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ARISTOTLE'S HIPPODAMOS (*POLITICS* 2.1267b22-30)

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ARISTOTLE'S HIPPODAMOS (*POLITICS* 2.1267b22-30)

Ἴππόδαμος δὲ Εὐρυφῶντος Μιλήσιος, ὃς καὶ τὴν τῶν πόλεων διαίρεσιν εὗρε καὶ τὸν Πειραιᾶ κατέτεμεν, γενόμενος καὶ περὶ τὸν ἄλλον βίον περιττότερος διὰ φιλοτιμίαν οὕτως ὥστε δοκεῖν ἐνίοις ζῆν περιεργότερον τριχῶν τε πλήθει καὶ κόσμῳ πολυτελεῖ, ἔτι δὲ ἐσθῆτος εὐτελοῦς μὲν ἀλεεινῆς δέ, οὐκ ἐν τῷ χειμῶνι μόνον ἀλλὰ καὶ περὶ τοὺς θερινοὺς χρόνους, λόγιος δὲ καὶ περὶ τὴν ὅλην φύσιν εἶναι βουλόμενος. πρῶτος τῶν μὴ πολιτευομένων ἐνεχείρησέ τι περὶ πολιτείας εἰπεῖν τῆς ἀρίστης.

“Hippodamos, the son of Euryphon and a Milesian, who both invented the division of cities and cut out the Piraeus, was in the rest of his life very extraordinary because of his love of reputation, so that to some people he seemed to live his life very elaborately, wearing his hair long and arranged in a costly manner, while his clothes were of cheap material that was nevertheless warm, which he wore both in the winter and in the summer alike. He wanted to be knowledgeable about nature in general. First among those who were not statesmen he tried to speak about the best state.” (Aristotle, *Politics* 2.1267b22-30)

Aristotle here introduces a discussion of the political theory of Hippodamos, but today there remains a certain amount of disagreement over what precisely he meant by the phrase “τὴν τῶν πόλεων διαίρεσιν εὗρε.”¹ On the

- 1 Modern discussions of Hippodamos include: Karl Friedrich Hermann, *Disputatio de Hippodamo Milesio ad Aristotelis Politicam II.5* (Marburg 1841); M. Erdmann, “Hippodamos von Milet und die symmetrische Städtebaukunst der Griechen,” *Philologus* 42 (1884) 193-227; G. Cultrera, “Architettura ippodamea. Contributo alla storia dell’edilizia nell’antichità,” *Mem. Lincei* s. V, 17 (1923) 361ff.; Ferdinando Castagnoli, *Orthogonal Town Planning in Antiquity*, trans. by V. Caliandro (Cambridge, Mass. / London 1971); Fabricius, *RE* 8.2 (1913) 1731-34, s.v. Hippodamos; Armin von Gerkan, “Hippodamos,” in Erich Boehringer (ed.), *Von antiker Architektur und Topographie: Gesammelte Aufsätze von Armin von Gerkan* (Stuttgart 1959) 8-9 (reprinted from Thieme/Becker [eds.], *Allgemeines Lexikon der bildenden Künstler* 17 [1924]); R. E. Wycherley, “Hippodamos and Rhodes,” *Historia* 13 (1964) 135-39; James R. McCredie, “Hippodamos of Miletos,” in D. G. Mitten/J. C. Pedley/J. A. Scott (eds.), *Studies Presented to George M. A. Hanfmann* (Mainz 1971) 95-100; Roland Martin, *L’Urbanisme dans la Grèce antique* (2nd ed. Paris 1974); J. B. Ward-Perkins, *Cities of Ancient Greece and Italy: Planning in*

one hand there are those scholars who think that Aristotle is attributing to Hippodamos the invention of orthogonal city planning – the use of straight streets meeting at right angles.² This interpretation seems to be supported by a later passage in the same work by Aristotle (*Politics* 7.1330b21-31) in which this method of city planning is labeled “τὸν νεώτερον καὶ τὸν Ἱπποδάμειον τρόπον” (“the newer, Hippodamean method”). However, in the last century, archaeological excavations from Greek settlements throughout the Mediterranean have demonstrated beyond any doubt that cities were in fact built according to a deliberate plan as early as the eighth century BCE, some three centuries prior to the lifetime of Hippodamos. Faced with the fact the Hippodamos could not have invented city planning, the scholars who favor this interpretation of Aristotle’s first passage, *Politics* 2.1267b22-30, are left with two escapes. Either Aristotle meant that Hippodamos invented some particular feature of city planning (possibly zoning, but Aristotle leaves the details vague³) and not city planning as a whole, or else Aristotle was just plain wrong in his assertion.

A second interpretation of the phrase “τὴν τῶν πόλεων διαίρεσιν εὖρε” has been gaining credibility among another group of scholars. It is an interpretation which seems to be better supported by the immediate context of the text and which avoids attributing either obscurity or error to Aristotle.⁴ According to this view, “τὴν τῶν πόλεων διαίρεσιν” does not refer to city planning at all, but rather introduces the political theory of Hippodamos, a theory Aristotle then goes on to discuss in greater detail (*Politics* 2.1267b30-1269a28). This interpretation is supported by Aristotle’s choice of words in the immediate context, since Hippodamos’ theory involves a tripartite division of the citizens into classes and land into types, which division is expressed by the verbs διηρημένην and διήρει, forms cognate to διαίρεσιν.⁵ In addition, according to this interpretation, the use of straight streets meeting at right angles is called the

Classical Antiquity (London 1974); Alfred Burns, “Hippodamus and the Planned City,” *Historia* 25 (1976) 414-28; E. J. Owens, *The City in the Greek and Roman World* (London/New York 1991); Spiro Kostof, *The City Shaped: Urban Patterns and Meanings Through History* (London 1991).

- 2 In addition to the translators and commentators listed below, at note 16, see Hermann, *Disputatio* (as in n. 1) esp. 51; Erdmann, “Hippodamos” (as in n. 1); Fabricius, “Hippodamos” (as in n. 1).
- 3 McCredie, “Hippodamos” (as in n. 1); Kostof, *Shaped* (as in n. 1) 105, 127; Richard Tomlinson, *From Mycenae to Constantinople: The Evolution of the Ancient City* (London/New York 1992) 16, 69-70; possibly also Owens, *The City* (as in n. 1) 4, 60-61, although his views are left vague: for example, on p. 4 he says that Hippodamos is “erroneously credited with the invention of city planning,” without explaining who is making this error, Aristotle or modern scholars.
- 4 Burns, “Hippodamos” (as in n. 1) 416-17 is the best articulation of this theory to date.
- 5 Cf. *Politics* 7.1329a41-b2 and 1330a9-16, 23-25.

Hippodamean method in Book 7 not because Hippodamos invented this method but because he popularized it on the Greek mainland through his work at the Piraeus.⁶

This argument for the second interpretation has not yet laid the matter to rest. Scholars are still using the passage from Book 2 to authorize the interpretation that Hippodamos was the inventor if not of city planning proper (because archaeological evidence has shown that this is not the case), then at least of some form of city planning. For example, in his 1992 work, Tomlinson remarks: "Hippodamos must be credited with more than the creation of a regular grid plan, since these are found in the appropriate Greek cities (particularly colonies) from a much earlier date than the fifth century. Given the similarity between Miletus and Piraeus ... what Hippodamos probably devised was the relationships of the different elements needed for a town within the area allotted to it."⁷ I can only conclude that the argument based on the immediate context has not completely convinced other historians that Aristotle's statement, "ὄς καὶ τὴν τῶν πόλεων διαίρεσιν εὔρε," makes no reference to city planning.

It is my purpose to establish beyond reasonable doubt that the second, theoretical interpretation must be the correct one. For the argument based on context can be significantly strengthened by the addition of two new lines of reasoning, one rooted in the overall structure of Book 2 of the *Politics* and the other in the history of the commentary to the passage in question.

The structure of Book 2 of the *Politics* makes it quite clear that the word διαίρεσις refers to the theoretical division of people into classes and land into types. The purpose of Book 2, as articulated clearly near the start, is to discuss

- 6 Cf. R. E. Wycherley, *How the Greeks Built Cities* (2nd ed. London/New York 1962) 17-18. City planning was fairly popular in the Greek colonies in both the west and the east, but only one planned city that antedates the Piraeus is known on the mainland, and that is Halieis on the Argolid. For Halieis, see Thomas D. Boyd and Wolf W. Rudolph, "Excavations at Porto Cheli and Vicinity, Preliminary Report IV: The Lower Town of Halieis 1970-1977," *Hesperia* 47 (1978) 333-55; Wolf W. Rudolph, "Excavations at Porto Cheli and Vicinity, Preliminary Report VI: Halieis, the Stratigraphy of the Streets in the Northeast Quarter of the Lower Town," *Hesperia* 53 (1984) 123-70. For early city planning in general, see: Castagnoli, *Orthogonal* (as in n. 1) esp. 10-12 and 128-130; Martin, *L'Urbanisme* (as in n. 1); David Asheri, "Osservazioni sulle origini dell'urbanistica ippodamea," *Rivista Storica Italiana* 87 (1975) 5-16; A. J. Graham, "The Colonial Expansion of Greece," *CAH* 3².3.83-162, pp. 103-113; A. J. Graham, "The Western Greeks," *CAH* 3².3.163-95; as well as numerous, site-specific publications.
- 7 Tomlinson, *From Mycenae* (as in n. 3) 70. Cf. Kostof, *Shaped* (as in n. 1) 127 and Wycherley, *How the Greeks* (as in n. 6) 17-18. Wycherley knows that Hippodamos could not have invented city planning, but continues to misread his Aristotle, for he finds it necessary to say (p. 18), "When we read of his [Hippodamos's] 'invention' we must remember that the Greeks were notoriously fond of transforming what was in fact a slow development, to which many contributed, into the more spectacular creation of one man."

theoretical and actual models of the ideal state, beginning with the question of how a state should share or distribute its basic goods:

ἀρχὴν δὲ πρῶτον ποιητέον ἢ περ πέφυκεν ἀρχὴ ταύτης τῆς σκέψεως. ἀνάγκη γὰρ ἢ τοὶ πάντας πάντων κοινῶν εἶναι τοὺς πολίτας, ἢ μηδενός, ἢ τινῶν μὲν τινῶν δὲ μή. τὸ μὲν οὖν μηδενός κοινῶν εἶναι φανερόν ὡς ἀδύνατον (ἢ γὰρ πολιτεία κοινῶνία τίς ἐστὶ, ...).

“First let us start from what is the natural beginning of such an examination. For it is necessary that either all the citizens share all things in common, or they share nothing, or they share some things but not others. And clearly it is impossible for them to have nothing in common (for a political association is a kind of sharing, ...).” (2.1260b36-40)

Thus Aristotle recognizes two possible communities, one in which the citizens share everything, and another in which they share only certain things. These principles form the basic framework for the following discussion.

First he discusses Plato’s ideal state, which is an example of Aristotle’s first alternative. Plato proposes the community of wives, children, and property among the Guardian class:

ἐνδέχεται γὰρ καὶ τέκνων καὶ γυναικῶν καὶ κτημάτων κοινῶν εἶναι τοὺς πολίτας ἀλλήλοις, ὥσπερ ἐν τῇ Πολιτείᾳ τῇ Πλάτωνος· ἐκεῖ γὰρ ὁ Σωκράτης φησὶ δεῖν κοινὰ τὰ τέκνα καὶ τὰς γυναῖκας εἶναι καὶ τὰς κτήσεις.

“And it is possible for citizens to share with each other their children and wives and property, just as in the *Republic* of Plato. For there Sokrates says that children and wives and property ought to be held in common.” (2.1261a4-8)

The other two theoretical states that are evaluated are variations on the second alternative – that is, that citizens hold some things in common but not other things. The first model of partial sharing is that of Phaleas of Chalkedon, who was the first to suggest that the land of the state be distributed in equal lots to the citizens:

περὶ γὰρ τούτων ποιεῖσθαί φασι τὰς στάσεις πάντας. διὸ Φαλέας ὁ Χαλκηδόνιος τοῦτ’ εἰσήνεγκε πρῶτος· φησὶ γὰρ δεῖν ἴσας εἶναι τὰς κτήσεις τῶν πολιτῶν.

“For some say that all civil unrest is due to these things [i.e. property]. Wherefore Phaleas of Chalkedon first put forward this suggestion. For he says that citizens must have equal property.” (2.1266a38-40)

Next Aristotle turns to Hippodamos in order to discuss what is a further example of a theory of the relationship between people and property in the ideal

state, introducing it with the passage which was given at the beginning of this article. According to my interpretation, Aristotle introduces Hippodamos as the authority for the theory about the division of cities based on the fact that he was the inventor of – that is, the first man to write about – the theoretical division of citizens into classes and land into types,⁸ just as Phaleas is introduced because he is the authority for, and the inventor of, the theory in which property is distributed equally for the sake of preventing civil unrest. If one follows the traditional interpretation, the statement which links the section about Hippodamos to the organizing theme of Book 2 is lost: Hippodamos is no longer the authority for the theory of division which follows by virtue of having invented it. The explicit authorization becomes merely implicit, and, furthermore, the parallelism between the introduction of Phaleas and Hippodamos is destroyed.⁹

The present interpretation that the phrase “τὴν τῶν πόλεων διαίρεσιν εὖρε” makes an explicit claim for the authority of Hippodamos as the inventor of the division of citizens by classes and land by types is supported by the methodology Aristotle uses to accomplish his goal of discovering the best possible form of political association. For he uses his trademark dialectical method of investigating the problem. In the introduction to the *Topica*, a handbook on dialectical argumentation, Aristotle discusses the method of dialectical reasoning, saying:

διαλεκτικὸς δὲ συλλογισμὸς ὁ ἐξ ἐνδόξων συλλογιζόμενος ... ἐνδοξα δὲ τὰ δοκοῦντα πᾶσιν ἢ τοῖς πλείστοις ἢ τοῖς σοφοῖς, καὶ τούτοις ἢ πᾶσιν ἢ τοῖς πλείστοις ἢ τοῖς μάλιστα γνωρίμοις καὶ ἐνδόξοις.

- 8 The fact that class division had existed for centuries would not hinder Aristotle from attributing its invention to Hippodamos. For Aristotle recognized that the same thing could be discovered many times in the course of the years: “... ὁ δὲ χωρισμὸς ὁ κατὰ γένος τοῦ πολιτικοῦ πλήθους ἐξ Αἰγύπτου· ... σχεδὸν μὲν οὖν καὶ τὰ ἄλλα δεῖ νομίζειν εὐρησθαι πολλάκις ἐν τῷ πολλῷ χρόνῳ, μᾶλλον δ’ ἀπειράκις” (“... And the separation of the citizen body by class first occurred in Egypt. ... And I suppose then that one must believe that other things are discovered frequently in a long space of time, or rather innumerable times,” *Politics* 7.1329b23-24, 25-27).
- 9 It is possible to argue that the parallel is actually between the fact that Phaleas was the first man to introduce equal land division and the fact that Hippodamos was the first non-statesman to discuss the ideal state (πρῶτος τῶν μὴ πολιτευομένων ἐνεχειρήσῃ τι περὶ πολιτείας εἰπεῖν τῆς ἀρίστης, 1267b29-30). But the important theme of this part of the *Politics* is the relationship between people and property. As Phaleas was the first to write about one theory of people and property, Hippodamos was the first to write about another, that is, the division of people and land. The fact that he was not a statesman is incidental.

“Dialectic reasoning¹⁰ is that which proceeds from common opinion (ἔνδοξα). ... And common opinion is that which seems reasonable to everyone, or to the majority, or to the wise; and of the wise, to all, or to the majority, or to those who are especially well-known and reputable.” (*Topica* 1.100a30-b23)¹¹

Ἐνδοξα, then, are views that are actually held and approved, either generally or by the most reputable people. By insisting on basing his dialectic on real beliefs, Aristotle is trying to avoid the fault of eristic argumentation – quarrelsome argument, or argument for argument’s sake (cf. *Topica* 1.104a2-39). He also avoids the fault of producing an argument that is contrived around a straw-man.

Aristotle has this aspect of the dialectical method in mind when he begins book 2 of the *Politics*:

Ἐπεὶ δὲ προαιρούμεθα θεωρῆσαι περὶ τῆς κοινωνίας τῆς πολιτικῆς, τίς κρατίστη πασῶν τοῖς δυναμένοις ζῆν ὅτι μάλιστα κατ’ εὐχὴν, δεῖ καὶ τὰς ἄλλας ἐπισκέψασθαι πολιτείας, αἷς τε χρῶνται τινες τῶν πόλεων τῶν εὐνομεῖσθαι λεγομένων, κἂν εἴ τινες ἕτεροι τυγχάνουσιν ὑπὸ τινῶν εἰρημέναι καὶ δοκοῦσαι καλῶς ἔχειν, ἵνα τό τ’ ὀρθῶς ἔχον ὀφθῆ καὶ τὸ χρήσιμον, ἔτι δὲ τὸ ζητεῖν τι παρ’ αὐτάς ἕτερον μὴ δοκῆ πάντως εἶναι σοφίζεσθαι βουλομένων, ἀλλὰ διὰ τὸ μὴ καλῶς ἔχειν ταύτας τὰς νῦν ὑπαρχούσας, διὰ τοῦτο ταύτην δοκῶμεν ἐπιβαλέσθαι τὴν μέθοδον.

“Since we propose to theorize concerning what form of political association is best of all for those who are able to live the kind of life they would especially prefer, we must examine other political associations, both those actually used by some cities and which are said to be well-governed, *and also any others that are designed by theorists and are held to be good, in order to discover that which is right and that which is useful, and in order that, when we seek some constitution other than these, we do not seem to be at all like those who wish to contrive something*, but rather, we seem to choose this method because the things that exist now are not good.” (*Politics* 2.1260b27-36) [italics added]

It is clearly important for Aristotle’s method to connect the theories he presents with the authorities who vouch for them. In the first half of *Politics* 2,

10 In the *Topica*, Brunschwig prefers the translation “deduction” for συλλογισμός because of the contrast with ἐπαγωγή, “induction.” Jacques Brunschwig, *Aristotle Topiques I* (Budé ed. Paris 1967) 113 n. 2.

11 Cf. *EN* 7.1145b1-7.

he draws the authority explicitly by naming the inventors of the theories – Plato, Phaleas, and Hippodamos.¹²

Therefore, based upon the structure of Book 2 of the *Politics* as well as the dialectic method which helped determine that structure, I maintain that when Aristotle says that Hippodamos invented the division of cities, he not only is not, but also cannot be, referring to the invention of city planning. Rather, he must be referring to this theory in which the people are divided into classes and the land is divided into types. There is no other satisfactory way to interpret this passage in this context.¹³

In addition to the structural argument, I can offer another line of reasoning in favor of the interpretation offered here. By examining the history of the translation and commentary of this passage it is possible to trace the misinterpretation to its source. The scholarship on this passage is divided along two lines. A few scholars assume the correct meaning of the passage without making any argument for it, translating, for example, “est inventeur de la division des États par ordres de citoyens.”¹⁴ A further, very large group mis-translates the passage. For example, Newman (1887) translates this phrase not merely as “the division of cities,” but as “the division of cities into streets” or “quarters.” Other scholars avoid the word “division” altogether and say: “the art of planning cities” (Jowett 1885; McKeon 1941)¹⁵; “the planning of towns in separate quarters” (Barker 1946); “celui qui inventa le tracé géométrique des villes” (Aubonnet 1960); or even “welcher die Abtheilung der Städte nach Strassen und Quartieren erfunden ... hat” (Stahr 1839).¹⁶

12 Aristotle's use of dialectic reasoning based on ἐνδοξία is discussed at Aristotle, *The Politics*, Stephen Everson (ed.) (Cambridge 1988) xii-xv; and W. L. Newman (ed.), *The Politics of Aristotle I* (Oxford 1887) 11-15.

13 One further point can be made which is not definitive by itself but which throws even further weight behind my argument. The word διαίρεσις occurs very frequently in the works of Aristotle. In the overwhelming majority of its occurrences, it means logical division, the division of genus into species. Compare that meaning to the usage in our passage, where Aristotle divides the *genera*, citizen-body and land, each into three *species*.

14 C. Millon, *Politique d'Aristote* (Paris 1803). See also Martin, *L'Urbanisme* (as in n. 1) 103. Many others employ the literal translation “who invented the division of cities” without any further elucidation. See the editions by Carnes Lord (Chicago 1984); J. G. Schneider (Frankfurt 1809); and Averrois (Venice 1562-74).

15 Repeated in the Modern Library edition of 1943 and the Oxford edition of 1970.

16 Cf. also the following editions of the *Politics* from the last two centuries: S. Everson (Cambridge 1981); J. Barnes (Cambridge 1984 [employed by Stephen Everson in his edition of 1988]); H. Rackham in the Loeb edition (Cambridge 1959, rept. of 1932); J. Warrington (London 1959); W. Ellis (London 1888); E. Walford (London 1881); F. Susemihl (Leipzig 1879); J. Bernays (Berlin 1872); A. F. Didot (Paris 1862); J. Barthélemy Saint-Hilaire (Paris 1848); J. Gillies (2nd ed. London 1804). See also A. Giuliano, *Urbanistica delle città greche* (Milan 1966) 94-95. This list is by no means exhaustive.

Thus this mistaken interpretation is quite widespread and centuries old. As far back as 1621, Daniel Heinsius translates “τὴν τῶν πόλεων διαίρεσιν” with “civitatum partitionem” but comments upon it: “qui primus invenisse rationem dicitur, qua commode in vias atque itinera distinguerentur civitates.” In fact, I believe that the origin of this interpretation can be traced with precision to the 1576 Latin translation and commentary on the *Politics* by the Italian Renaissance scholar, Pier Vettori.

The commentaries and translations written before that date – insofar as I have been able to examine them – are unanimous in following the medieval interpretation of the passage as expressed in the work of Thomas Aquinas. In the thirteenth century (*circa* 1272), Aquinas wrote a commentary on the first three books of the *Politics* in which he comments thus on the phrase in question: “adinvenit distinctionem civitatis quantum ad diversos ordines civium.”¹⁷ This interpretation recurs, for example, in the 1502 commentary by Ferdinandus Rhoensis (“... primus invenit divisionem civitatis quantum ad diversos ordines civium ...”) and the 1548 edition by Io. Genesisius Sepulveda Cordubensis (“Hippodamus hanc Reipublicae formam excogitavit ut civitas ex hominum decem milibus constituta, in tres partes divideretur.”).

Pier Vettori (Victorius) was the first to depart from this tradition. He translates the phrase as “civitatum divisionem” but appends the following commentary: “Primum igitur narrat eum divisionem urbium invenisse: monstrasse inquam (nisi fallor) quomodo viae itineraque publica distingui formarique deberent.” I believe that Vettori’s supposition – note the “nisi fallor” – was repeated by Heinsius. In the absence of contradictory archaeological evidence, this erroneous interpretation was soon generally accepted by many later editors, to the extent finally that the notion of division in roads or districts made its way from the commentary into the translation of “τὴν τῶν πόλεων διαίρεσιν.”

How did this conjecture arise? Vettori himself tells us, for he gives us the sources upon which he based his interpretation. He mentions by name Harpokration, Hesychius, Demosthenes (actually Ps.-Demosthenes), and Suidas (the *Suda*). Harpokration, an Alexandrian lexicographer, probably from the first or second century CE, lists the following:

Ἴπποδάμεια: Δημοσθένης ἐν τῷ πρὸς Τιμόθεον ἀγορὰν φησιν εἶναι ἐν Πειραιεῖ καλουμένην Ἴπποδάμειαν ἀπὸ Ἴπποδάμου Μιλησίου ἀρχιτέκτονος τοῦ οἰκοδομησαμένου τοῖς Ἀθηναίοις τὸν Πειραιᾶ.

“Hippodamian: Demosthenes, in the *pros Timotheon* [49.22] says that an agora in the Piraeus is called Hippodamian after Hippodamos, a Milesian architect who built the Piraeus for the Athenians.”

17 I saw the version of Aquinas’ commentary that was printed in 1558, using the text from Aretino.

From this passage (as from *Politics* 7) Vettori knew that Hippodamos was a designer of cities.¹⁸ But the crucial evidence for his interpretation Vettori found in Hesychius, the lexicographer, probably from the fifth century CE:

Ἴπποδάμου νέμησις: τὸν Πειραιᾶ Ἴππόδαμος Εὐρυφῶντος παῖς ὁ καὶ μετεωρολόγος διεῖλεν Ἀθηναίους. οὗτος δὲ ἦν καὶ ὁ μετοικησας εἰς Θουριακοὺς Μιλήσιος ὄν.

“The Distribution of Hippodamos: Hippodamos, the son of Euryphon and also a meteorologist, divided the Piraeus for the Athenians. Also, although he was a Milesian, he went as a colonist to Thurii.”

If this passage can be taken at face value as representing concepts or vocabulary actually used by Hippodamos, then it is evidence that tells against my interpretation, because it uses *διαίρέω*, the cognate of the *διαίρεσις* in Aristotle's passage, to mean something equivalent to the *κατατέμνω* in that same passage. But if this is so, at most this passage demonstrates that Hippodamos considered city planning to be a kind of division and may well have called it *διαίρεσις*. I still hold to my interpretation of the passage at *Politics* 2 because, even if Hippodamos did include city planning among the many types of division that he discussed, the preponderance of evidence that was discussed above makes it clear that Aristotle is not referring to city planning when he makes Hippodamos the inventor of “the division of cities.”

However, there are reasons for doubting the evidential value of this passage as the basis for a modified interpretation of *Pol.* 2.1267b22-30. First, Hesychius is not a near contemporary to Hippodamos. In fact, he wrote ten centuries after the life of Hippodamos, ample time for old meanings to become confused and new ones to arise. In addition, my other reason for rejecting Hesychius' evidence is the possibility that it was ultimately dependent upon Aristotle in the first place. While I grant that my reasoning here is speculative, I believe that this possibility cannot be entirely ignored. Certainly, the scholarly tradition that Hesychius followed must have had access to information about Hippodamos that did not derive from Aristotle, one that supplied the evidence that he went to Thurii¹⁹ and that he was a *μετεωρολόγος*.²⁰ But the idea of division in close

18 Neither the *Suda* nor *Ps.-Demosthenes* give any additional information, but Xenophon (*Hell.* 2.4.11) and Andokides (*De Myst.* 45) confirm the name of the Piraean agora.

19 This is mentioned by Photius (*s.v.* Ἴπποδάμου νέμησις) in the ninth century CE, who may have been drawing on the same tradition as Hesychius, and also by the scholia to Aristophanes *Equites* 327, where our Hippodamos is confused with another man by the same name who was an Athenian citizen (see the excellent discussion of this scholion in Burns, “Hippodamus” [as in n. 1]).

20 This information also occurs in Photius, whereas other accounts refer to Hippodamos as an architect (Harpokration and the *Anecdota Graeca*, *s.v.* Ἴπποδάμεια ἀγορά [Bek-

conjunction with the Piraeus does not occur in any other early source besides Aristotle. This fact makes it possible that Aristotle was the ultimate source of the information about division. Aristotle's words at *Pol.* 2.1267b22-30 would have been excerpted by an earlier scholar, perhaps a biographer who found the material about Hippodamos' clothing and lifestyle too tempting to pass over. Such an excerpt would naturally omit the subsequent paragraphs where the concept of division was clarified. Then at a later stage of the transmission, Hesychius, or whatever other lexicographer he may have been following,²¹ would have read this passage that said Hippodamos "invented the division of cities" ("τὴν τῶν πόλεων διαίρεσιν εὗρε") and "cut out the Piraeus" ("καὶ τὸν Πειραιᾶ κατέτεμεν"), and he would have arrived at the conclusion that the second phrase was exegetical: when Aristotle said that Hippodamos "cut out the Piraeus," he was giving a specific example of the "division of cities." Therefore, the passage in Hesychius conflates the two parts of Aristotle's passage and says that Hippodamos "divided the Piraeus" ("τὸν Πειραιᾶ ... διεῖλεν").

Regardless of the true value of the passage from Hesychius, it is clear that Vettori used it in determining his own interpretation of the passage at *Pol.* 2.1267b22-30. His chain of thought must have gone something like this: from a comparison of the passage from Hesychius with the passage at *Politics* 2.1267b22-30, it seems that διαίρεω and κατατέμνω (note that both have τὸν Πειραιᾶ as their object) are synonymous. If "to divide" (διαίρειν) a city means essentially the same thing as "to cut out" (κατατέμνειν) a city, then "division" was synonymous with "city planning," and Hippodamos becomes the man who invented the art "quomodo viae itineraeque publica distingui formarique deberent." That this idea is a conjecture is marked by the phrase "nisi fallor," and perhaps referred to by the "dicitur" in Heinse's commentary. However by the nineteenth and twentieth centuries, many commentators on the *Politics* had abandoned caution and adopted this new interpretation in such a wholesale manner that it has become the traditional, majority view and has come to appear frequently not only in commentaries but also in translations of the text. It has only recently become a problem, when the archaeological evidence made it necessary for scholars mistakenly to attribute to Aristotle either error or obscurity.

ker]). A case could be made that the idea of Hippodamos as μετεωρολόγος can be found in a phrase from the same passage in Aristotle: "λόγιος δὲ καὶ περὶ τὴν ὅλην φύσιν εἶναι βουλόμενος."

21 According to C. F. Ranke, *De lexicis Hesychiani vera origine et genuina forma commentatio* (Lipsiae 1831) as well as the listing by Hans Gärtner in *Der Kleine Pauly* (Munich 1975) 2.1120, s.v. Hesychios (1), the later lexicographers such as Hesychius rarely resorted to original works but rather culled their material from their lexicographical predecessors.

Thus, by virtue of a threefold argument – contextual, structural, and historical – we can see that the phrase “ὅς καὶ τὴν τῶν πόλεων διαίρεσιν εὗρε” must mean that Hippodamos invented the theoretical division of citizens into class and land into type. To be sure, Hippodamos was an important intellectual figure of the fifth century, responsible for laying out the town plan of the Piraeus, and probably also of Thurii and Rhodes. He certainly employed a gridded street system in these cities, popularizing it and possibly making significant modifications to it. But we must be careful to distinguish between Hippodamos the theorist, who invented the hypothetical division of cities into classes and land-types, and Hippodamos the architect, who popularized city planning to such an extent that Aristotle feels justified in referring to some such system as the Hippodamean method of building. It is important to remember that we do not know precisely what this method entailed, and we must exercise caution in attempting to assign specific innovations to a man about whom we know almost nothing about. What we do know is that Hippodamos did not invent city planning, and Aristotle never said that he did.

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