

ARISTOTLE'S DEFINITION OF NATURE

Physics 2 opens with Aristotle's definition of nature and "by nature," and this definition constitutes the proper subject of physics. As I shall argue, subsequent arguments do not so much proceed from this definition as provide the conditions required for it, and in this sense they are "for the sake of" this definition.¹ In short, the definition of nature and things that are "by nature" dominates first *Physics 2.1*, then *Physics 2*, and finally the rest of the *Physics*.

Physics 2.1 opens with a sharp distinction: "Of things that are, some are by nature, some from other causes."² The other cause that is Aristotle's primary concern here is art, and he is at pains to distinguish things that are "by nature" from those that "are products of art."³ Natural things, Aristotle begins, possess an innate principle of change, while products of art possess no such innate principle.⁴ Ultimately, he identifies both nature and artifacts primarily with form, which grants a thing its definition.⁵ The difference between them, so important here at *Physics 2.1*, lies not in their primary identification with form but in the relation of matter to that form. In things that are "by nature," matter is immediately and intrinsically aimed at form, whereas things that are "by art" require an artist to impose form on matter that in and of itself is neutral to artistic form.⁶

Aristotle's definition of nature here in *Physics 2.1* is revealing in several ways. (1) It appears *first* in the overall argument. In this sense, it defines the problems and arguments that follow and ultimately constitute the proper subject matter of physics as a science. (2) The contrast between nature and art

reveals what, for Aristotle, is the most important competing account of nature and the relation of matter to form. By eliminating this competing account at the outset, Aristotle can focus exclusively on the requirements of his own definition of nature. (3) Aristotle rejects materialism and twice interprets an odd image, a planted bed that acquires the power to send up a shoot.⁷ I shall consider these issues in order and argue that *Physics* 2.1 establishes the problems that form the proper subject matter of the remainder of the *Physics*.

(1) Aristotle opens *Physics* 2 by contrasting things that are “by nature” with those that are “by art.” The former, consisting of animals, plants, their parts, and the four elements (earth, air, fire, water), contain an innate principle of motion, while the latter do not.⁸ That is, insofar as a thing is a work of art, such as a bed or coat, it possesses no innate impulse to change; but insofar as such artifacts are made from things that are by nature (e.g., stone or earth), they *do* possess such an impulse.⁹ For example, earth is by definition heavy and so by definition goes downward. Therefore, an artifact made of earth is also heavy and goes downward—not by virtue of its artistic form, but by virtue of the natural element from which it is made.¹⁰

This relation indicates “that nature is some source and cause of being moved and being at rest in that to which it belongs primarily, in virtue of itself and not accidentally.”¹¹ This formulation spells out the characterization of nature as “a principle of motion” and reveals the problems entailed by it that are addressed in the remaining books of the *Physics*.

The first and most obvious problem concerns the relation between nature and motion. It is made explicit in the opening lines of *Physics* 3.1: if the meaning of “motion” were unknown, nature too would remain unknown; and if we are to understand motion, we must also consider those “terms” without which motion seems to be impossible, such as *the continuous, the infinite, place, void, and time*.¹²

Secondly, there are the principles “of being moved and of being at rest.” The principle of being moved will ultimately require Aristotle both to define motion as the actualization of the potential *qua* potential (by that which is actual) and to establish the principle that “everything moved is moved by another.”¹³ The principle of being at rest is “contrary to motion” in that which is movable and is associated with the related problems of elemental motion and natural place.¹⁴

In short, Aristotle establishes his definition of nature first, sharply contrasting it with art, and then proceeds to particular problems, implications, and supporting arguments entailed by this definition. Hence “nature,” or “by nature,” is both the first and the most important topic of *Physics* 2—and ultimately of the *Physics* as a whole.¹⁵ If we look at the rubric of *Physics* 2 as a *logos*, the force of nature as a topic emerges.

Physics 2.1 defines nature and things that are “by nature.” Aristotle then distinguishes mathematics, physics, and astronomy by distinguishing among their subject matters: physics deals with things that are “by nature” and so considers things that (and insofar as they) involve both form and matter—matter, that, unlike the matter of the heavens, can be generated and corrupted.¹⁶ The argument then proceeds by stages to the four causes that are by nature, to chance and spontaneity, which might be thought (falsely) to be causes “by nature” in addition to the four causes, to the relation of final and formal causes within nature, to the sense in which nature is a cause that acts for the sake of something, and, finally, to necessity and its place within physics.

In effect, the *logos* begins with a bang (“Of things that are, some are by nature and some are from other causes”) and proceeds through a series of progressively more specialized problems to end with a whimper—hypothetical necessity in nature and its identification with matter.¹⁷ Aristotle first establishes what is most important and then turns to whatever topics are necessary for its clarification or further support. In this sense, the arguments in *Physics* 2, as in the remaining books of the *Physics*, are neither progressive nor cumulative. Rather they become narrower and more specialized in support of an opening thesis or definition.¹⁸

And in *Physics* 2 the primary thesis concerns things that are by nature, that they contain “a source of being moved and of being at rest in that to which it belongs primarily.” In *Physics* 2.1, Aristotle makes two points about nature and things that are “by nature.” (1) Nature is a substance, a subject, and, although in a secondary way it may be identified with matter, it is primarily identified with form and shape.¹⁹ Form is what a thing is when it has attained fulfillment, form is the proper object of the definition, and form is reproduced by nature—man begets man.²⁰ Form in the sense of shape is what a natural thing attains when it is fully developed.²¹ A natural thing is in the fullest sense when it has completely attained its form; and we know that thing most completely when we know its form, because to know a thing’s form is to know its definition. Therefore, nature is primarily identified with form.

But this identification leaves Aristotle with something of a dilemma: he intends to distinguish things that are by nature from those that are by art; but art, too, is primarily identified with form—there is nothing artistic about a thing if it is a bed only potentially but has not yet received the form of a bed.²² As form, nature and art are alike. Thus, the identification of nature with form does not sufficiently specify it so as to distinguish nature from art. (Aristotle does not mention god in *Physics* 2, but we may note that it is pure form, and so the identification of nature with form fails to distinguish it from god as well as from art.)²³ We require Aristotle’s second characteristic of nature.

(2) Nature is not just form: things that are by nature have an intrinsic impulse of change. That is, things that are by nature possess an active orientation toward their final form.²⁴ In this sense, natural things are *unlike* artistic things, because artifacts possess no such innate impulse.²⁵ This innate impulse of change serves as the principle of being moved specified in the definition of things that are by nature; it founds the sense in which natural things include matter and, so, accounts for why, as Aristotle goes on to explain in *Physics* 2.2, things that are by nature must refer to matter in their definition.²⁶

Here we reach a key issue: for Aristotle, in natural things to be moved does not imply a passive principle. Matter (or potential), which is moved by form (or actuality), is moved precisely because it is never neutral to its mover: matter is aimed at—it runs after—form.²⁷ Because of the active orientation of the moved toward its mover, no third cause is required to combine matter and form. They go together naturally: form constitutes a thing as natural, and matter is aimed at form.

In short, then, nature requires both that form immediately constitute the natural thing *and* that matter relate intrinsically to form. Indeed, in natural things, matter cannot exist prior to, or apart from, form; so flesh can neither come to be nor endure apart from a living animal: a severed hand is a hand in name only.²⁸ And so, Aristotle concludes, the combination of form and matter, such as a man, is not “nature” but “by nature.”²⁹ And so, too, are plants, animals, their parts, and the four elements.³⁰

(2) The sharp contrast of nature with art here reveals Aristotle's interest in refuting the view that identifies nature with art—Plato's view. An account of nature as a complex work of art formed by a master craftsman who looks to an eternal model and instantiates that model onto chaos, insofar as chaos can receive it, occupies Plato's *Timaeus* and is consistent with arguments in other dialogues. When Aristotle defines nature as an intrinsic source of being moved, he not only establishes the subordinate problems occupying the remainder of the *Physics*, he also rejects virtually every feature of Plato's account. This rejection at the outset enable him to pursue his own account more fully in the remainder of the book.

Plato's account establishes the physical world as caused from without. The Demiurgos produces the physical world as an artisan produces the products of his craft: he looks toward a model, or pattern, to instantiate it on his effect.³¹ The Demiurgos orders the world—itsself an artifact halfway between the random, resistant chaos of the receptacle and the being of the forms—by sending soul down into resistant chaos so as to produce the world.³² Soul is the messenger of the gods, bringing order down into things and reporting the needs of things to the gods.³³ In this sense, like the Demiurgos, it operates not as an intrinsic, but as an extrinsic, source of motion. Before turning to Plato's

definition of soul, it is important to see how sharply Aristotle's definition of nature here in the opening lines of *Physics* 2.1 contrasts with that of Plato.

Aristotle begins, "Of things that are, some are by nature"; Plato distinguishes sharply between things that are and never become (the forms) and things that always become and never are (the physical world).³⁴ Both Plato and Aristotle identify form with being and the object of definition. But for Plato, this identity implies that form remains always separate from the physical world, which is but a copy or appearance of form and so can never be defined, merely described. Aristotle identifies nature with form—with the result that nature *is*—and form serves as the object of the definition of things that are by nature; consequently, natural things are immediately definable. For this reason, Aristotle's "nature" and Plato's physical world are dramatically different—as are their accounts and evaluations of physics. Physics is a science for Aristotle and a "likely story" for Plato.³⁵

Again, while Aristotle defines nature as an intrinsic source of being moved and being at rest, Plato defines the physical world as requiring an extrinsic mover (or movers). Both the Demiurgos and soul are separate from the world; indeed, soul descends into the world, when, losing its wings, it can no longer fly on high.³⁶ This dependence on a cause "from another world" lies close to Plato's classification of the world as becoming—things change (i.e., become) because they are not self-sufficient but depend upon another. On this view, we can understand Aristotle's complaint that Plato fails to provide a cause of natural motion; Plato, quite properly on his own view, provides an extrinsic cause (or causes) of motion, while Aristotle requires an intrinsic cause.³⁷

Finally, while for Aristotle nature possesses an innate impulse to change, that is, matter is aimed at form, for Plato chaos resists the imposition of form by the Demiurgos, or soul, his messenger. As with "nature" and "the physical world," the concepts of "matter" and "chaos" are at odds with one another and cannot be translated immediately from one account to the other. As a result, the very objects designated as "nature" or "the physical world" differ not only in status and definition but in their constitution as objects. And Aristotle's characterization of nature as containing an intrinsic principle of motion announces this difference immediately.

In short, Plato and Aristotle agree about art. It requires that matter and form be combined by an external agent, because they do not go together in and of themselves. But for Plato, nature is a work of art, while for Aristotle it is not, precisely because in natural things matter and form do go together immediately and without reference to a third cause. *Physics* 2.1 establishes, contra Plato, that nature *is*, is form, and contains an intrinsic source of being moved.³⁸

After defining nature as a "source or cause of being moved and of being at rest in that to which it belongs primarily, in virtue of itself and not

accidentally," Aristotle immediately explains why he says "not accidentally."³⁹ A doctor, for example, might heal himself, but it is not insofar as he is sick that he possesses the art of medicine; rather, by chance the man who happens to be sick also happens to be a doctor, so that the doctor cures himself.⁴⁰ Because this relation rests on happenstance, these things are not always combined, and when they are combined the doctor heals himself by accident and not by virtue of what he is—a doctor.⁴¹

The doctor who cures himself is a possible case in which the mover and the moved, the doctor and the patient, are one and the same. And Aristotle is at some pains to show that even though they may be the same individual, the cause and the effect are not the same within the individual. Indeed, Aristotle emphasizes that precisely because of such cases he adds the expression "in virtue of itself and not accidentally" to his definition of nature.⁴² The point here must be directed against Plato, because such an identity of mover and moved is Plato's definition of soul.⁴³

Plato defines soul as "that which moves itself," an identity of mover and moved.⁴⁴ Physical motion is the by-product produced in body by the presence of a self-identical mover, namely, soul.⁴⁵ Indeed, soul is the first principle of motion, upon which the whole universe depends.⁴⁶ Thus, Plato concludes, without soul as its extrinsic mover, nature (body) would "collapse into immobility, and never find another source of motion to bring it back into being."⁴⁷

Again, the contrast with Aristotle could hardly be sharper. While nature for Plato requires an extrinsic mover, for Aristotle nature is an intrinsic source of being moved.⁴⁸ While for Plato, soul presents the first motion, which is self-moving motion, Aristotle will go on, first in *Physics* 3, to define motion such that the same thing can never be both mover and moved in the same respect at the same time, and finally in *Physics* 7 and 8, to argue that "everything moved is moved by another [or by itself qua other, as when a doctor cures himself]."⁴⁹ If we look beyond the *Physics* to the *De Anima* and *Metaphysics*, soul for Aristotle is not self-moving, but unmoved, soul is not descended into body from without but is the first entelechy of body, and god moves not as an artisan, but by being unmoved, an object of love desired forever by the first heaven, which runs after him.⁵⁰

The particulars of some of these problems will be discussed in the chapters to follow. Here I wish to draw two conclusions. First, Aristotle's definition of nature as it appears at the opening of *Physics* 2 establishes the subject matter for the arguments that follow, not only in *Physics* 2 but also in the subsequent *logoi* of the *Physics*. Secondly, at least in part, the immediate backdrop of Aristotle's definition is Plato's account of the physical world as produced by extrinsic movers, the Demiurgos and self-moving soul.⁵¹ These conclusions follow from the striking contrast between Aristotle's definition

and Plato's account of nature along with the pointed rejection of the doctor curing himself as an example of self-moving motion.

(3) But *Physics* 2.1 does not end with the rejection of a self-mover. Having eliminated the most obvious case of the self-mover, Aristotle goes on to consider the position of those who would identify nature with

that first constituent of it which in virtue of itself is without arrangement, the wood is the nature of a bed and the bronze a statue.⁵²

Again, he intends to reject his opponents' view while at the same time establishing his own position as the primary thesis to be considered. Aristotle in effect situates his definition of nature as distinct from (and superior to) what he takes to be its two most serious competitors, Plato's account of the physical world and the materialists' account. I shall suggest that in a broader sense, his argument against the materialists reveals a full vision of the Greek context in which he works and the ultimate origin of the problem concerning the relation between art and nature.

After suggesting that nature can be identified with matter, that is, the immediate constituent taken by itself without arrangement, Aristotle inserts a puzzling argument:

As a sign of this Antiphon says that if someone planted a bed and the rotting wood were to acquire a power such that a shoot would come up, not bed but wood would be generated; thus, the arrangement, namely the craft, according to convention is what belongs by accident, the substance being the other, which, indeed persists continuously while being acted upon.⁵³

Aristotle returns to this peculiar example a page later at the end of his argument, and here he refers to the argument generally as if it were a "sign" that is well known:

And therefore they say that the figure is not the nature, but the wood is, because if the bed were to sprout, not a bed but wood would come up.⁵⁴

These two, rather different, appearances of a planted bed are revealing.

Aristotle first refers the planted bed to an argument from Antiphon, a materialist. For Antiphon, the bed is a sign that things can be reduced to what persists continuously beneath form. So form, whether of bed or of olive, can be reduced to its material constituent, wood. The case could be taken

even further, and all things could be reduced to the four elements: "for example, bronze and gold to water, bones and wood to earth, and likewise for other such."⁵⁵ On this materialist view, there is no real difference between natural form and artistic form, because both are like accidents added to, and ultimately separable from, matter.⁵⁶

Without explicitly rejecting this view, Aristotle moves to the argument that "nature" is the shape or form of a thing given in the definition.⁵⁷ And here, as we have seen, art and nature are both identified with form. Both a potential bed and potential flesh must receive form before they can be said to be "by art" or "by nature."⁵⁸ But then he adds the key point: "nature" is in this sense identified with "the shape, namely the form, (not separable except in definition) of things having in themselves a source of motion."⁵⁹ That is—and for Aristotle the crucial difference between art and nature lies here—when a thing is "by nature," the form, which constitutes what it is actually and by definition, is not separable in fact from the matter, which is the thing's source of being moved, because matter is aimed at form.⁶⁰

Aristotle now explicitly rejects the materialist view and asserts that indeed nature is form. He returns to the "sign" of the planted bed, which now signifies something rather different from what it signified for Antiphon.⁶¹ Again Aristotle says, "Man comes to be from man, but not bed from bed."⁶² The figure is not the nature of the bed in the same sense that the form is the nature of a man, because if you planted a bed and it could sprout, it would sprout wood and not more bed. Here rather different conclusions follow about the planted bed and the relation between nature and art.

When we define an object such as a bed as an artifact, the olive wood out of which it is made is no longer central to the definition. The definition of any artifact must bear upon its artistic form (e.g., bed) as imposed by an artist and not its matter and natural form (e.g., the olive wood out of which it is made). Hence, in an artifact, what is by nature is its matter in relation to its form; but what makes it to be definable as an artistic thing is the form imposed upon it by the artist.⁶³ Therefore, olive wood can simultaneously be both wood and a wooden bed. The relation between art and nature, as Aristotle would have it, requires that an artifact such as a bed be identified both with its olive wood (i.e., the combination of form and matter that, if possible, would "by nature" grow) and with its artistic form, the extrinsic shape imposed by an artist and the object of the definition of the thing as a work of art.

These distinctions show how an artifact is properly identified both with what it is by nature, its matter in relation to natural form, and with its artistic form. On the one hand, Aristotle maintains the primacy of form in any object, artistic or natural. All objects, whether "by nature" or "by art," possess their names and/or definitions in virtue of form. On the other hand, he

differentiates variable relations between form and matter. In nature, matter must be intrinsically related to form—no artist is required to combine them—and so matter neither precedes form nor can it be without form. For example, the wood of a bed may have been an olive tree and so will always retain the nature of olive wood, for instance, the grain of the wood. And so, when we look at a bed, we may admire the beauty of the wood from which the bed is made. In so doing, we admire what the bed is by nature and what would grow if the bed could sprout, not matter, but matter in relation to form: olive wood.⁶⁴

But at the same time, artistic form is extrinsically imposed upon matter by the artist, because matter is exclusively oriented toward natural form and possesses no innate ability to be moved by artistic form. And if we admire an object as artistic, we admire the craftsmanship of the artist as displayed by the artistic form of the object. Aristotle's distinctions are designed to account for nature as distinct from art and both nature and art as primarily identified with form. The same object is at once natural and artistic, beautifully grained wood, such as olive or oak, and a bed.

But this account leaves an important question unanswered. Why such an odd sign, a planted bed, and why does Aristotle return to this sign and reinterpret it in light of his own account? Although a decisive solution to this question is probably not possible, some speculation is: perhaps this planted bed ultimately echoes an interest in the "planted bed" of Odysseus, which stands in Homer's account as the ultimate sign between returning husband and faithful wife.⁶⁵ This sign may serve as an ancient *locus classicus* for the problem of the union of art and nature. A brief consideration of this sign in Homer shows the power of Aristotle's position and the full context in which he may have intended it to operate.

Everyone recalls Homer's account of Odysseus's return—Penelope tests him with a secret sign, knowledge of their rooted bed, and reunited they retire to this immovable bed. Knowledge of the rooted bed constitutes a clear sign proving the identity of Odysseus to Penelope and the faithfulness of Penelope to Odysseus. Ostensibly, the secret sign between Odysseus and Penelope is a rooted bed, a special union of art and nature.⁶⁶ Let us first consider the bed as identified with what it is by nature: the olive tree which grew and from which it is made.

Most beds are made out of cut wood; but this bed must be identified with the olive tree itself, and so it retains its relation to the olive tree found in nature. When Penelope commands Eurykleia to place the bed outside the bed chamber, Odysseus asks if someone has sawn through the trunk and dragged the frame away.⁶⁷ We can only conclude that an important part of the intrinsic identity of this bed rests in the rooted olive tree. Indeed, Odysseus tells us, the olive tree by its presence determined the plan both for the bedroom and for the bed itself.⁶⁸

The olive tree in Greek literature is often associated with divine presence and longevity, and a marriage bed that retains its identity with a rooted olive tree would retain this identification as well.⁶⁹ Consequently, in order to be the bed of Odysseus, the bed cannot lose its identity with the rooted olive tree, that is, with what it is by nature, on Aristotle's account.⁷⁰

But as the artist, Odysseus plots out the bedroom and the bed itself around the olive tree from which he will form the marriage bed. What makes the bed unique as a bed is Odysseus's artistry in shaping the bedpost "from the roots up." And herein lies, as Aristotle would have it, its artistic form. The artistry lies in the bed being made by Odysseus so as to be immovable. Its immovability both makes the bed formally unique and explains the construction of the bed, that is, why the bedpost retains its identity as the rooted trunk of a tree.

The unity of form and matter in this sign, this immovable rooted bed, cannot be overemphasized.⁷¹ A tree is by nature rooted and immovable. The olive is associated with divine presence and longevity. But beds are normally made of "lumber," the wood sawn from a tree that has been cut down. Odysseus makes his bed immovable, and this immovability, both present in the olive tree as rooted and imposed upon the bed through the unique decision and construction by Odysseus, constitutes the crux of Penelope's test—her search for a clear sign. Only this unity of art and nature makes the bed operate as a sign absolutely clear between husband and wife.

With the perfect unity of art and nature, the sign of the bed in Homer's *Odyssey* functions perfectly within the plot of the poem and completes the return of Odysseus. The immovable bed, to which Odysseus and Penelope immediately retire, stands as a token of perfect marriage. While Odysseus has rejected even immortality in order to return home to his wife, Penelope has withstood the infamous siege of the suitors.⁷² Her test possesses a double edge: the immovability of the bed tests not only Odysseus's identity, but also Penelope's faithfulness. If the bed were moved, the secret sign of the marriage would be destroyed: the bed would be the bed of an adulteress. No other woman could know the secret of the bed and so formulate this test; Penelope *would not* use her knowledge of the bed in such a test except as a faithful wife. While only Odysseus could not mistake the sign of the bed, only *faithful* Penelope could use this sign as a test. Thus, the rooted bed constitutes a sign excluding everyone but Odysseus and Penelope, returning husband and faithful wife. The sign of the bed signifies the sanctity and inviolability of their relation.⁷³ The formal perfection of this marriage is signified by a bed made from a rooted olive tree: mortals in a divine union.

It may be well to note that taking our clue from Aristotle solves two serious problems traditionally associated with the sign of the bed in Homer. The first concerns Odysseus's anger when Penelope tells Eurykleia to move the bed: "For the first time in the whole *Odyssey*, Odysseus is mastered by a

sudden impulse [i.e., his anger]. Odysseus speaks without perceiving the implications of his interlocutor's words."⁷⁴ What Odysseus does not know is that Penelope's words constitute a test. He most surely understands the implications of Penelope's command to Eurykleia. While he has given up immortality itself to return to her, Penelope's command to move the bed implies that she has been unfaithful. Odysseus's anger is both completely justified on the basis of Penelope's command and immediately resolved at the revelation of the test and the truth of the sign on which it rests.⁷⁵

Secondly, the bed of Odysseus seems curious.⁷⁶ Stanford suggests that the olive tree might have been sacred but would then scarcely have been proper matter for a marriage bed, and suggests that natives of the interior of New Guinea, whose traditions go back to Neolithic times, do not completely clear their gardens, because of the difficulty of felling a tree with a stone tool.⁷⁷ Such an explanation misses the point of Odysseus's bed as a unique union of art and nature: Odysseus *makes* the bed to be rooted from the olive around which he designs the room. (Surely, anyone who cuts down suitors as Odysseus does could handle a tree!) The answer to the curiosity of the bed lies with the special nature of the marriage of Odysseus and Penelope, especially if we think of other couples in Homer or Greek mythology more generally.

Aristotle does not mention Homer in *Physics 2*; nevertheless, his treatment of the "planted bed" as a common sign, and his reinterpretation of it, constitute a strong clue as to its importance. And that clue works together with the other features of *Physics 2.1* to define for us Aristotle's specific interests in defining nature and contrasting it with art.

His immediate interest in defining nature is to establish his definition in contrast to those opponents whom he takes to represent the most serious challenges to his position. And these opponents are Plato, for whom nature is a work of art, and the materialists, for whom nature and art alike are attributes added to the real nature of a thing, namely, its matter. The ultimate background to the entire argument about nature, art, and their relation may rest with one of the most remarkable symbols of all Greek literature, the planted bed of Odysseus. And Aristotle clearly thinks that his distinctions account for this symbol better than do those of his opponents. Hence his position is the best, and his definition of nature (and its relation to art) is established and ready to be explored.

What has Aristotle accomplished by the end of *Physics 2.1*? In one sense, a good deal. he has implicitly rejected Plato's account of nature, and he has explicitly rejected the inadequacies of materialism. He has also reinterpreted the sign of the planted bed and so shown the superiority of his position. And he has achieved these ends in the context of asserting his own definition of nature and its two essential features, the primacy of form and the innate impulse to be moved in things that are "by nature."

But in another sense, he has accomplished little. He has explained neither the meaning of his definition, nor the terms involved in it, nor has he considered its implications. This work lies ahead, in the remainder of *Physics* 2, in the explicit reference of *Physics* 3 through 6 back to *Physics* 2, and then in the more remote and specialized problems of *Physics* 7 and 8. As I shall now argue, these problems are defined by their relation to *Physics* 2 as they establish the terms and conditions required by the definition of nature established here—first—in *Physics* 2.1.