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Aristotle's Scientific Inquiry into Natural Slavery

JOSEPH A. KARBOWSKI*

THE NATURE OF ARISTOTLE'S ETHICAL METHODOLOGY has been the subject of intense debate in recent years. The standard view is that the ethical methodology is essentially dialectical.¹ There are multiple sources of motivation for this interpretation. One of the most striking is that Aristotle describes a method that cannot unreasonably be viewed as dialectical in *Nicomachean Ethics* (*NE*) VII.1 and uses it to guide his inquiry into *akrasia* in *NE* VII.1–10.² This method, roughly, involves setting out, raising, and solving puzzles about *endoxa*, the beliefs of the many and the wise.³ Since Aristotle follows this “endoxic” method so carefully in *NE* VII.1–10, it is natural to wonder whether he employs it elsewhere in the *NE* (and the corpus as a whole). For a long time, many scholars did indeed suppose that the endoxic method was the main methodology of the *NE*. However, recent work has forcefully questioned this presumption.⁴

Interestingly, Victor Goldschmidt's important work on the method of the inquiry into natural slavery in the *Politics* (*Pol.*) sets him at the forefront of this recent trend.⁵ He established long ago that Aristotle does not employ the endoxic method of *NE* VII.1 in his inquiry into natural slavery in *Pol.* I.4–7. In *Pol.* I.3 Aristotle surveys two *endoxa* and uses them to set the agenda for the following chapters,⁶ but he explicitly discusses one of them in *Pol.* I.6 only *after* he has developed his own account of the natural slave independently of any consideration of *endoxa*.

¹This interpretation was inaugurated by John Burnet's famous claim that the *NE* is “dialectical throughout”; see Burnet, *The Ethics of Aristotle*, v and xxxix–xli.

²The *NE* VII.1 method is typically viewed as dialectical, because it uses *endoxa*, the main currency of dialectic (*Top.* I.1, 100a18–20), as its starting points or *phainomena*. However, it is debatable whether this characterization of that method is correct, because Aristotle never calls it dialectical. In any case, what matters most for my purposes is that the *NE* VII.1 method is taken by many to be Aristotle's main ethical methodology.

³For further discussion of this method, see section 4 below.

⁴See Frede, “Mystique”; Natali, “Scientific Aspects” and “Happiness”; and Salmieri, “Non-Dialectical Methodology.”

⁵See Goldschmidt, “Théorie et méthode,” 149–53. As far as I know, this is the only other paper whose main focus is the methodology of the inquiry into natural slavery in *Pol.* I.4–7.

⁶For the *endoxa* I have in mind, see note 27 below.

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This retrospective use of *endoxa* in *Pol.* I.4–7 clearly contrasts with the prospective and constructive use of *endoxa* in an application of the *NE VII.1* method, wherein one develops one's own account of a given subject *by* raising and solving puzzles about *endoxa* (see section 4 below).

It is not difficult to determine why the *NE VII.1* method would not have been a suitable choice in this case. Aristotle was already convinced of the falsity of the views mentioned in the prospectus of *Pol.* I.3 (1253b17–18), and so it would have hardly made sense for him to examine the *truth* about slavery via aporetic reflection upon these *false* beliefs.⁷ However, it is more of a challenge to characterize positively the method that Aristotle employed in his inquiry into natural slavery in *Pol.* I.4–5. Goldschmidt describes it as *scientifique* and *physique* (“Théorie et méthode,” 152), but he is less than clear about what this method amounts to. He draws a connection between the existential (*ei estin*) and definitional (*ti estin*) aims of the *Pol.* I.4–5 inquiry and the existential and definitional aims of the scientific treatments of place, void, and time in *Physics* (*Phys.*) IV (see Goldschmidt, “Théorie et méthode,” 151n38). But there is an apparent difference between the two procedures, which proves problematic for his suggestion, at least at first glance.

As Goldschmidt himself acknowledges, in *Phys.* IV Aristotle tends to investigate the existential question first and only then proceeds to the definitional question. This is in keeping with his repeated assertion in the *Posterior Analytics* (*An. Post.*) that essence is not to be investigated before existence (*An. Post.* II.1, 89b34; II.2, 89b38–90a1; and II.7, 92b4–8). However, contrary to this remark, in *Pol.* I.4–5 Aristotle does undertake to define the natural slave *before* establishing its existence (*Pol.* I.4, 1254a13–14; and I.5, 1254b17–20). Given Aristotle's aim in *Pol.* I.4–7, this reversal of his procedure is understandable.⁸ But it is an apparent obstacle to accepting his suggestion that Aristotle is employing the scientific method described in *An. Post.* II and employed in *Phys.* IV in that inquiry.

Perhaps for some such reason Malcolm Schofield suggested that Aristotle is employing the *Pol.* I.1 method of analysis in *Pol.* I.4–7.⁹ Unfortunately, however, this proposal fares no better than Goldschmidt's. This method, whereby we investigate a topic by analyzing it into its incomposite parts (*asuntheta*), works only for composite (*suntheta*) entities (*Pol.* I.1, 1252a18–20). Thus, it applies to the *polis*, which is composed of households (*Pol.* I.1, 1252a20–21; and I.3, 1253b1–3), and also to the household, which is composed of slaves and free persons (*Pol.* I.3, 1253b3–13). Aristotle even employs it in his investigation of wealth acquisition (*Pol.* I.8, 1256a1–3).¹⁰ However, he never says that it is, or was, the guiding method in his investigation of natural slavery,¹¹ and it is easy to understand why. A slave is

⁷See Schofield, “Ideology,” 8. Admittedly, Aristotle concedes in *Pol.* I.6 that there is something to the claim that slavery is conventional, but he does not share the same opinion about the other belief from *Pol.* I.3; see *Pol.* I.7.

⁸Aristotle's main goal is to show that in some cases at least slavery is natural, just, and beneficial, and he tries to do this by establishing the existence of natural slaves (*Pol.* I.5, 1254b17–20). However, in order to pull this off he needs a preliminary account of the natural slave; see Goldschmidt, “Théorie et méthode,” 151.

⁹See Schofield, “Ideology,” 8.

¹⁰See Natali, “Aristote et la chrématistique.”

¹¹The only passage within the discussion of slavery that Schofield cites as proof of his assertion is *Pol.* I.5, 1254a20–1254b26; see Schofield, “Ideology,” 8. But in that passage Aristotle is not analyzing

an *incomposite* part of the household, and so a different method must guide the examination into natural slavery.¹²

In this paper I will argue that Goldschmidt's original suggestion is basically correct: Aristotle employs a method in his inquiry into natural slavery in the *Politics* that bears a striking resemblance to the scientific method of *An. Post.* II.1–10. The initial appearance to the contrary is due, on the one hand, to a failure to acknowledge that different kinds of definitions play different roles in inquiry (section 1), and, on the other, to ignorance of the fact that Aristotle continues to refine his definition of the natural slave into *Pol.* I.5 (section 3). Below I begin with an overview of the *An. Post.* II.1–10 method and the different sorts of definition it involves. I then proceed to a close analysis of *Pol.* I.4–5 and argue that it exhibits the existential/definitional progression characteristic of that method. Before concluding, I briefly discuss *Pol.* I.6 and show that Aristotle does not employ the endoxic method of *NE* VII.1 in it. This discussion also reinforces Goldschmidt's claim that Aristotle does not employ the latter method in the whole of *Pol.* I.4–7. I conclude with remarks intended to forestall some natural objections to my scientific interpretation of the inquiry into natural slavery.

I. DEFINITION AND SCIENTIFIC INQUIRY IN *AN. POST.* II. 1–10

Goldschmidt's construal of Aristotle's "physical" or "scientific" method focuses upon his two-step procedure for treating the main topics in *Phys.* IV. In these cases he first establishes the existence of the phenomenon and only then proceeds to determine its essence (*Phys.* IV.1, 208a28–29; IV.6, 213a12–14; and IV.10, 217b31–32). This procedure is clearly an instance of the following method:¹³

[C]ertain items we seek in another way, e.g. if a centaur or god is or is not. (I mean if it is or is not *simpliciter* and not if one is white or not.) And having come to know that it is, we seek what it is (e.g.: Then what is a god? Or What is a man?). (*An. Post.* II.1, 89b31–35)

This passage presents existence as an object of scientific investigation that naturally precedes essence.¹⁴ Now, of course Aristotle realizes that in certain special cases, e.g. where we are already acquainted with the existence of the thing or its existence is uncontroversial, we need not conduct a separate existential investigation (*An. Post.* I.10, 76b16–20). However, there will also be cases where we are unsure of the existence of the phenomenon or its existence is controversial, and in these cases we will have to mount a preliminary existential investigation.

natural forms of rule into constituent "parts" but instead inductively supporting his principle of ruler-ship by appeal to natural ruler/subject pairs; see section 5.

¹²One might argue that insofar as Aristotle undertakes to identify the "elements" of the definition of the natural slave in *Pol.* I.4–5 he is employing a method of analysis. That will ultimately be my suggestion, for the scientific method of *An. Post.* II.1–10 just is such a method of analysis.

¹³For translations of the *Posterior Analytics* in this paper I use Barnes, *Posterior Analytics* with some emendations.

¹⁴Aristotle allows that a thing's existence and essence might be discovered simultaneously (*An. Post.* II.8, 93a29–36). But we never discover the fundamental, causal essence before existence (*An. Post.* II.1, 89b34; II.2, 89b38–90a1; and II.7, 92b4–8).

This last sort of case is important for us, because reflection upon it will lead us to one of the refinements we need to understand the method of *Pol.* I.4–5. At the beginning of such an existential inquiry, the inquirer will be unsure or even ignorant of the existence of the subject in question. However, if one is to conduct a fruitful investigation, one must have *some* conception of the subject of investigation, a conception that tells one what it would be like for the thing to exist without presupposing knowledge of its existence. Aristotle was well aware of this necessary prerequisite of existential inquiry, for in his catalogue of scientific definitions he identifies one type that is naturally suited to play this role:

Since a definition is said to be an account of what something is, it is clear that one sort will be an account of what a name or some other name-like account signifies, e.g. that which signifies what something is insofar as it is a triangle [*to ti sēmainēi ti esti hēi trigōnon*].¹⁵ Upon grasping that this exists, we seek why it exists. But it is difficult to grasp anything in this way [i.e. causally]¹⁶ if we do not know that it exists. The explanation of the difficulty was given earlier: we do not even know whether it exists or not except incidentally. (*An. Post.* II.10, 93b29–35)

Whenever we set out to investigate the existence of a subject whose existence has not yet been established, we rely upon information associated with its name: an account of what its name signifies or, more simply, a nominal definition.¹⁷ This sort of definition does not presuppose or by itself yield knowledge of the existence of the thing in question;¹⁸ but it contains information useful for determining the existence of the subject in question because it says what would have to be the case if it were to exist (cf. *Phys.* IV.7, 214a16–19).

¹⁵For the textual reading of 93b31–32 that I adopt, see Detel, *Analytica Posteriora*, 675–76; and Pellegrin, *Seconds Analytiques*, 408.

¹⁶For this reading, see Charles, *Meaning*, 34n18; and Sorabji, “Why Necessary?,” 217n30.

¹⁷It would perhaps be most accurate to call this sort of account a “signifying” definition, but the “nominal definition” terminology is so entrenched that I will stick with it in this paper. Suffice it to say that Aristotelian nominal definitions are not necessarily to be identified with Lockean nominal definitions.

¹⁸According to Robert Bolton, nominal definitions presuppose knowledge of existence, because they signify a kind loosely by referring to instances of it that are familiar to us via perception and experience; see Bolton, “Semantic Theory,” 526–33. But this interpretation is problematic for several reasons. Firstly, Aristotle clearly denies that definitions necessarily affirm or assert the existence of the *definienda* (*An. Post.* I.2, 72a18–24, I.10, 76a32–36; see Demoss and Devereux, “Existence and Nominal Definition,” 142; Sorabji, “Why Necessary?,” 216; and Charles, *Meaning*, 72–77). Furthermore, contrary to what we should expect on Bolton’s reading, not all nominal definitions seem to make an explicit reference to individual instances. Specifically, the definition of soul as a “self-moving thing” (*An. Post.* II.8, 93a24) includes no indefinite article (*tis*), which according to Bolton is Aristotle’s vehicle for referring to actual instances; see Demoss and Devereux, “Existence and Nominal Definition,” 142–43. Finally, *An. Post.* II.10, 93b32–33 suggests that the grasp of a nominal definition by itself does not presuppose or even yield knowledge of existence. This last observation cuts against Bolton’s interpretation, but it also challenges the view of Demoss and Devereux according to which nominal definitions “yield” knowledge of existence by giving us a means of recognizing instances of the phenomenon in question when they confront us; see Demoss and Devereux, “Existence and Nominal Definition.” This view is also problematic because the sheer ability to identify instances of a kind if and when one is confronted with them does not count as knowledge of existence *in the absence of experience of actual instances*. DeMoss and Devereux are, it seems, committed to claiming that we can have knowledge of the existence of goat-stags and centaurs, because surely our nominal definitions of them could give us an ability to pick out goat-stags or centaurs if we were ever confronted with them. For these reasons I prefer Charles’s “spring board” view, according to which nominal definitions neither presuppose nor by themselves yield knowledge of existence; see Charles, *Meaning*, 35–37.

In cases like the void, where the item in question turns out not to exist, this nominal definition is the only kind of definition available (*An. Post.* II.7, 92b5–8).¹⁹ However, in the case of an existing kind, like eclipse or thunder, there will be multiple definitions of the kind of varying degrees of epistemic robustness:

[1] Since a definition is said to be an account of what something is, it is clear that one type will be an account of what a name or some other name-like account signifies. . . . [2] Another definition is an account which shows why something is the case. Hence the former type signifies something but does not prove it, whereas the latter will clearly be like a demonstration of what something is, differing in arrangement from a demonstration. . . . [3] Again, a definition of thunder is noise in the clouds, and this is the conclusion of a demonstration of what it is. [4] The definition of an immediate item is the indemonstrable positing of what it is. (*An. Post.* II.10, 93b29–94a10)

In this passage Aristotle mentions four different types of definitions.²⁰ The first sort is the so-called nominal definition. As I pointed out above, this kind of definition mentions information associated with the name of the (putative) kind in question and as such does not presuppose or impart knowledge of the existence of a genuine kind corresponding to the name.²¹ The other three definitions, however, are found at different stages of inquiry, viz. those where existence has already been established. The second sort of definition is a definition that differs in arrangement (*thesei, ptōsei*) from a demonstration (*An. Post.* II.10, 94a1–2 and a11–12). These definitions contain the same information encapsulated in demonstrations (explicable features of the kind with their causes or explanatory factors) but rearranged in the form of definitions, e.g. “Thunder is the noise of fire being quenched in the clouds” (*An. Post.* II.10, 94a5).²² The third type of definition is an account that contains information that appears as the conclusion of demonstrations (*An. Post.* II.10, 94a7–9 and a13–14). These accounts define a kind by means of its derivative, necessary features alone, e.g. “Thunder is a noise in the clouds” (*An. Post.* II. 10, 94a7–8). They may be similar in content to nominal definitions, but they are found at a more advanced stage of inquiry, where the existence of the subject has already been secured (*An. Post.* II.8, 93a21–24).²³ The fourth and final sort of definition mentioned is an indemonstrable posit of the immediate essence of the kind (*An. Post.* II.10, 94a9–10). This type of definition identifies the primitive explanatory essence of the kind by itself, e.g. “Thunder is fire being quenched in the clouds.”

¹⁹Some scholars conclude from this passage that the accounts that signify the names of non-existent entities are not genuine definitions. But it is most natural, in the light of Aristotle's subsequent admission in *An. Post.* II.10 that ‘definition’ is said in many ways, to conclude that he would allow even these accounts the status of definitions. However, this issue does not majorly affect my overall argument, because Aristotle does ultimately believe in the existence of natural slaves, and so the account of *Pol.* I.4 is undoubtedly a genuine (nominal) definition in his eyes; see section 2.

²⁰There is an apparent tension in the chapter, because Aristotle's summary at the end omits nominal definitions (*An. Post.* II.10, 94a11–14). A plausible way to resolve it is to suppose that Aristotle's summary takes into consideration only definitions that are linked with demonstration; see Charles, *Meaning*, 47–48.

²¹For further discussion of Aristotle's view of the mechanism of signification that explains how this can be possible, see Charles, *Meaning*, chs. 4–6.

²²See Barnes, *Posterior Analytics*, 224–25.

²³This point is nicely articulated in McKirahan, *Principles and Proofs*, 203.

As is clear from this overview of *An. Post.* II.10, Aristotle believes that there are different sorts of definitions and that they can be found at different levels of progression in scientific inquiry. In general, Aristotle seems to distinguish three main levels or stages of scientific inquiry:²⁴ (1) a pre-existential stage wherein the inquirer is ignorant or unsure of the existence of the subject of investigation; (2) a stage where existence has been secured and only a partial grasp of the essence is possessed (*An. Post.* II.8, 93a28–29); and (3) a stage wherein the fundamental causal essence of the subject has been adequately identified and its explanatory power fully grasped. We can make the following rough correlation between these stages of inquiry and the definitions of *An. Post.* II.10:²⁵

Stage (1): Nominal definitions only.

Stage (2): Definitions that are suitable conclusions for demonstrations.

Stage (3): Definitions differing in arrangement from demonstrations/Indemonstrable posits of the essence.

From this perspective, advancement in scientific inquiry essentially involves progression in our definitions of the object of investigation. We typically begin with an account of the name of the item that lacks existential import; advance to a stage where we grasp its existence and the derivative features explained by its fundamental causal essence; and then proceed from there to a precise grasp of the immediate essence.²⁶

In outlining these three definitional stages I am in effect sketching the general skeleton of scientific inquiry contained in *An. Post.* II.1–10. More details about scientific inquiry—for instance, the roles that division and induction play in it—are contained in subsequent chapters of *An. Post.* II. However, those chapters are notoriously difficult, and this overview of *An. Post.* II.1–10 is sufficient for progress on our main issue, for it shows that, contrary to what Goldschmidt assumes, Aristotle's decision to inquire into the essence or nature of the natural slave before determining its existence is not necessarily a reversal of his typical scientific procedure. There is a respectable sort of scientific definition—the so-called nominal definition—that lacks existential import but plays a crucial role in guiding existential inquiry; and, as we will see, there are strong reasons to identify the definition of the natural slave offered in *Pol.* I.4 as this sort of definition (section 2). When this observation is combined with the fact that Aristotle continues to refine and

²⁴For further elaboration and defense of this three-stage view of scientific inquiry, see Charles, *Meaning*, chs. 3–4.

²⁵This is rough correlation for several reasons. First, nominal definitions are not abandoned at the more advanced stages of scientific inquiry; they are enhanced with information and existential import. However, at stage 1, nominal definitions are the only definitions we have. Furthermore, we might find non-immediate “demonstrative” definitions at stage 2, prior to the grasp of the entity's fundamental causal essence (*An. Post.* II.8, 93a36–b3). However, I associate such definitions with stage 3, because the example of such a definition Aristotle gives in *An. Post.* II.10 occurs at such a stage. In any case, the most important point for our purposes is that he recognizes a type of definition that is noncommittal regarding existence and distinguishes it from more epistemically robust definitions. This is the sort of definition we find in *Pol.* I.4 prior to his determination of the existence of natural slaves.

²⁶Aristotle also permits existence and essence to be discovered simultaneously in some special cases (*An. Post.* II.8, 93a30–36). As we will see, this is precisely the situation of *Pol.* I.5, because Aristotle there argues for the existence of natural slaves while simultaneously offering a deeper definition of them in terms of their psychology (section 3).

deepen his definition of the natural slave even into his existential inquiry in *Pol.* I.5 (section 3), it becomes difficult to deny that there is a strong fit between the shape of the inquiry into natural slavery in the *Politics* and the scientific method of *An. Post.* II.1–10.

2. THE NOMINAL DEFINITION OF THE NATURAL SLAVE IN *POL.* I.4

Aristotle's inquiry into natural slavery in *Pol.* I.4–7 can be neatly separated into two phases: a *constructive* phase in which he develops his own account of the natural slave and establishes its existence (*Pol.* I.4–5) and an *application* phase in which he draws out the implications of his positive developments for certain issues concerning master and slave (*Pol.* I.6–7).²⁷ My main concern is Aristotle's method in the constructive phase, but I will turn briefly to part of the application phase toward the end of the paper.²⁸ In this section I argue that the definition of the natural slave at which Aristotle arrives in *Pol.* I.4 is a nominal definition, or at least has many of the same features and function as such definitions.

I shall begin with an overview of *Pol.* I.4. Aristotle's avowed aim in the chapter is to give an account of the nature (*phusis*) and capacity (*dunamis*) of the natural slave (*Pol.* I.4, 1254a13–14).²⁹ His general strategy involves reflecting upon the *de facto* status and role of slaves in typical Greek households and then identifying *natural* slaves as human beings who have that very status and role *by nature*.³⁰ Al-

²⁷As we learn from the prospectus of *Pol.* I.3, the issues are (i) whether mastership is a science, the same as the other ruling sciences, and (ii) the normative status of master/slave (*Pol.* I.3, 1253b18–23). On a literal reading of the text, (i) contains two issues, i.e. whether mastership is a science and, if so, whether it is the same as the other ruling sciences. But Aristotle's back reference to *Pol.* I.1, 1252a7–16 suggests that his main concern is with the thesis that mastership is identical with the other forms of rule/ruling science. Presumably, the idea that mastership, or any form of rule, is a science enters the story as a diagnosis of why these individuals believe that all of the forms of rule are essentially the same; see Schofield, "Ideology," 17–18.

²⁸I will ignore *Pol.* I.7, as it contains no interesting methodological nuggets. In it Aristotle simply argues, on the strength of his previous conclusions, that being a master is not essentially a matter of possessing a science but rather being a certain sort of person, and that despotic rule is non-identical to that of a household manager, statesman, and king.

²⁹An anonymous referee astutely pointed out that the language of "nature" (*phusis*) here is unusual, because Aristotle typically uses it in the biology where existence has already been established or at least is presupposed. Now this observation is not necessarily a problem for my interpretation of the chapter, because the signposting makes it clear that *Pol.* I.4 is a pre-existential inquiry. But some explanation of that unusual terminology is still desirable. Perhaps the distinction between nominal and scientific essences that Demoss and Devereux find in Aristotle can be of help here. On their interpretation, roughly, a nominal essence consists simply of the explicable superficial features of the subject in question, the sort that get mentioned in nominal definitions, whereas the scientific essence mentions these features along with their cause; see Demoss and Devereux, "Existence and Nominal Definition," 150–52. Given the close connection in Aristotle between a thing's nature and essence (*ti estin*), he could have made a similar distinction between a thing's nominal and scientific nature (*phusis*). If he did, then his unusual use of 'nature' in *Pol.* I.4 would naturally be referring to the nominal nature of the natural slave, which in itself has no existential commitments.

³⁰One might think that Aristotle is talking about the natural slave throughout *Pol.* I.4. However, the qualification 'by nature' (*phusei*) is conspicuously absent until the very end of the chapter (*Pol.* I.4, 1254a14–15). So the text suggests that in the chapter Aristotle first reflects upon the salient features and function of actual slaves and then uses them to construct a definition of the natural slave, which appears at *Pol.* I.4, 1254a14–17. I thank an anonymous referee for pressing me on this point.

though he does not explicitly say so, it is clear that his working assumption in the chapter is that a slave is a piece of domestic property (*ktēma*, *Pol.* I.4, 1253b32).³¹ Thus, he begins the chapter with an analysis of the notion of property:³²

Since property is a part of the household, property acquisition is also a part of household management (for we can neither live nor live well without the necessities). But just as the specialized crafts must have their proper tools if they are going to perform their tasks, so too does the household manager. Some tools are inanimate, however, and others are animate. The ship captain's rudder, for example, is an inanimate tool, but his lookout is an animate one; for where crafts are concerned every assistant is classed as a tool. So a piece of property is a tool for maintaining life; property in general is the sum of such tools; a slave is a kind of [*ti*] animate piece of property; and every assistant is like a tool beyond [*pro*] tools. (*Pol.* I.4, 1253b23–33)

Property plays an analogous role for the household manager that tools (*organa*) play for a craftsman. A craftsman's tools aid him in achieving his essential task or function. So, too, property aids the household manager in accomplishing his aim of preserving his own life and the lives of his family members (*Pol.* I.2, 1252b12–14). Thus, a single piece of property (*ktēma*) is a “tool for maintaining life,” and property in general (*ktēsis*) is “the sum of such tools” (*Pol.* I.8, 1256b36–7). But craft tools come in two distinct sub-types: inanimate (like the rudder of a ship) and animate (like the ship's lookout). Likewise, property comes in two main sub-types: inanimate and animate property. Clothes and beds are inanimate pieces of property (*Pol.* I.4, 1254a4–5), while slaves are animate pieces of property.

The craft analogy and subsequent division of property into inanimate/animate, then, yield an initial specification of the slave as a certain (*ti*) animate piece of property. Since a piece of property is a tool for maintaining life, it also follows that a slave is an animate tool for maintaining life. But, clearly, slaves are no ordinary tools:

[A]nd all assistants are as it were tools before [*pro*] tools. For, if each tool could perform its task on command or by anticipating instructions, and if like the statues of Daedalus or the tripods of Hephaestus . . . shuttles wove cloth by themselves, and picks played the lyre, a master craftsman would not need assistants, and masters would not need slaves. What are commonly called tools are tools for production. A piece of property, on the other hand, is for action. . . . Life consists in action, not production. Therefore, slaves too are assistants in the class of things having to do with action. (*Pol.* I.4, 1253b33–1254a8)

Like all assistants, slaves are second-order tools: “tools before tools.”³³ Many daily domestic chores require the use of first-order tools: sweeping requires a broom, plowing requires the use of a plow, and so on. Unfortunately, however, these items cannot do the work automatically; and the household manager's time is better devoted to more noble activities, for example, politics or philosophy (*Pol.* I.7, 1255b35–37). So, the optimal arrangement of the household requires the

³¹This is a widespread assumption about slaves in the Greek world. See Aristophanes *Ecc.* 1126; *Plut* 4; Homer *Il.* 19, 333; *Od.* 7, 225; Plato *Leg.* VI, 776b5, 777b2; IX., 879a3; XI, 932d6; Schütrumpf, *Politik Buch I*, 242.

³²For translations of the *Politics*, I follow Reeve, *Aristotle: Politics* with some emendations.

³³Reeve's translation “tools for using tools” (*Aristotle: Politics*, 6) is not inaccurate, but it does not vividly convey the special status among tools slaves have suggested by the ‘*pro*’ language; cf. *PA* IV.10, 687a19. For this reason I prefer Brunt's suggestion of “before” for ‘*pro*’; see Brunt, *Greek History*, 387.

existence of domestic assistants whose job is to perform the relevant tasks using the first-order tools.³⁴ By this line of reasoning, Aristotle identifies another crucial feature of slaves: they are assistants in the class of those things pertaining to action (*Pol.* I.4, 1254a8). This observation augments our understanding of slaves by gesturing at their function. It essentially tells us that they help engender leisure for their masters by performing various necessary domestic chores.

Aristotle's final move before formulating his definition of the natural slave in *Pol.* I.4 involves reflecting upon the grammar of 'property':

Pieces of property are spoken of in the same way as parts. A part is not just a part of another thing, but is entirely of that thing. The same is also true of a piece of property. That is why a master is just the master of the slave, not his simply, while a slave is not just the slave of his master but is entirely his. (*Pol.* I.4, 1254a8–13)

'Property' is spoken of in the same way as 'part.' It is legitimate to move from "X is a part of Y" to "X is of Y" (unqualifiedly), but it is not valid to move from "Y is the whole of which X is a part" to "Y is of X" (unqualifiedly). So too, in the case of property one can infer "X is of Y" (unqualifiedly) from "X is the property of Y" but not that "Y is of X" from "Y is the owner of X." Aristotle applies this insight to the specific owner–property relation between master and slave and concludes that it is legitimate to say that "X is of Y" if X is the slave of Y but not that "Y is of X" in that case. The reason for this asymmetry is that the unqualified genitive ("of X") suggests that the subject *belongs* to the object of the genitive (X), and while the slave *qua* property does wholly belong to the master, the master does not belong to the slave. Thus, if one wants to use the genitive in describing the master's relation to his slave, one must always specify that he is the slave's master ("Y is the master of X").

Let us briefly take stock. By the time Aristotle reaches *Pol.* I.4, 1254a13, he has identified three main features of the slaves in typical Greek households:

- (1) Slaves are animate pieces of property. (*Pol.* I.4, 1253b32)
- (2) Slaves are assistants/second-order tools for action. (*Pol.* I.4, 1254a8)
- (3) Slaves are human beings who belong to another or are of another unqualifiedly. (*Pol.* I.4, 1254a14–16)

He then proceeds to use these features to construct a definition of the *natural* slave:

It is clear from these considerations what the nature and capacity of a slave are. For anyone who, while being human, is by nature not his own but of someone else is a natural slave. And he is of someone else when, while being human, he is a piece of property; and a piece of property is a tool for action separate from its owner. (*Pol.* I.4, 1254a13–17)

Typical Greek slaves are pieces of human property who belong unqualifiedly to their masters and are second-order tools for action. Therefore, a *natural* slave, that is, one who is naturally suited for slavery, will be a human being who is *by nature*

³⁴Note that even though the slave is an active agent relative to the inanimate tools he is implementing, he himself is just a tool used by the master who is the primary agent of these activities; see Cooper, "Political Community," 234n30.

sued to be a piece of property that belongs to someone else and functions as a second-order tool for action.

Several observations suggest that this definition—the definition of the natural slave with which *Pol. I.4* culminates—is a nominal definition, or at least a definition that has a very similar status.³⁵ First, it contains information that anyone in Aristotle's time would recognize as salient features of the institution of slavery. This definition is not a deep pronouncement about the psychology of the natural slave that only the select few philosophically minded individuals would care about,³⁶ but rather superficial features of the institution available to anyone who grew up around it. For, domestic slaves were essentially living chattel, that is, human beings who performed menial tasks for other human beings that owned them.³⁷ Aristotle's main contribution here, which is an important move in his treatment of the normative status of slavery, is to add the qualification 'by nature' to these salient features of the institution, thereby identifying a putative class of individuals for whom slavery would be natural and hence just and beneficial.³⁸ Notice, however, that he does not take himself to have established the existence of any such individuals in *Pol. I.4*. That existential task is the main object of the next chapter (*Pol. I.5*, 1254b17–20). Thus, the definition of the natural slave in *Pol. I.4* lacks existential import, which is another reason to classify it as a nominal definition. Thirdly, the use of the method of division (*diairesis*) at the beginning of the chapter (*Pol. I.4*, 1253b27–33) is telling. Although Aristotle is critical of the method of division in various places (*An. Pr. I.3* 1; and *An. Post. II.5*), it is important to recognize that

³⁵It is no objection to this interpretation to point out that Aristotle uses no 'signification' (*sēmainein*) vocabulary in the chapter. It is not necessary for a nominal definition to have the form "The name 'A' signifies XYZ. . . ." *Phys. IV.7* is an inquiry into what the name 'void' signifies (213b30–31), but Aristotle sometimes (though infrequently) uses the ordinary formula for a definition with *einai* "A is XYZ" in describing it (see *Phys. VI.7*, 214a16–17; and *VI.8*, 214b17–18). What is essential to a definition's status as a nominal definition is that it contains information that anyone familiar with the name of the subject will recognize and understand, regardless of whether that status is explicitly conveyed in the definition itself. Furthermore, Aristotle's vocabulary tends to reflect his existential expectations. In practice, he uses heavy signification language whenever he is not convinced of the existence of the thing (*An. Post. II.7*, 92b). However, when he does anticipate the existence of a phenomenon, he uses 'being' (*einai*) language. (Cf. the lack of signification vocabulary in his treatments of place and time in *Phys. IV.1–5*, 10–14 with its presence in the discussion of void in *Phys. IV.7*.) Thus, the absence of signification language in *Pol. I.4* is plausibly explained as an anticipation of the positive existential results in the next chapter and does not tell against my "nominal definition" interpretation.

³⁶In *Pol. I.5* Aristotle does suggest that physical features of the slave are easy to detect via experience and uses that as part of an "empirical" argument for the existence of natural slaves (*Pol. I.5*, 1254b27–31). But notice that he says nothing about the rational capacities of the natural slave, which he takes to be difficult to detect via perception alone (*Pol. I.5*, 1254b38–1255a1).

³⁷See Brunt, *Greek History*, 347–51; Garlan, *Slavery in Ancient Greece*, 40–45; and the citations in note 31 above.

³⁸This reliance upon the actual institution of slavery in formulating his definition of the natural slave in *Pol. I.4* is not a suspect procedure, nor does it beg the question of the existence of natural slaves. In this chapter Aristotle only wants to give an account of what it would be like for someone to be a slave by nature without yet taking a stance on whether there are human beings that fit that description. Now, if this is going to be a recognizable notion of slavery and not, e.g. something else that just happens to be called by that name, it should be sufficiently similar to the institution as practiced at his time. For in that way there will be some sort of objective constraint on the concept. So, from a methodological standpoint Aristotle's reliance upon the actual institution of slavery in developing his nominal definition of the natural slave in *Pol. I.4* is a sound strategy. We will, of course, disagree with his claim that there are natural slaves in *Pol. I.5*, but that does not compromise his strategy in *Pol. I.4*.

he is essentially critical of the grandiose claims that people have made about its ability to demonstrate essences (*An. Pr.* I.3 I, 46a34–39).³⁹ He himself gives it a positive but preliminary role in scientific inquiry for identifying, for example, the explicable features of the subject of investigation.⁴⁰ Admittedly, the definitions that mention such derivative features of the subject will be the definitions as conclusions of demonstrations after the existence of the subject has been established; but prior to the determination of existence they will be mere nominal definitions (see section 1). Since, then, the existence of natural slaves is taken for granted by Aristotle only after *Pol.* I.5, it is reasonable to view the definition of the natural slave in *Pol.* I.4 as a nominal definition or very close analogue.

3. *POL.* I.5 AND THE EXISTENCE OF NATURAL SLAVES

In *Pol.* I.4 Aristotle articulates a nominal definition of the natural slave. The aim of the very next chapter is to show that there really are natural slaves corresponding to that definition (*Pol.* I.5, 1254b17–20). Aristotle's signposting undeniably gives the impression of a strict division of definitional (*Pol.* I.4, 1254a13–14) and existential labor (*Pol.* I.5, 1254a17–20). But a close look at the text reveals that his concern in *Pol.* I.5 is also at least partly definitional.

Aristotle suggests at *Pol.* I.5, 1254b20–21 that he will offer two treatments of the existence of natural slaves in the chapter: a logical (*logikōs*) argument appealing to abstract reasoning (*logos*) and an empirically grounded discussion “from what occurs” (*ek tēn gignomenōn*).⁴¹ On a straightforward reading of the chapter, that is just what we get.⁴² At *Pol.* I.5, 1254a21–b26, Aristotle argues for the existence of

³⁹In *An. Pr.* I.3 I and *An. Post.* II.5, Aristotle argues that division cannot demonstrate definitions, because it cannot establish the necessity of the *definiendum* being one thing rather than another. At most, it establishes the necessity of a certain disjunction, e.g. man is necessarily either footed or footless, and merely assumes that one of these disjuncts belongs to the *definiendum*.

⁴⁰This view of the role of division in scientific inquiry is supported by a close look at *An. Post.* II.13; see Bolton, “Division”; and Charles, *Meaning*, ch. 9. It also fits nicely with Aristotle's claim that in the case of a divisional definition we can always ask “Why?” (*An. Post.* II.5, 91b39–92a2), and the pre-causal role division plays in the biology; see *HA* I.6, 491a8–11; and Lennox, “Divide and Explain.”

⁴¹Aristotle expresses this contrast in different ways in different contexts: *logos* vs. *ta ergai* (*GA* I.2 I, 729b21; *Pol.* VII.14, 1333b15; and VIII.5, 1340b7); *logos* vs. *ta gignomena* (*Pol.* I.9, 1257b33; and VII.14, 1334a5); *logos* vs. *aisthēsis* (*Phys.* VIII.8, 262a18–19; *De Cael.* II.14, 297b17–24; and *GA* III.10, 760b27–33). And, understandably, he closely connects the appeal to *logos/logoi* and the “logical” (*logikōs*) treatment of an issue (*Gen. et Corr.* I.2, 316a5–14). A logical treatment of an issue is one which appeals to general (*katholou*) principles not appropriate or peculiar to the subject matter (*GA* II.8, 747b28–748a16; *GA* I.2 I, 729b8–9, 21–22; and *Phys.* VIII.8, 264a7–9, b2). By contrast, a “physical” treatment appeals to considerations that are not general in that sense and are appropriate and peculiar to the subject matter (*De Cael.* I.10, 280a32–33; I.12, 283b17–8; and *Gen. et Corr.* I.2, 316a5–14). For further discussion of this distinction, see Bolton “Two Standards”; and Burnyeat, *Map*, 20–22. These observations explain why Susemihl and Hicks gloss the two treatments of existence in *Pol.* I.5 as *logikōs* and *physikōs* respectively; see Susemihl and Hicks, *The Politics of Aristotle, Books I–V*, 157. On my reading, the first argument for the existence of natural slaves is *logikōs*, because it partly relies upon a general principle about how nature operates with respect to any non-aggregative whole involving living beings. However, I hesitate to classify the second argument as *physikōs*, because such argumentation is not identical to an appeal to empirical facts. In certain cases, these treatments coincide, most notably at *Gen. et Corr.* I.2, 316a5–14. But it is doubtful that they do in all cases; cf. the *physikōs* arguments of *De Cael.* I.10 and I.12.

⁴²See Barker, *Political Thought*, 363–64; Goldschmidt, “Théorie et méthode,” 150–51; and Schlaifer, “Greek Theories,” 197. Aubonnet (*Politique*, 115–16) doubts that *Pol.* I.5 contains the two treatments

natural slaves by appeal to a certain principle (*logos*) of nature, namely the principle of rulership.⁴³ This procedure is logical (*logikōs*), because the relevant principle is a general, regulative principle of nature that applies to any non-aggregative natural whole, not just the household or *polis* (*Pol.* I.5, 1254a31–32). Then, in the final third of the chapter (*Pol.* I.5, 1254b27–1255a3), Aristotle reinforces the existence of natural slaves with an appeal to experience, specifically palpable morphological differences between master and slave. My main concern is with the “logical” treatment of the existence of natural slaves at *Pol.* I.5, 1254a21–b26, because it is there that Aristotle offers two deeper definitions of the natural slave; and so in the interest in keeping the discussion on track I will focus upon that part of the chapter and ignore the empirical argument.⁴⁴

Aristotle begins his logical argument with a preliminary statement of his principle of rulership and some axiological remarks about different rulers and subjects:

For ruling and being ruled are not only necessary, they are also beneficial, and some things are distinguished right from birth, some suited to rule and others to being ruled. There are many kinds of rulers and ruled, and the better the ruled are, the better the rule over them always is. (*Pol.* I.5, 1254a21–26)

This passage introduces the three main ideas in the background of Aristotle’s treatment of slavery in *Pol.* I.4–7. The first idea is an initial statement of his principle of rulership: that some things are naturally suited to rule while other things are naturally suited to be ruled. The second idea is a corollary of this principle and the intimate connection between what is natural and what is good: that it is beneficial for the natural rulers to rule and the natural subjects to be ruled.⁴⁵ These two principles do much of the heavy lifting in this section of I.5. The third idea distinguishes different kinds of natural rulers and subjects and coordinates the value of being a ruler with the value of the ruled subjects. This principle is not used to establish the existence of natural slaves in *Pol.* I.5. However, it is in the background of Aristotle’s distinction between different types of rule/ruling science and his claim that mastership is not a grand science in *Pol.* I.7 (1255b33–37). He presumably mentions it here to have all of his main principles in one place.

After these introductory remarks, Aristotle restates the principle of rulership and proceeds to describe cases that he thinks clearly support it:

promised at *Pol.* I.5, 1254b20–21. Saunders (*Politics I and II*, 75) thinks that the whole of *Pol.* I.5 is empirical and that Aristotle provides a “theoretical” discussion in *Pol.* I.6. But this interpretation is vitiated by the fact that *Pol.* I.6 is not concerned to establish the existence of natural slaves but actually takes that conclusion for granted (*Pol.* I.6, 1255a4–5, a29–31, and b5–8). The text clearly states that both of these treatments (*kai . . . kai*) establish the existence of natural slaves; and that issue is taken up and concluded in *Pol.* I.5; see *Pol.* I.5, 1255a1–3. So, a satisfactory interpretation must locate both logical and empirical treatments in that very chapter.

⁴³This is the name given to the principle by Fred Miller in *Nature, Justice, and Rights in Aristotle’s Politics*, 20–21.

⁴⁴In the empirical treatment of the issue at *Pol.* I.5, 1254b27–1255a1, Aristotle appeals to observable differences between the bodies of slaves and free men as an indication (*tekmērion*) that they are naturally suited for different functions and statuses in the household. For further discussion see Goldschmidt, “Théorie et méthode,” 152. This argument is bound to strike us as dubious and question-begging, but it was a relatively common argumentative strategy; cf. Theognis, *Eleg.* 535–38.

⁴⁵This idea actually comes first in the passage, but I present it second because I take it to be a corollary of the principle of rulership.

[A] For whenever a number of constituents, whether continuous with one another or discontinuous, are combined into one common thing, a ruling element and a subject element appear. These are present in living things, because this belongs to living things from nature as a whole [*ek tēs hapasēs phuseōs*]⁴⁶. . . . [B] First of all [*prōton*], an animal is constituted of soul and body: the soul is the natural ruler; the body the natural subject. . . . [C] At any rate, it is, I say, in an animal that we can first observe both rule of a master and rule of a statesman. For the soul rules the body with the rule of a master, whereas understanding rules desire with the rule of a statesman or a king. In these cases [*en hois*]⁴⁷ it is evident that it is natural and beneficial for the body to be ruled by the soul, and for the affective part to be ruled by understanding (the part that has reason), and that it would be harmful to everything if the reverse held, or if these elements were equal. [D] The same applies again [*palin*] in the case of human beings with respect to other animals . . . it is better for all of them to be ruled by human beings, since this will secure their safety. [E] Moreover [*eti*], the relation of male to female is that of natural superior to natural inferior, and that of ruler to ruled. [F] But, in fact, the same holds true of all human beings. (*Pol.* I.5, 1254a28–b16)

In the first section of this passage, [A], Aristotle presents a version of the principle of rulership that applies quite generally to non-aggregative wholes and characterizes it as a regulative principle of nature. The remaining sections up to [E] cite examples of this principle at work. Animals are natural wholes constituted by body and soul, and the soul is the natural ruler of the body [B]. In fact, the soul rules the body despotically.⁴⁸ Likewise, the (human) soul is a natural whole constituted by understanding (*nous*) and desire, and the former naturally rules the latter, albeit with political or kingly rule [C].⁴⁹ Up to this point, Aristotle has been focusing upon ruling relations between the internal constituents of living beings. However, before proceeding to an examination of ruling relations between groups of living beings in [D]–[E], he pauses to affirm that the principle of rulership and the corollary about benefit hold in the previous cases: “[I]t is evident that it is natural and beneficial for the body to be ruled by the soul, and for the affective part to be ruled by understanding . . . and that it would be harmful to everything if the reverse held.” Aristotle then moves on by asserting that these very principles hold

⁴⁶The phrase ‘nature as a whole’ (*tēs hapasēs phuseōs*) need not imply an endorsement of cosmic teleology or a universal nature; it merely signals that the principle in question is a general, regulative principle of the natural world. Cf. similar vocabulary at *De An.* III.5, 430a10; and *Met.* X.10, 1075a11. Its status as a general principle is confirmed by its application to nonliving/inanimate wholes as well, e.g. harmony, at *Pol.* I.5, 1254a31–33. For discussion of its application to harmony see Schütrumpf, *Politik Buch I*, 252–53.

⁴⁷Aristotle uses ‘*en*’ throughout this passage to signal cases that exemplify the principle of rulership (*Pol.* I.5, 1254a32, 36, 39, b3, 10). But these cases are not merely meant to illustrate the principle; they provide inductive support for it. See Goldschmidt, “Théorie et méthode,” 150; and Saunders, *Politics I and II*, 75.

⁴⁸Schütrumpf (*Politik Buch I*, 256) rightly complains about Aristotle’s reticence here. Aristotle neither justifies this characterization of the relation nor explains what it is about body and soul that makes despotic rule appropriate. It is likely that he would justify this claim from the perspective of his own philosophy in terms of the instrumental, teleological relation of body to soul (see *DA* II.1, 412a27–b9; *PA* I.5, 645b14–17; and Menn, “Definition of Soul”). But in this context he seems to be treating it as an uncontroversial fact that needs no justification/explication (*Pol.* I.5, 1254b6). For earlier statements of this relation between body and soul, see Plato *Phd.* 79e8; and *Tim.* 34c5, 44d5.

⁴⁹Reeve’s note here is helpful: “Both statesmen and kings rule willing subjects; in the virtuous desires obey understanding ‘willingly’” (Reeve, *Aristotle: Politics*, 8n33).

again (*palin*) with respect to humans and non-rational animals [D] and furthermore (*eti*) in the case of male and female human beings [E].⁵⁰

In sections [B]–[E] of the passage, Aristotle presents “clear” cases of wholes whose components stand in natural relations of authority/subordination and for whom it is beneficial to stand in those relations. In the final section, [F], he asserts that these principles also hold—necessarily (*anagkaion*)—in the case of whole communities, which presumably include the household, village, and polis (*Pol.* I.5, 1254b14–16). These observations lead Aristotle to the conclusion that some human beings must be naturally suited to rule and others must naturally be suited to be ruled, and it will be beneficial for each class to play these roles because they are in accordance with nature. Now, this application of the principle of rulership by itself does not establish the existence of natural *slaves*, that is, human beings who are by nature living tools to be domestically owned and used by other human beings. At most the principle permits Aristotle to infer the existence of a class of naturally subordinate human beings, but it is not robust enough to sort the naturally subordinate human beings into specific sub-classes, for example, women, natural slaves, and so forth.⁵¹ Presumably recognizing this limitation of the simple appeal to the principle of rulership, Aristotle proceeds to single out a subset of these naturally subordinate human beings as suitable candidates for slavery:

Therefore those people who are as different from others as body is from soul or beast from human, and people whose task [*ergon*], that is to say, the best thing to come from them, is to use their bodies are in this condition—those people are natural slaves. And it is better for them to be subject to this rule, since it is also better for the things we mentioned. For he who can belong to someone else (and that is why he actually does belong to someone else), and he who shares in reason to the extent of understanding it, but does not have it himself (for the other animals obey not reason but feelings), is a natural slave. (*Pol.* I.5, 1254b16–24)

According to Aristotle, there are certain human beings who “differ from others as body does from soul or beast from human.”⁵² These human beings, he says, are those whose greatest contribution to society is the use of their bodies. These individuals have robust physiques (or robust enough physiques) for hard manual labor, but are seriously lacking in mental capacity. They “share in” reason to the extent of understanding it, but do not have it themselves.⁵³ Such a physical/psy-

⁵⁰In the biological works, ‘male’ (*to arren*) and ‘female’ (*to thēlu*) tend to be used for causal principles of animal generation (*GA* I.2, 716a4–7). However, in the *Politics* those terms refer without exception to human males and females (*Pol.* I.2, 1252a27, b1; I.5, 1259b2, 9–10, 1260a10, 13). So, in this passage Aristotle’s attention is restricted to the natural relation between (free) male and female human beings that is a sub-community of the household.

⁵¹This limitation of the argument is overlooked by Goldschmidt (“Théorie et méthode,” 150–51). It is, however, nicely pointed out in Brunt (*Greek History*, 378–79), who actually faults Aristotle for overlooking this limitation of the argument. But I think he overlooks the work that *Pol.* I.5, 1254b16–24 is doing for Aristotle.

⁵²Strictly speaking, the locution that Aristotle uses to identify these individuals, ‘as many as’ (*hosoi*, *Pol.* I.5, 1254b16), is compatible with the non-existence of anyone fitting that description. However, in order for Aristotle’s argument to establish the existence of natural slaves, he clearly must take himself to be referring to actual human beings.

⁵³In *Pol.* I.13 Aristotle points out that natural slaves lack the “deliberative” part of reason (*to bouleutikon*, *Pol.* I.13, 1260a12), but he most likely means here that they lack the capacity for

chological profile is surely not that of a natural ruler. But, Aristotle maintains, it seems to fit the bill of the natural slave from *Pol.* I.4. Recall that such individuals are living property, possessions “of another,” who are naturally suited for manual labor. (Aristotle signals the connection with the *Pol.* I.4 definition of the natural slave with the ‘belongs to another’ [*allou einai*] locution at *Pol.* I.5, 1254b21; cf. *Pol.* I.4, 1254a15.) Well, the people to whom Aristotle is referring here are presumably naturally suited for manual labor: that is their function and the best thing to come from them (*Pol.* I.5, 1254b18–19); and these people legitimately qualify as property “of another” because of their limited share in reason (*Pol.* I.5, 1254b20–23). Thus, these individuals seem to possess the features of the natural slave as defined in *Pol.* I.4, and so it stands to reason that they *are* natural slaves, and that being subject to the despotic rule of a master is just and beneficial for them.

Of course, no one nowadays will be moved by this argument, but its soundness is not our concern. What matters for us is that, in the course of identifying individuals that fit the *Pol.* I.4 definition of the natural slave, Aristotle offers two additional definitions:

- (A) A natural slave is a human being whose function/best contribution to society is the use of the body for manual labor. (*Pol.* I.5, 1254b16–20)
- (B) A natural slave is a human being who shares in reason to the extent of understanding it but does not have it himself. (*Pol.* I.5, 1254b20–23)

The first definition of the natural slave offered here (A), which turns out to be his second definition overall, explicitly mentions the function (*ergon*) of the natural slave: the use of the body for manual labor (*Pol.* I.2, 1252a32–34). This definition cites the final cause of the natural slave or that for the sake of which it exists, and it justifies the earlier characterization of the natural slave as an assistant (second-order tool) in the realm of action. However, this account by itself does not adequately distinguish the natural slave from the beasts of burden that tend to be the living property among the poorer households (*Pol.* I.2, 1252b12); their function is very similar if not identical (*Pol.* I.5, 1254b24–26).⁵⁴ Of course, Aristotle repeatedly says that natural slaves are human beings (*Pol.* I.4, 1254a15–16), which does distinguish them from beasts, but this account of the function of natural slaves does not substantively justify or explain their status as human beings.

That work is presumably performed by the next, and arguably most fundamental, definition of the natural slave, (B), which cites its natural psychological

architectonic practical reflection/deliberation, because he subsequently acknowledges that some natural slaves at least have proficiency in technical deliberation; see *Pol.* VII.7, 1327b27–28; Heath, “Aristotle on Natural Slavery,” 244–53; and Kraut, *Aristotle: Political Philosophy*, 283–94. These scholars disagree about whether natural slaves are capable of a robust form of craft knowledge (*technē*), but this debate is beyond the scope of present concern.

⁵⁴One might think that this observation calls into question that (A) is a genuine definition, because definitions are supposed to cite coextensive features. But we must not forget that Aristotle permits some accounts that fail to cite coextensive features to count as definitions in *An. Post.* II.10; see section 1 above. In fact, nominal definitions and definitions as conclusions of demonstration are just such accounts; see Demoss and Devereux, “Existence and Nominal Definition,” 149. To be sure, the features they cite will ultimately appear in the “full” definition (differing in structure from a demonstration) that mentions the causal essence plus the derivative features, and for this reason we may deem them “partial” definitions. But their status as definitions is put beyond question by the text of *An. Post.* II.10. So we can safely consider (A) a genuine, if “partial,” definition of the natural slave.

orientation. According to Aristotle, natural slaves are human beings, because, unlike nonhuman animals, who merely follow passion with no understanding of reason (*logos*), they are rational; they are capable of understanding the (practical) reasoning of another, even though they themselves are bereft of the capacity for such reasoning (*Pol.* I.5, 1254b23–24).⁵⁵ Thus, even though their rational faculties are naturally diminished, they can still perform the characteristic human function (*ergon*) to some extent (*NE* I.7, 1098a3–4, 7–8), which is all that it takes to be a genuine human being.⁵⁶ Aristotle's linking of this final definition of the natural slave with its status as the property of another (*Pol.* I.5, 1254b20–23) also suggests that the psychological orientation of the natural slave underwrites its status as property. Natural slaves are naturally suited to be possessions *because* they are incapable of the sort of independent reflection needed to organize their own lives.⁵⁷ A natural ruler possesses the foresight needed to rule over the household and polis at large (*Pol.* I.2, 1252a32) and is alone capable of acquiring practical wisdom (*Pol.* III.4, 1277b25–26). Thus, being subject to the (despotic) authority of a natural ruler can help the natural slave optimize his own nature and attain the highest degree of virtue of which he or she is capable (*Pol.* I.13, 1260a32–36 with b3–7).⁵⁸

In *Pol.* I.4–5, then, Aristotle presents no less than three definitions of the natural slave. The first nominal definition mentioned at the end of *Pol.* I.4 cites relatively superficial features of the natural slave; identifies its status among the household items; and indirectly gestures at its function. The two more substantive definitions of *Pol.* I.5 directly cite the natural slave's function and its underlying psychological orientation respectively. These latter definitions mention the fundamental features of the natural slave that ground its other, more superficial features, and so they are more fundamental from an explanatory point of view. The definitions in *Pol.* I.4–5 also exhibit different existential commitments. The nominal definition of *Pol.* I.4 lacks existential import (in *Pol.* I.4), whereas the definitions of *Pol.* I.5 have it. Thus, Aristotle's constructive treatment of the natural slave in *Pol.* I.4–5 possesses the existential/definitional progression characteristic of the scientific method of *An. Post.* II.1–10, so we can confidently conclude that he is employing that method, or at least a close analogue, in those chapters of the *Politics*.

⁵⁵Schütrumpf (*Politik Buch I*, 267–68) denies the importance of the remarks where Aristotle distinguishes natural slaves and animals in *Pol.* I.5. He thinks that Aristotle's main concern in the context is to emphasize the similarities between natural slaves and animals. But this cannot be the whole story. Distinguishing natural slaves from nonhuman animals is absolutely crucial for Aristotle's task in *Pol.* I.5. After all, natural slaves are human beings (*Pol.* I.4, 1254a15–16). Thus, if he cannot validate their claim to humanity, he cannot legitimately establish the existence of genuine natural slaves (as opposed to nonhuman beasts of burden). So, the importance of *Pol.* I.5, 1254b23–24 cannot be underestimated.

⁵⁶See *Meteor.* IV.12, 390a10; *PA* I.1, 640b34–641a5; Deslauriers, "Aristotle on the Virtues of Slaves and Women," 214–21; Fortenbaugh, "Aristotle on Slaves and Women," 136; and Heath, "Aristotle on Natural Slavery," 259n60.

⁵⁷See Schütrumpf, *Politik Buch I*, 267–68.

⁵⁸This is an incidental benefit of the master–slave relation, because despotic rule is ultimately and properly for the benefit of the ruler (*Pol.* III.6, 1278b32–37). But it is still a benefit of the relation. See Kraut, *Aristotle: Political Philosophy*, 295–301; Deslauriers, "Aristotle on the Virtues of Slaves and Women." For a different interpretation altogether, see Heath, "Aristotle on Natural Slavery," 265–67.

4. THE ENDOXIC METHOD IN *POL.* I.6?

Before concluding, I shall briefly discuss *Pol.* I.6, because it has been suggested that Aristotle employs the endoxic method of *NE* VII.1 in that chapter.⁵⁹ This examination will also help to reinforce Goldschmidt's negative conclusion that Aristotle does not employ that method in *Pol.* I.4–6 more generally.

It will first be necessary to examine the endoxic method.⁶⁰ Aristotle describes it in the follow passage:

We must, as in the other cases, set out the appearances [*phainomena*] and, after first raising the puzzles, in this way establish, ideally, all the *endoxa* about these affections or, if we cannot, most of them or the most authoritative of them. . . . (*NE* VII.1, 1145b2–6)

This method involves gathering and “setting out” the appearances or *phainomena* about the subject of investigation, which in this case are *endoxa* (*NE* VII.1, 1145b4–5);⁶¹ raising puzzles (*aporiai*) about them; and then solving the puzzles in a way that “establishes” the truth about the subject of investigation. This method is sometimes viewed as Aristotle's general philosophical methodology,⁶² but such a claim is too grandiose and not borne out by the text.⁶³ This method is a specific method that attempts to establish the truth about a subject of inquiry in a very specific way: by aporematic reflection upon a particular kind of data or *phainomena*, namely *endoxa* or the beliefs of the many and the wise.⁶⁴ Thus, any other legitimate application of this method must have the same three-stage structure exhibited by *NE* VII.1–10. That is to say, the inquirer must initially set out a host of *endoxa* about the subject matter (*NE* VII.1, 1145b8–20); proceed to raise puzzles about the very *endoxa* set out in the first stage (*NE* VII.2);⁶⁵ and then attempt to establish the truth about the matter by solving the various puzzles (*NE* VII.3–10). Any retrospective examination of *endoxa* fails to qualify as an application of that method, and so does any prospective investigation of *endoxa* that effectively demolishes or rejects them.⁶⁶ Thus, it follows that Aristotle cannot be employing the endoxic

⁵⁹See Saunders, *Politics I and II*, 81. This is a different claim from the one refuted by Goldschmidt, because its focus is solely *Pol.* I.6, not the whole of *Pol.* I.4–6.

⁶⁰For further discussion of this method, see Barnes, “Methods”; Cooper, “The Authority of Appearances”; and Kraut, “Ethical Propositions.”

⁶¹*Endoxa* are beliefs about a subject held by the many or the wise (*Top.* I.1, 100b21–23). This term is variously translated as “reputable beliefs,” “common opinions,” “accredited opinions,” etc. I shall simply transliterate it here.

⁶²See Nussbaum, “Saving Aristotle's Appearances,” 267n1.

⁶³For further defense of this claim see the works by Frede, Natali, and Salmieri cited in note 4 above.

⁶⁴As Owen famously observed in “Tithenai,” *endoxa* are not the only sort of *phainomena* recognized by Aristotle; empirical observations are a different kind of *phainomena* that guide a different kind of investigation. There is, admittedly, some extensional overlap here, but the conceptual distinction between these two types of *phainomena* must still be acknowledged; see Bolton, “Definitions,” 127; and Irwin, *Aristotle's First Principles*, 116.

⁶⁵Note that the puzzles of *NE* VII.2 do not provide conclusive reasons to reject the initial *endoxa* but instead identify “epistemic infelicities,” e.g. lack of clarity, apparent contradiction, etc. that need to be sorted out; see Barnes, “Methods,” 493. That is why the various prospective critical or ground-clearing discussions of his predecessors' views, e.g. in *DA* I, *Phys.* I.2–6, *Met.* I, etc., do not count as instances of the second stage of this method.

⁶⁶A possible grey area would be a case in which Aristotle initially sets out a list of *endoxa*, quickly eliminates some of them, but then proceeds to examine the rest of them aporematically. This procedure would arguably count as an instance of the *NE* VII.1 method, provided that Aristotle developed

method in *Pol.* I.4–6, because he undertakes a substantive discussion of *endoxa* (in *Pol.* I.6) only after he has developed his own independent view on the matter (*Pol.* I.4–5).⁶⁷ But what about *Pol.* I.6 itself? Does its treatment of *endoxa* have the three-stage structure of the *NE* VII.1 method?

Despite the notorious difficulty of the chapter, a relatively superficial and uncontroversial overview of *Pol.* I.6 reveals that it is not an instance of the *NE* VII.1 method. In *Pol.* I.6 Aristotle discusses the views of three sets of individuals:⁶⁸

- (1) Those who believe that slavery is unjust because it is purely the result of an unjust law/convention.
- (2) Those who believe that slavery is just because it is based upon a just law whose validity is grounded by the superior virtue (= power) of the victors.
- (3) Those who believe that slavery is just because it is based upon a law that has a sort of justice, viz. because it is a law.

The individuals in each of these categories go unnamed throughout the chapter, but we can be confident that their beliefs must be *endoxa*, because otherwise he would have no reason to take them seriously (*NE* I.4, 1095a28–30; and *EE* I.3, 1214b28–1215a7), and, at any rate, Aristotle explicitly refers to some of the proponents of these views as wise (*Pol.* I.6, 1255a12). However, it is important to note that not all of these *endoxa* have an equal standing relative to the aim of the chapter; the first group (1) and their view about slavery seem to be Aristotle's main focus of concern. At least, Aristotle introduces the chapter with a concession to these individuals and concludes the chapter in the same way (*Pol.* I.6, 1255a3–6, b4–5). The second set of thinkers (2) are introduced in direct opposition to (1) as those who maintain the justice of the convention of slavery in war (*Pol.* I.6, 1255a11). The third group (3) is examined after the second (2) and, like them, supports the validity of slavery in war but offers a different and rather deflationary defense of it (*Pol.* I.6, 1255a21–24). Aristotle's discussion of this group of individuals leads him back to the first, main group (1) and indeed helps to reveal the element of truth in their position.

It is true that, from Aristotle's point of view, each of these positions has something to be said for it. However, he plays this fact up only in the case of the first group (1). Unlike other cases (e.g. *EE* VII.2, 1235b13–18) Aristotle does not try to harmonize the apparently inconsistent views in *Pol.* I.6. He does not even explicitly criticize the second group (2), though he would of course find fault

his own theory of the matter by raising and solving puzzles about those remaining beliefs. However, Aristotle does not proceed in precisely that way in *NE* VII.1–10; the critical refinements only come at the puzzle-solving stage of the method, i.e. from *NE* VII.3 onward.

⁶⁷This is essentially Goldschmidt's point (see "Théorie et méthode," 152–53). But it is worth pointing out additionally that there are no indications of reliance upon *endoxa* as such in *Pol.* I.4–5. None of the characteristic locutions indicating *endoxa* appear in those chapters, e.g. 'they say' (*phasi*) or 'it seems' (*dokēi*). Nor does Aristotle ever say that what he is asserting in *Pol.* I.4–5 are "things said" (*legomena*). (Contrast *NE* VII.1, 1145b20.) Instead, the information upon which he relies in *Pol.* I.4–5 are all things that he himself takes to be true; and even if these beliefs also happen to be *endoxa*, there are no indications in *Pol.* I.4–5 that he is relying upon them *qua endoxa*, which is necessary if he is to be employing the *NE* VII.1 method; see Bolton, "Definitions," 127–28.

⁶⁸Aristotle also briefly discusses the views of certain noblemen at *Pol.* I.6, 1255a32–b4. But these are views about noble birth, not about slavery per se.

with their belief that superiority in strength/brute force effectively suits one for rule. The main purpose of the notoriously difficult section in which Aristotle discusses the attitudes of these two groups to the law about slavery in war (*Pol.* I.6, 1255a12–21) is to confirm that the person superior in virtue deserves to rule and be master (*Pol.* I.6, 1255a20–1, a39–b1). That is a common assumption of these two opposing camps, and it is a view that Aristotle himself accepts.⁶⁹ His investigation of the belief of the third group (3) similarly confirms a thesis that he himself endorses: the existence of natural slaves. Aristotle points out that even these individuals would not hold onto strict conventionalism, for example in the case of laws arising from unjust wars (*Pol.* I.6, 1255a24–25), and would certainly not maintain that the well-born (Greek) individuals taken captive in war are slaves (*Pol.* I.6, 1255a25–29). They reserve that title for non-Greeks, but in doing so “they are seeking precisely the natural slave we talked about in the beginning; for they have to say that some people are slaves everywhere, whereas others are slaves nowhere” (*Pol.* I.6, 1255a30–32). After some remarks pointing out that the views of certain nobles have a similar upshot (*Pol.* I.6, 1255a32–b4), Aristotle concludes that “the objection with which we began has something to be said for it, and that the one lot are not always natural slaves nor are the other always naturally free” (*Pol.* I.6, 1255b4–5). But he is also sure to point out that there is such a distinction in some cases—and in these it will be just and beneficial for the natural slaves to be subjected to slavery and for the natural rulers to rule (*Pol.* I.6, 1255b6–9).

It is clear from this overview of *Pol.* I.6 that its purpose is to highlight that those who deny the justice of slavery (because it is based upon an unjust law) are correct insofar as they acknowledge that not all individuals who are conventionally enslaved necessarily deserve that status, but they mistakenly overlook the fact that certain human beings are nonetheless suited by nature for slavery.⁷⁰ Insofar as the discussion identifies the true and false aspects of an *endoxon*, it bears a partial resemblance to the method of *NE* VII.1. However, this resemblance falls far short of identity, because Aristotle does not work out or even refine his own view of the normative status of slavery by aporematic examination upon the *endoxa* in *Pol.* I.6. He has already established his own view of the matter by the end of *Pol.* I.5 without the use of *endoxa* (*Pol.* I.5, 1255a1–3); and, furthermore, he raises no puzzles (*aporiai*) about natural slavery in *Pol.* I.6. Thus, there are no counterparts to the second (puzzle-raising) and third (puzzle-solving) stages of the *NE* VII.1 method in that chapter. We must conclude, then, that Aristotle does not employ the endoxic method of *NE* VII.1 in *Pol.* I.6.

⁶⁹The vexed textual issue of whether to read ‘*eunoia*’ or ‘*anoia*’ at *Pol.* I.6, 1255a17 does not affect this point. That solely impacts one’s reading of *Pol.* I.6, 1255a17–19. If one reads ‘*eunoia*’ with the manuscripts, then one must view those lines as part of Aristotle’s diagnosis for the different attitudes to the justice of the convention of slavery in war; see Reeve, *Aristotle: Politics*, 10n41. If, however, one accepts Ross’s ‘*anoia*’ (or Richards’s less likely ‘*euētheia*’), one must read it as a digression about different forms of immoralism; see Schofield, “Ideology,” 24–26. Both parties, however, can (and should) admit that the main upshot of the larger context of *Pol.* I.6, 1255a12–21 is to confirm something that Aristotle himself believes; see Schofield, “Ideology,” 26.

⁷⁰In doing so Aristotle fulfills his promise to come up with a better idea about the normative status of slavery than that currently entertained at *Pol.* I.3, 1253b17–18.

5. CONCLUSION

Throughout *Pol.* I.4–5 Aristotle offers three definitions of the natural slave. The nominal definition offered in *Pol.* I.4 essentially classifies the natural slave as a certain “part” of the household but is non-committal concerning the existence of such individuals. By contrast, the two definitions of the natural slave in *Pol.* I.5 directly describe its function and underlying psychological orientation respectively. These definitions shine light upon the status of the natural slave as described in *Pol.* I.4 and have existential import (section 3). Consequently, there is an extremely tight fit between the structure of the constructive phase of Aristotle’s inquiry into natural slavery and that of the scientific method described in *An. Post.* II.1–10.

This conclusion is important. In some cases, the recent work that questions the dialectical nature of Aristotle’s ethical methodology does so in favor of a scientific interpretation of it. For instance, it has been suggested that Aristotle employs analogues of the *An. Post.* II.1–10 method in his inquiries into happiness in *NE* I and character virtue in *NE* III–IV.⁷¹ Now, it should be no surprise to find some methodological continuity between the *NE* and *Pol.*, because Aristotle seems to treat them both as parts of his “philosophy of human affairs” (*NE* X.9, 1181a12–23). The extent of this methodological overlap, however, remains to be seen. Another potentially promising place to find something like Aristotle’s scientific method being employed in the *Politics* is the discussion of citizenship in *Pol.* III.1. For there he presents various definitions of the citizen, so it would be worth exploring whether they exhibit the sort of progression characteristic of the scientific method.⁷²

One might naturally be a bit concerned about this thrust in current research on Aristotle’s ethico-political methodology. Aristotle famously maintained a doctrine of the autonomy of the sciences (*An. Post.* I.7, 75a38–b12), which might suggest that different methodologies are appropriate for different subject matters. However, I would caution against reading that much into the doctrine. It seems to say only that the theorems of a science that has no overlap whatsoever in subject matter with another science cannot be explained by the principles of the latter science.⁷³ It makes no claims about the methodologies appropriate for the *discovery* of the principles and theorems of different sciences. So, for all we know, Aristotle allows that similar methods of inquiry can be used in radically different sciences.

But, one might ask, why should we think that ethics/politics requires a scientific method? Can a method appropriate to theoretical sciences like mathematics or physics be applied to a practical discipline like ethics? Essentially fueling these questions is a more general question about the difference in precision between

⁷¹See Natali, “Scientific Aspects,” “Happiness”; and Salmieri, “Non-Dialectical Methodology.” Interestingly, this strategy has also been extended to the *Poetics*; see McKirahan, “Place.”

⁷²I should stress that I am not definitively asserting this thesis. I am only proposing it as a possible topic for future exploration.

⁷³Aristotle recognizes some cases in which the principles of one science explain the theorems of another subordinate one, e.g. geometry and optics (*An. Post.* I.7, 75b6, 75b14–17; and I.13, 78b34–79a16). In these cases, he says that the relevant sciences share the same genus either unqualifiedly or “in a way” (*pēi*, *An. Post.* I.7, 75b8–9). By there being no overlap in subject matters of two sciences I mean that their subject genera are neither the same unqualifiedly or “in a way.”

ethical and theoretical disciplines. That issue can hardly be settled now.⁷⁴ Suffice it to say that Aristotle's famous remarks about precision in *NE* I.3 apply solely to our expectations about the *results/conclusions* of ethical and theoretical inquiry: we should not expect the results of ethical inquiry to have the same precision as those of mathematical inquiry (see the *sumperainesthai* at *NE* I.3, 1094b22). Aristotle does not say there that we cannot use a similar *method* to reach these results of varying exactness. Arguably, the texts of the *NE* and *Pol.* speak for themselves, for Aristotle shows a strikingly similar concern for existential/definitional progression in inquiries in those works as he does, say, in *Phys.* IV.

This is just what we would expect from the following passage of the *Metaphysics* (*Met.*):

[I]n general every thinking or thought-partaking discipline deals with explanatory factors and principles [*aitias kai archas*], more or less precise . . . starting from the essence [*to ti estin*]⁷⁵—some making it clear by perception, others assuming it as a hypothesis—they then demonstrate [*apodeiknuousin*], more or less cogently, the *per se* attributes of the genus with which they deal. (*Met.* VI.1, 1025b5–13; see also *Met.* XI.7, 1063b36–1064a22)

Every intellectual discipline—theoretical, productive, and practical—employs definitions (statements of essence) as causes (*aitiai*) and first principles (*archai*). Since, then, ethics/politics is a practical intellectual discipline (*Met.* VI.1, 1025b25), it should also concern itself with definitions (and even a superficial reading of the *NE* and *Pol.* confirms that it does).⁷⁵ However, its principles/causes and hence definitions will be less precise than, say, those of mathematics. What this difference in precision amounts to and how it is manifested is a topic worthy of further investigation. Nonetheless, these observations already suggest that we should not be too surprised to find Aristotle using similar methodological strategies for the acquisition of definitions in, say, the biological and ethico-political works, for that similarity is a testament to the role of definitions as principles in theoretical, productive, and practical disciplines alike.⁷⁶

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⁷⁴In their own ways, Anagnostopoulos (*Exactness*) and Reeve (*Practices*) attempt to explain how ethics can be a science, while respecting Aristotle's various remarks about precision.

⁷⁵According to Aristotle, scientific definitions function in explanations of the *per se* accidents of the relevant kind (*Met.* VI.1, 1025b5–13). So if we take this "scientific" model of ethics seriously, ethical definitions will also have to be explanatory in that way. This explanatory aim is not incompatible with the ultimate practical aim of the *NE/Pol.* (see *NE* I.3, 1095a5–6; II.2, 1103b26–30; and X.9, 1179a35–b2). After all, practical wisdom requires knowledge of universals (*NE* VI.7, 1141b14–15; and VI.9, 1142b31–3), and so Aristotle might think that this "general" component of practical wisdom (which admittedly needs to be supplemented with a certain character, experience, and perception) is a science or is at least science-like; see Reeve, *Practices*.

⁷⁶I would like to thank Richard Kraut, Sean Kelsey, and Kristen Inglis for their feedback on earlier versions of this paper. Warm thanks also go out to the anonymous referees of the *JHP* whose generous comments provided great help and stimulation.

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ABBREVIATIONS OF ANCIENT SOURCES

Aristophanes:

Ecc.—*Ecclesiazusae*

Phut.—*Plutus*

Aristotle:

DA—*On the Soul*

De Cael.—*On the Heavens*

EE—*Eudemian Ethics*

GA—*Generation of Animals*

Gen. et Corr.—*On Generation and Corruption*

HA—*History of Animals*

Met.—*Metaphysics*

Meteor.—*Meteorology*

NE—*Nicomachean Ethics*

PA—*Parts of Animals*

Phys.—*Physics*

Pol.—*Politics*

An. Post.—*Posterior Analytics*

An. Pr.—*Prior Analytics*

Top.—*Topics*

Homer:

Il.—*Iliad*

Od.—*Odyssey*

Plato:

Leg.—*Laws*

Phd.—*Phaedo*

Tim.—*Timaeus*

Theognis:

Eleg.—*Elegies*