to dissolve this sort of absent-presencing [die abwesende Anwesen] into a frivolous dialectical play of concepts rather than holding on to the wonder of it; for in στάσις is hidden the being of φύσις. (WB 366-7)

The dynamic of φύσις, this passage tells us, is announced by Aristotle’s employment of the term “στάσις.” The στάσις/μορφή relationship is φύσις, and φύσις is thus understood in precisely the same terms Heidegger uses to formulate the happening of being as ἀλήθεια, that is, as a self-revealing which is at the same time a self-concealing. Moreover, this conception of the happening of φύσις must not under any circumstances be “frivolously” understood in terms of a Hegelian sort of dialectic; for this would require injecting the dynamic of φύσις with some dimension of relational mediation. It would imply that being is not utterly self-sufficient and self-related, but rather, that it is itself accountable to an other.

LONG/HEGEMONY OF FORM AND RESISTANCE OF MATTER

Thus, in one of the most revealing passages of the essay, Heidegger writes:

In what sense is the Being of φύσις twofold? As φύσις ὁδός ἐκ τῆς φύσεως. φύσις is a kind of ἐνέργεια, that is, a kind of ὁδός, namely it is a production from out of itself and into itself. In essence, that which is ‘underway’ is always a being which is pro-duced [ein Hergestellt] and put away [weg-gestellt] (not something made), for example, the blossom is put away by the fruit. But in this putting away, the placing into appearance, φύσις, does not cease to be. To the contrary: as fruit, the plant goes back into its seed, whose being is nothing other than going forth into appearance, ὁδός ἐκ τῆς φύσεως. With its coming to life, each living being already begins to die, and vice versa: dying is a mode of life, because only living beings are able to die. Indeed, dying can be the highest ‘act’ [Akt] of life. (WB 367-8; Heidegger’s emphasis)

I emphasize this passage for two reasons. First, it indicates that ultimately the relation of the self-placing being towards itself is what characterizes the twofold nature of φύσις. Φύσις is twofold in the sense that its very self-pro-duction (which is not the sort of production endemic to making) is also a putting away of itself. However, it is decisively not twofold in the sense that it is grounded in the encounter between form and matter. On Heidegger’s reading, the twofold nature of φύσις is based exclusively and completely on the doubled nature of μορφή understood in terms of ἀλήθεια. Thus, the impetus behind Heidegger’s attempt to posit the absolute priority of μορφή over ὅπερ is to establish an analogy between Aristotle’s conception of φύσις and Heidegger’s own peculiar understanding of ἀλήθεια.15

The second reason I emphasize the above passage has to do with the disturbing nature of its final sentence. Heidegger wrote these words in 1939 and spoke them in Freiburg, Germany during the first trimester of 1940.19 Given this context, the final sentence, “Indeed, dying can be the highest ‘Akt’ of life,” takes on a disconcerting political dimension. By placing the modal verb “kann” in italics Heidegger seems to give this sentence a sense of urgency. Furthermore, he puts the word “Akt” in quotation marks, which could be seen as a clue that this word should be given particular attention. The word itself is related to its Latin cognate, actualitas, which is the translation of the ancient “ἐνέργεια.” At the beginning of the paragraph, the word ἐνέργεια is identified with ὁδός and, in the course of the passage, with φύσις. Thus, these words seem to find some common denominator in the word “Akt.” Of course, Heidegger does not use the word “Handlung” here, which would point us to the normal sorts of actions and activities endemic to everyday life. Rather, with “Akt” he establishes not only the vital link between ὁδός, φύσις, and ἐνέργεια, he also implicitly suggests the German word “Tat,”
a word cognate with "Tätigkeit" which, in a very different context, Hegel used to translate Aristotle's ἔσχεσις. "Akt" understood in this context is really the heroic "Tat" in which the individual bravely sacrifices himself for a cause greater and higher than his own individual life. This is the sense in which dying can be the highest "Akt" of life; it is also the sense in which Heidegger's sentence becomes deeply disturbing. By placing such a sentence in a paragraph explaining the proper way to understand the nature of ϕός in Aristotle, Heidegger implicitly relates his conception of ϕός to a very concrete political act.

Of course, it remains possible to de-emphasize the significance of this sentence; to explain it away. One could easily do so by appealing to the mood of the time. Indeed, one could appeal to thinkers like Max Weber, Edmund Husserl, Sigmund Freud, Ludwig Wittgenstein and, in a particularly interesting case, even Karl Jaspers, in order to argue that there was a mood of death in Europe between the two world wars, and this mood found expression in the thoughts of the great thinkers of the time. Such an explanation, however, would be too simple, for Heidegger presents us with a special and complicated case. Without intending to become mired in the full range of these complications, I emphasize the sentence above and along with it, the possibility of its disturbing interpretation because it perspicuously suggests precisely the danger endemic to Heidegger's attempt to establish the absolute priority of form over matter. To eschew the context and significance of this comment is to risk missing the dark side of Heidegger's interpretation. The point, therefore, is not to exploit Heidegger's political engagement in order to discredit him, but rather, to elucidate the ontological and political/ethical implications of Heidegger's particular way of understanding the dynamic nature of ϕός. The sentence in question is more symptomatic of the ontological position for which Heidegger argues than it is of whatever political views he may have espoused. Indeed, even if this particular sentence had never been "placed into appearance," the authoritarian nature of Heidegger's understanding of being as ἄληθες would not be diminished, although it may be less explicitly obvious.

Heidegger's attempt to retrieve a genuine "pre-metaphysical" conception of ϕός in Aristotle has led to an affirmation of the absolute priority of form over matter. In so doing, Heidegger falls victim to what could be considered the other side of Aristotle's critique of Antiphon. Whereas Antiphon's conception of ϕός had over emphasized matter and missed the important role form plays as the ordering principle, Heidegger goes too far in the opposite direction. If Antiphon's position is inadequate because it fails to account for the ordering principle of natural beings, Heidegger's is inadequate because it renders the ordering principle absolute.

The Resistance of Matter

How justified is Heidegger in reading such an authoritarian viewpoint back into Aristotle? On the one hand, he is quite justified, for it must be admitted that Aristotle himself often seems to affirm the ultimate hegemony of form over matter. We have already recognized this tendency in the Physics, and it seems to be at work in Aristotle's ultimate appeal to God as pure activity devoid of matter in the Metaphysics (1074a84-40). On the other hand, there is another tendency in Aristotle (especially in his writing on sensible substance) to affirm the individual by recognizing the impossibility of doing away with matter altogether. I will conclude with a discussion of this dimension in Aristotle's thinking in order to suggest that ultimately an account of ontological identity must be sought not in the mystical wonder of ἄληθες, but rather in the far more mundane and profound work endemic to the relational mediation between form and matter.

It has often been correctly suggested that Aristotle's ontology is intimately related to his biology. In his biological writings, and particularly in book four of the Generation of Animals, Aristotle translates the relation between form and matter into the language of sexual reproduction. Here the male semen corresponds to the form, while the female catamenia corresponds to the matter. The biological underpinnings of Aristotle's ontology are emphasized by Fritzsche at the end of Methode und Beweisziel.

In the Generation of Animals, the formula that the moving semen, because of its warmth or lack of warmth, masters the catamenia to one extent or another is designed to explain three things: 1) how male and female beings are produced, 2) how family resemblance comes about, and 3) how deformed beings and monstrosities are born. For Aristotle, the ideal case would be that the semen is hot enough to fully dominate the matter and concoct a male specimen as similar as possible to the father. If, however, the resistance of matter is strong, then either male specimens with maternal characteristics will be produced, or, if the resistance is stronger still, female specimens will be produced, and finally, in what Aristotle would consider the most horrendous case, the female matter will be so strong that a deformed being, a monstrosity, will be generated. Distasteful as it is, it must be recognized that Aristotle's biology considers the generation of a female specimen as itself a deviation from the ideal, that is, as a de-formity.
Here it may appear slightly misleading to speak in terms of the “resistance” of matter, for Aristotle seems often to suggest that it is merely a question of the appropriateness of the matter to receive the form, and not of the matter’s active resistance. However, there are also places in Aristotle where he suggests that what is acted upon itself acts on the agent. Thus, in the *Generation of Animals*, Aristotle writes:

> The reason why the movements [between the male and female principles] relapse is this. The agent is itself acted upon by that on which it acts; thus, that which cuts is blunted by that which is cut by it, that which heats is cooled by that which is heated by it, and in general the moving cause (except in the case of the first cause of all) does itself receive some motion in return; e.g. what pushes is itself in a way pushed again and what crushes its itself crushed again. Sometimes it is altogether more acted upon than acting, so that what is heating or cooling something else is itself cooled or heated. . . . (765b15-21)\(^{29}\)

Already in *Physics* A.7 with the introduction of the example of the seed (σπέρμα) as the ἐντολήματος, Aristotle indicates a tendency to ascribe an activity to matter.\(^{30}\) Aristotle does indeed refer to ἀληθικόν as “σπέρμα,”\(^{31}\) thus ascribing a certain activity to the female principle; so the vocabulary of “resistance” here is not wholly inappropriate.\(^{32}\)

Yet, there is a profound irony in Aristotle’s claim that the generation of females is a deformity, a case of a breakdown in the effectiveness of form, for it is a deformity of the highest necessity. Without female members, the continuation and preservation of the species (ἐξίσασθαι) is impossible. Again, in the *Generation of Animals*, Aristotle writes:

> The first departure [from the genus] indeed is that the offspring should become female instead of male; this, however, is a natural necessity. (For the class of animals divided into sexes must be preserved, and as it is possible for the male sometimes not to prevail over the female, either through youth or age or some other such cause, it is necessary that animals should produce female young.) And the monstrousity, though not necessary in regard of a final cause and an end, yet is necessary accidentally. (767b7-14)

If, in *Physics* A.7, Aristotle responds to the question of diachronic identity by privileging form over matter in order to account for the intergenerational preservation of the species, he also, albeit in a backhanded way, must affirm the necessity of the resistance of matter. Without matter as the other over against which to relate, the form is utterly powerless; generation is not possible.

In the middle books of the *Metaphysics*, Aristotle recognizes the futility of attempting to do away with matter altogether. Indeed, one could read the introduction of the example of the snubnose and of the entire discussion of the *generation* of sensible substance in book Z, chapters 7-
decisive for praxis, and the end of an action becomes immanent to that action.\textsuperscript{24} I would argue that this distinction is already at work in the Metaphysics with the delineation of the difference between κίνησις and πράξεις/ενταλέξεια and that, already within the ontological framework presented there, the emphasis on the domination of the form which characterizes the authoritarian tendency in Aristotle is undermined.\textsuperscript{24} From this perspective, the individual would not be determined exclusively by its lineage, by the authoritarian force of the σῆσις, but also would retain the power of self-determination, πράξεις. Here, the role of matter is crucial. Matter resists the absolute hegemony of the σῆσις; it holds form accountable by remaining ultimately irreducible.

Thus, matter may be understood as a condition for the possibility of ontological πράξεις. To say this is to redirect the focus of the question of identity to the site of the relation between form and matter. In this way, it shifts the emphasis away from the impersonal happening of the universal and onto the dynamic relation between form and matter. Aristotle thematizes this relation as a πράξεις and thus firmly places the burden of responsibility on the action of the individual, for the individual is nothing other than that which exists through this relation which it is identity. With this, the ethical/political significance of the question of ontological identity comes into focus. Ontological identity is grounded in the action of the individual working through the tension generated by the relation between form and matter. To the extent that this tension exists, so too does the individual. The authoritarian tendency, therefore, to give absolute priority to one principle over another undermines the very being of the individual. Such a conception of ontological identity renders the opposition to such an authoritarian tendency not only ethically and politically, but also ontologically imperative.

NOTES

1. Johannes Fritsche, Methode und Beweisziel im ersten Buch der "Physikvorlesung" des Aristoteles (Frankfurt am Main: Verlag Anton Hain Meisenheim, 1985), p. 6; henceforth referred to as MB.

2. One example of Heidegger's attitude toward the distinction between form and matter can be found in Der Ursprung des Kunstwerkes (Martin Heidegger, Holzwege, Gesamtausgabe, vol. 5 [Frankfurt am Main: Vittorio Klostermann, 1984], pp. 11ff.), where it is used to establish the "equipmental nature" of equipment in juxtaposition to the "workly character" of the work of art; another can be found in Die Frage nach der Technik (Martin Heidegger, Die Technik und die Kehre [Pfullingen: Günther Nesse, 1991], pp. 7ff.), where the form/matter distinction along with Aristotle's theory of the four causes are appealed to in order to show how the paradigm of production is at the core of western philosophical thinking, a thinking which culminates (and collapses) in the modern obsession with technology—das Ge-stell.


4. I develop the full story in my dissertation, Christopher Long, The Legacy of Nousia: Toward a Dynamic Conception of Ontological Identity (Ann Arbor, Michigan: University Microfilms, 1998); see especially chapters 2 through 6. To be clear, one need not accept a strong developmentalist conception of Aristotle's ontology to accept the argument found here. At the very least, one accepts the obvious difference between the account in the Categories and that of the Physics and Metaphysics: whether one conceptualizes this difference in terms of "earlier" vs. "late" or in terms of "exoteric" and "esoteric" has no bearing on the argument below.


6. In the Categories, Aristotle employs a strategy of evasion at precisely those moments when a consideration of radical change would be expected. This is evident in a number of places in the Categories, most perspicuously at 8b14-17, where he explicitly denies the possibility that a secondary υόσιον may be considered a "γόνιον τύπον." To grant "γόνιον τύπον" status to secondary υόσιον in the Categories would have been to undermine the absolute priority of primary υόσιον and thus the basic foundation of the ontology offered there. For a discussion of this "strategy of evasion," see Long, p. 32ff.

7. Unless otherwise noted, the translations are Hippocrates' Apoll's, of the Physics (Aristotle's Physics [Grinnell, Iowa: The Periaptetic Press, 1980]. I have always also consulted the Ross edition of the Greek text (Aristotelis Physica [Oxford: Oxford University Press, 1967]). I have entirely retranslated the present passage for two reasons: 1) because Apoll's often translates the optative simply as a future (which is, of course, perfectly legitimate) and thus gives the statement an aura of certainty which I want to call into question; 2) because he mistranslates the genitive singular "ομώρως" as a plural.

8. In the above passage Aristotle explicitly mentions "bronze," "stone," and "gold" as underlying subjects, indicating that he has the production of an artifact like a statue or a bronze sphere in mind as he develops the nature of the relationship between form and matter. Aristotle is very fond of such examples. However, this need not undermine the point that throughout his work, Aristotle always thought living beings were in some strong sense primary. In fact, Aristotle often uses examples of artifacts as heuris-
tic devices—it is easier to speak of the difference between the material and formal principles in artifacts than it is in living beings. What makes these examples historically helpful—namely, that in them the form is so readily separable from the matter—is precisely what marks them as inadequate. The fundamental point Aristotle must make with regard to form and matter in primary σώματα is that they are not separable in the way the artifact examples make them seem: form and matter depend upon one another. (I take the weakening of the criterion of separability in *Metaphysics* H.6, 1042a27ff. as a recognition that strict separability is not applicable to primary σώματα. It arises as a result of Aristotle’s intention to hold onto the intuition that primary σώματα are living beings.) As Aristotle here begins to develop the distinction between form and matter, it is natural that he would turn to the simple, though misleading, examples of artifacts. In the end, however, it seems safe to say that the distinction between form and matter really arises not out of a consideration of the production of statues, but out of an in-depth study of the generation of animals. This is already implied by the introduction of the concept of υφιστάμενα mentioned above.


10. See *Physics* B.1, 193a29ff. That Aristotle does not completely reject Antiphon’s materialist position is an important issue for three reasons. First, it indicates Aristotle’s unwillingness, even here as he develops a powerful new theory of form, to reject matter altogether. Second, it gives an important context to Aristotle’s assertion that form is φύσις to a higher degree than matter. Third, it suggests the extent to which Heidegger perverts Aristotle’s position in his attempt to read a conception of Being as ἀλήθεια into *Physics* B.1; for Heidegger’s interpretation depends upon the complete rejection of matter and the affirmation of the absolute priority of form (WB 360).

11. Throughout the discussion, Aristotle is clear to emphasize that the form does not exist separately from the matter except according to formula (κατὰ τὸν λόγον), see 193b4-6. This is consistent with his comments in *Metaphysics* H.6 (see note 8 above) and with his concern to retain an appropriate distance from the Platonic position of the strict separation of the forms.

12. As the German noun “Leib” is most often juxtaposed with “Seele” (soul), it already points to the form/matter distinction which plays such a vital role in Aristotle’s mature ontology. Aristotle often formulates this distinction in terms of σώμα and ψυχή, for one of many examples, see *De Anima*, 414a18-9. Heidegger makes this noun into a verb, “leiben,” thus placing it in close proximity to the verb “leben,” to live, in order to suggest the importance of the matter of living beings. Thus, perhaps another way to render this Heideggerian neologism into English is: “... that is, a living being which only lives in that it ‘matters’. I say this neologism gains in significance when translated in this manner because the English adds an ethical connotation to the phrase. Indeed, I would argue that there is precisely such an ethical dimension at the core of both Aristotle’s and Heidegger’s ultimate treatment of the material principle—the question is: how much does the individual matter? In any case, Heidegger’s verbalization of the noun “Leib” nicely suggests the importance of the material principle.

13. All four points about the inadequacy of Antiphon’s position are outlined at WB 342.

14. This seems to be Heidegger’s general position in *Sein und Zeit*. Indeed, the terminological difference between “Anwesenung” (the participial form, “anwesend” appears more often in *Sein und Zeit*) and “Anwesenheit” indicates the covering over of the ontological difference: the verbal noun “Anwesenung” along with the participle “anwesend” point to the event-like (verbal) happening of being, while the substantive noun “Anwesenheit” always indicates for Heidegger the reification of this dynamic happening. See, for example, Martin Heidegger, *Sein und Zeit*, 16th ed. (Tübingen: Max Niemeyer Verlag, 1986), pp. 25-6, where Aristotle’s understanding of time is designated as responsible for the reification of being in this way. See also, Ted Sadler, *Heidegger and Aristotle: The Question of Being* (London and Atlantic Highlands, New Jersey: Athlone, 1996), chapter I: “Being and the Ousian Reduction;” and Werner Marx, *Heidegger and the Tradition*, trans. Theodore Kisiel and Murray Green (Evanston: Northwestern University Press, 1971), especially Introduction, pp. 3-14 and Part II: “Overcoming the Tradition.”

15. Here the interpretation of σώμα in terms of “Anwesenung” is in conflict with the interpretation offered in *Sein und Zeit*, where σώμα is most often identified with “πρᾶγμα” (a being present, presence) and rendered into German by Heidegger via the substantive noun “Anwesenheit” rather than via the verbal noun “Anwesend.”

16. See, for example, Heidegger, *Die Frage nach der Technik*, where the concepts of “Anwesenung” and “Abwesenheit,” which occur throughout the φύσις essay are mirrored by the twin terms: “entbergen” and “verbergen,” “to uncover” and “to cover” (p. 11). See also Heidegger, *Ursprung der Kunstwerk*, where he writes: “The being of truth, that is, of unconcealment [der Unverborgenheit], is dominated throughout by a denial... This denial belongs to the being of truth as unconcealedness in the manner of a twofold concealment [Verborgenheit]. The truth is, in its very being, untruth” (p. 43). It seems relatively clear that the same structure of thought occurs in all three works, and indeed, throughout this period of Heidegger’s thought: being is to be understood in terms of the entbergen/verbergen, anwesen/anwesen, revealing/concealing endemic to Heidegger’s understanding of ἀλήθεια. At the end of the φύσις essay, Heidegger is explicit: “Being [das Sein] is a self-concealing revealing [das sich verborgende Entbergen]—φύσις in its original sense. Self-revealing is a coming-forth into unconcealedness, and that means, to preserve unconcealedness as such first in essence [Wesen]: unconcealedness is α-Λήθεια” (WB 371).

17. Earlier, Heidegger wrote: “φύσις ist οἷος ἐκ φύσεως εἰς φύσιν,” which he translates in a typically abstruse manner as: “the being-on-the-way of a self-placing being towards itself as what is to be pro-diced, and this in such a way that the placing itself is completely of a kind with the self-placing which is to be pro-diced” (WB 382).
18. I say “peculiar” here because Heidegger’s use of ἀλήθεια to designate the pre-Socratic conception of the revealing/concealing of being is by no means uncontroversial. In fact, in an essay entitled “Der frühgriechische Wortgebrauch von Logos und Aletheia,” Heribert Boeder suggests that the term ἀλήθεια was often used in contexts in which a witness to a far-off event is asked to report on the truth, the ἀλήθεια, of what had happened. Thus, ἀλήθεια does have the connotation of unconcealing, but this in the sense of revealing an event to an inquirer interested in what had happened. Boeder further points out that in Homeric Greek, the ἀλήθεια about events witnessed long ago is often requested from the older generations (Heribert Boeder, “Der frühgriechische Wortgebrauch von Logos und Aletheia,” Archiv für Begriffsgeschichte 4 (1959), pp. 82-112). Heidegger himself admits that his own conception of ἀλήθεια cannot be ascribed to the Greeks in a late essay entitled “The End of Philosophy” (Martin Heidegger, On Time and Being, trans. Joan Stambaugh [New York: Harper and Row, 1972], p. 70). Fritsch has suggested the profound ramifications of this surprising admission in “Genus and τὸ τί ἐν ἐνότατα (essence) in Aristotle and Socrates,” Graduate Faculty Philosophy Journal 19:2-20:1 (1997), p. 202n. 25.

See the introduction to Sheehan’s translation of “On the Being and Conception of physics in Aristotle’s Physics B.1.”

20. G.W.F. Hegel, Werke in Zwanzig Bänden, vol. 19 (Frankfurt am Main: Suhrkamp Verlag, 1986), p. 164. The context is “very different” because Hegel uses the term to conceive the active identity of νέος and δύναμις and not as here, to understand the response to the happening of being.


22. Physics B.1, 193b1.

23. The deep political implications of Heidegger’s outright rejection of Antiphon come further into focus if the political dimension of Antiphon’s philosophy is taken into consideration. Antiphon seems to have been one of the first Greek thinkers to posit the equality of all human beings. In an oxyrhynchus papyrus fragment the following sentiment is attributed to Antiphon: “Those born of a noble father, we revere and respect; those not being from a noble house, we do not revere and respect. In this regard, we have become barbarous towards one another, since by nature we are all entirely equal, both barbarians and Greeks.” For Antiphon, it is nature (φύσις) that equalizes; he continues: “It is possible for all human beings to ascertain the things which are of necessity by nature; it is possible for all to procure these things, and in none of these things is any of us set apart, neither barbarian nor Greek. For do we all not breathe the air by the mouth and the nose and eat with our hands? . . .” (Diels-Kranz, Die Fragmente der Vorsokratiker, vol. II [Berlin: Wiedmann, 1977], Fragment 44, pp. 332-3). In the present context the name of the work from which this citation is excerpted must be mentioned with a certain amount of irony; it is from Antiphon’s ἀλήθεια.


25. This is a somewhat schematic characterization of Aristotle’s theory of generation, for Aristotle is also concerned to account for situations whereby female off-spring resembling the father are generated. It is sufficient, however, to make two general points: 1) for Aristotle the best case scenario is the complete domination of the form over the matter and 2) nevertheless, it is the dynamic relationship between form and matter that accounts for the being of the individual.


27. When Heinz Happ traces the development of A.7 as the transition from ὑποκείμενον = οὐκοίτως to ὑποκείμενον = ὅλον, he suggests that by predicinging “οπτίμα” of the ὑποκείμενον, Aristotle implies that the term is applicable to matter as well (Heinz Happ, Hyle: Studien zum Aristotelischen Materiebegriff [Berlin: De Gruyter, 1971], pp. 228f). However, while Happ argues that Aristotle does ascribe a certain activity to ὅλον by means of the term οπτίμα, he does not think that it is wise to point to the passage in Physics A.7 as a place where Aristotle explicitly does this (Happ, pp. 228-31).

28. H. Bonitz, Index Aristotelicus (Berlin: Graz, 1955), 691b40-58. For a good discussion of the extent to which the female principle may be active in Aristotle’s biology, and for a discussion of the various places in Aristotle where the catamenia is referred to as “spematics,” see Furth, pp. 129-141.


30. For precisely such a reading of Metaphysics Z, see chapter 5 of my The Legacy of ousia. Michael Ferejohn’s article, “The Definition of Generated Composites” in Unity, Identity and Explanation in Aristotle’s Metaphysics, eds. Theodore Scaltsas, David Charles, and Mary Louise Gill (Oxford: Clarendon Press, 1994), pp. 291-318, distinguishes between the “logical” and the “physical” treatment of generated composites and suggests that Aristotle’s example of the snubnose is precisely the sort of composite being that presents a problem for the purely logical account, that is, for the account based exclusively on an understanding of τὸ τί ἐν ἐνότατα as form.

