## AN EXCERPT FROM BOETHUS OF SIDON'S COMMENTARY ON THE CATEGORIES?

Theodore Waitz, in the section of his introduction to Aristotle's Organon called De Codicibus graecis organi, prints a number of passages found in various manuscripts, which are not to be treated simply as scholia on Aristotle, but are still of some interest to the student of Aristotle's logic. In this paper I am concerned with three leaves, fos. 84–6,² from Laurentianus 71, 32, a fourteenth-century manuscript containing paraphrases of several works, which Waitz uses for scholia on the Categories and the De Interpretatione. These leaves are in a different hand from the rest of the manuscript, and Waitz thinks they originated elsewhere. The heading is:  $\Pi \epsilon \rho i \tau \hat{\eta} s \tau o \hat{v} \pi \sigma \tau \hat{\epsilon} \kappa \alpha \tau \eta \gamma o \rho i \alpha s$ , and the work falls into two parts, a discussion of Time, based on Physics 4, and an independent section in which the category of When, which Aristotle does little more than mention in a number of lists, is treated at length. In Waitz' text there are a number of references to scholia: these are in fact from Simplicius' Commentary on the Categories, and a comparison with these and still other passages of Simplicius not mentioned by Waitz suggests that the author of this work was Boethus of Sidon, the Peripatetic. I propose to examine it and argue that it is indeed by Boethus.

Boethus, known as 'the Peripatetic', to distinguish him from the Stoic philosopher of the same name, was head of the Peripatos in succession to Andronicus of Rhodes. There is some uncertainty about Andronicus' dates, but he lived some time in the middle of the first century B.C. and we may place Boethus somewhat later in the same century. Andronicus is well known as the editor, and in a sense the rediscoverer, of the esoteric works of Aristotle; it is less well known that he had an independent attitude to Aristotle and put forward what he presumably thought of as some improvements in doctrine. What concerns us here is his attempt to substitute the category of Time for that of When. In opposition to him Boethus may be seen as a conservative, coming to the defence of Aristotle against these innovations. In particular he is known to have written a commentary on the Categories: indeed Simplicius, in the introduction to his own commentary on that work, singles out Boethus as one who had 'deeper thoughts' about it, and called him  $\delta \theta av\mu \acute{a}\sigma tos$ . Simplicius refers quite frequently to his views, and is our main source for them. I suggest that Waitz' fragment is a section of Boethus' commentary.

## Περὶ τῆς τοῦ ποτὲ κατηγορίας [Waitz p. 19]\*

[line 42]Μετὰ δὲ ταῦτα περὶ τῆς ποτὲ κατηγορίας δίκαιον ἂν εἴη διαλαβεῖν πρότερον περὶ χρόνου τὰ χρήσιμα ἐκθεμένους διὰ τὸ οἰκεῖον εἶναι τὸν χρόνον τῆ τοιαύτη φωνῆ. ἔστιν οὖν ὁ χρόνος ποσόν συνεχὲς [Waitz p. 20] γὰρ ἐδείχθη τῶν μορίων αὐτοῦ τοῦ τε παρεληλυθότος καὶ τοῦ μέλλοντος κατὰ τὸ νῦν συνημμένων. ὤσπερ δὲ ἔκαστον τῶν ὑπὸ τὸ ποσὸν ἀναγομένων, εἴτε διωρισμένον λέγεις εἴτε συνεχές, τὰ μὲν ὑπό τινος ἐνὸς τῶν ἐν αὐτοῖς μετρεῖται, ὡς ἄνθρωποι δέκα ὑπό τινος τῶν ἐν

- \* To facilitate commentary line numbers of Waitz' pagination are given in square brackets.
- <sup>1</sup> This paper was originally read at a seminar on Space and Time in Antiquity in January 1980 at the Institute of Classical Studies, London, and I wish to thank members of that seminar for many helpful comments.
  - <sup>2</sup> Printed in Th. Waitz, Aristotelis Organon Graece, 1 (Leipzig, 1844), pp. 19-23.
- <sup>3</sup> For a recent study of Andronicus and Boethus see P. Moraux, *De Aristotelismus bei den Griechen* (Berlin, 1973), pp. 97–179.

  <sup>4</sup> 1. 18, Kalbfleisch.

αὐτοῖς, τὰ δὲ συνεχη θεμένων τι μέτρον ἐπ' αὐτοῖς ἡμῶν οἶον πόδα ἤ τι ἔτερον κατὰ τὸν αὐτὸν τρόπον καὶ ὁ χρόνος ἔν τι γε ὂν τῶν συνεχῶν ποσῶν τοῖς έαυτοῦ μέρεσι μετρείται θεμένων ήμων έλάχιστον προς αἴσθησιν χρόνον οἶον ωραν ἢ ήμισυ ταύτης ἢ καὶ ἔτερον μέρος. ἔστι δὲ ὅτε καὶ μείζονί τινι μετρεῖται οἶον ἡμέρα καὶ νυκτὶ καὶ τη έξ άμφοῖν τοῦ ἡλίου περιόδω καὶ μηνὶ καὶ ἐνιαυτῶ. [11] ἔτι τριῶν ὄντων, μεγέθους, οίον σταδίου φέρε είπειν, έφ' οῦ ἡ κίνησις γίνεται, καὶ κινήσεως καθ' ἡν τὸ κινούμενον κινείται, καὶ χρόνου, ἐν ὧ τὸ κινούμενον κινείται, ταῦτα μετροῦσιν ἄλληλα καὶ ὑπ' ἀλλήλων μετροῦνται. μετρεῖ γὰρ καὶ ὁ χρόνος τὴν κίνησιν $\cdot$ ἐρωτηθέντες γάρ, πόση τις ἡ κίνησις, φαμὲν ἡμερησία· καὶ αὖθις ἡ κίνησις τὸν χρόνον πόσος γὰρ χρόνος; γνωρίζομεν ὅτι πολύς, ἐὰν πολλὴ ἡ κίνησις καὶ αὖθις τὸ μέγεθος ἡ κίνησις μετρεῖ καὶ ἀντιμετρεῖταί γε ὑπ' αὐτοῦ· πολλὴν γάρ φαμεν ὁδὸν ής ή πορεία πολλή, πολλήν δὲ πάλιν πορείαν, ὅταν ἡ ὁδὸς μῆκος ἱκανὸν ἔχη. τριῶν οὖν ὄντων τούτων, διὰ μὲν τὸ μέγεθος ὃ διερχόμεθα, ὅτι ποσὸν καὶ ὅτι τοσόνδε, καὶ ἡ κίνησις δήλη ὅτι ποσὴ καὶ ὅτι τοσήδε, διὰ δὲ τὴν κίνησιν ὁ χρόνος δῆλον ὅτι ποσὸν καὶ ὅτι τοσόνδε. [23] ἔτι δὲ δῆλον καὶ ἐκ τῶνδε, ὅτι συνεχὲς ποσὸν ὁ χρόνος, έκ τοῦ πᾶν τὸ λαμβανόμενον ὑπ' αὐτοῦ μέρος διαιρετὸν εἶναι. οὐ γὰρ διαιροῦντες τὸν χρόνον εἰς ἀδιαίρετόν τι λήγομεν ὥσπερ ἐπὶ τοῦ ἀριθμοῦ εἰς τὴν μονάδα άδιαίρετον οὖσαν, ἀλλὰ τῷ μεγέθει καὶ τῆ κινήσει ἀκολουθεῖ ἄπερ συνεχῆ ὄντα πᾶς τις έρεῖ. [27] ἐπεὶ δὲ ἐν τῷ μεγέθει ἐστὶ τὸ πρότερον καὶ τὸ ὕστερον, ἀνάγκη καὶ έν κινήσει είναι τὸ πρότερον καὶ τὸ ὕστερον διὰ τὸ μέγεθος. ἔτι γε μὴν καὶ ἐν τῶ χρόνω διὰ τὴν κίνησιν: [30] δρίζομεν δὲ τὸν χρόνονα τῶ ἄλλο καὶ ἄλλοδ ὑπολαβεῖν τό τε πρότερον νῦν καὶ τὸ ὕστερον καὶ τὸ μεταξὺ αὐτῶν ἔτερον· ὅταν γὰρ ἔτερα τὰ ἄκρα τοῦ μέσου νοήσωμεν καὶ δύο είπη ἡ ψυχὴ τὰ νῦν, τὸ μὲν πρότερον τὸ δὲ ὕστερον, τότε φαμὲν χρόνον εἶναι. [34] τινὲς μὲν οὖν χρόνον τὴν τοῦ παντὸς περιφοράν εἰρήκασιν, οἱ δὲ τὴν τοῦ παντὸς σφαῖραν, ἔστι δὲ οὐδέτερον ἀληθές. περιφορᾶς μὲν γὰρ τὸ μέρος οὖκ ἔστι περιφορά, χρόνου δὲ μέρος χρόνος: ἀλλ' οὖδὲ χρόνος ή τοῦ παντὸς σφαίρα, ως τινες ψήθησαν ἐκ τοῦ ἀμφότερα περιεκτικὰ εἶναι. οί γὰρ οὖτω λέγοντες πρῶτον μὲν οὐ συλλογίζονται, ἔπειτα καὶ ἑτέρως άμαρτάνουσι. τὸ γὰρ περιέχειν πρός τι ὂν οἰκείως ἐν ἀμφοτέροις ἀποδέδοται. οὐ γὰρ ἁπλῶς ἡ τοῦ παντὸς σφαίρα περιεκτική σωμάτων πάντων, ὁ δὲ χρόνος περιεκτικὸς τῶν ἐν γενέσει καὶ φθορᾳ πραγμάτων. [43] δόξειε δ' αν μαλλον κίνησις είναι καὶ μεταβολὴ ὁ χρόνος, οὐκ ἔστι δέ. ἡ μὲν γὰρ ἑκάστοῦ [Waitz p. 21] μεταβολὴ καὶ κίνησις ἐν αὐτῶ τῶ μεταβάλλοντι μόνον έστίν, οἷον έγω κινοῦμαι καὶ έν έμοὶ ἡ κίνησις, οὐ μὴν δὲ καὶ έν σοί, ὁ δὲ χρόνος ὁμοίως καὶ πανταχοῦ καὶ παρὰ πᾶσιν. ἔτι κίνησις μὲν λέγεται καὶ θάττων καὶ βραδυτέρα, χρόνος δὲ οὐκέτι, ἀλλὰ πολὺς καὶ ὀλίγος. τὸ δὲ θᾶττον καὶ βραδύτερον ἐν χρόνω μετρεῖται· ταχὺ μὲν γὰρ λέγομεν τὸ ἐν ὀλίγω χρόνω πολὺ κινούμενον, βραδύ δὲ τὸ ἐν πολλῷ χρόνῳ ὀλίγον διάστημα κινούμενον, ὥστε οὐκ ἔστιν ὁ χρόνος κίνησις ἢ μεταβολή, [8] ἀλλ' ἔστιν ἀριθμὸς ὁ μὲν ἀριθμῶν, ὁ δὲ ἀριθμούμενος. ζητητέον πῶς φαμεν τὸν χρόνον ἀριθμὸν κινήσεως, ἇρα ὡς ἀριθμοῦντα την κίνησιν η ώς ύπ' αὐτης ἀριθμούμενον, φαμέν δη τὸν χρόνον ἀριθμεῖσθαι μέν ὑπὸ της πρώτης καὶ άπλης κινήσεως της κυκλοφορικης, ανταριθμεῖν δὲ πάλιν αὐτήν. εί μη γαρ ύπο χρόνου ή τοιαύτη κίνησις, ύπο τίνος αριθμηθείη αν; την πρώτην οδν καὶ κυριωτάτην τῶν κινήσεων τὴν κυκλοφορικὴν ὁ χρόνος μετρῶν κατ' ἐκείνην καὶ τὰς ἄλλας μετρεῖ, ὥστε τῆς μὲν κυκλοφορικῆς κινήσεως ἀριθμὸς ἔσται ὁ χρόνος καὶ ώς ἀριθμῶν καὶ ὡς ἀριθμούμενος, τῶν δὲ λοιπῶν κινήσεων ὡς ἀριθμῶν μόνον οὐ μήν καὶ ώς ἀριθμούμενος οὐ γὰρ της ἐμης βαδίσεως ἀριθμὸς ἔσται ὁ χρόνος ώς άριθμούμενος, άλλὰ μόνον ώς άριθμῶν. [20] οὐ μόνον δὲ τῶν κινήσεων μέτρον ὁ

<sup>&</sup>lt;sup>a</sup> δρίζομεν...χρόνον m. rec. add.

<sup>&</sup>lt;sup>b</sup> τῷ ἄλλο καὶ ἄλλο Waitz: τὸ ἄλλο ἄλλο ms.

e θᾶττον ms

χρόνος, ἀλλὰ καὶ τῶν ἤρεμιῶν· καὶ αὖται γὰρ ὑπὸ χρόνου μετροῦνται πλὴν κατὰ συμβεβηκός· οὐ γὰρ καθὸ ἤρεμίαι, ἀλλὰ καθὸ καὶ ἤρεμίαι καὶ ἐν ῥοῆ εἰσι διηνεκεῖ μηδέποτε ἐπὶ τοῦ αὐτοῦ ἱστάμεναι. α ἄλλως τε, εἰ ἀρχὴν ἔχει χρονικὴν ἡ ἤρεμία καὶ τέλος, δῆλον ὅτι χρόνω καὶ αὐτὴ μετρεῖται, ὥστε συνελόντα εἰπεῖν μέτρον ἐστὶν ὁ χρόνος τῆς ἐν γενέσει ῥοῆς, ῆτις ἐστὶ κοινὴ κινήσεως καὶ ἤρεμίας. [27] διαιρεῖται δὲ ὁ χρόνος εἰς παρεληλυθότα καὶ μέλλοντα, διαιρεῖται δὲ κατὰ τὸ νῦν. καὶ ἔστι τὸ νῦν πέρας μὲν τοῦ παρελθόντος ἀρχὴ δὲ τοῦ μέλλοντος, ἀλλ' ὅπερ ἐν γραμμῆ τὸ σημεῖον καὶ τὸ κίνημα ἐν κινήσει, τοῦτο καὶ (τὸ) νῦν ἐν τῷ χρόνω. [31] τὴν δὲ χρείαν ἢν ὁ χρόνος τῷ παντὶ παρέχεται δίκαιον ἄν εἴη προσθεῖναι περὶ χρόνου λέγοντας. φαμὲν δὴ ὡς ἡ γένεσις διὰ τὸν χρόνον ἐν τάξει διακέκριται, ὡς, εἴπερ μὴ ἦν χρόνος, σύγχυσις αν ἦν καὶ τῶν γενέσεων καὶ τῶν πράξεων ὡς συγκεχύσθαι τοῖς ἐπὶ τῶν Τρωϊκῶν τὰ νῦν.

Since much of the first part of the fragment is closely related to Aristotle, I will summarize it, giving the relevant references to the *Physics*:

- (a) Waitz 19. 42 20. 10. Time must be discussed because it is connected with When. It is quantity  $(\pi \sigma \sigma \delta \nu)$ ; it is continuous, and is measured by its own parts (*Physics* 220a 27–32, b20–23, 223 b13–15).
- (b) 20. 11-22. Distance, movement and time are related: time measures movement, and is measured by it; movement measures distance, and is measured by it (*Physics* 220b14-32). Length is quantity, and so, therefore, is movement and so again is time (220b24-8).
- (c) 20, 23-7. Time is infinitely divisible, and therefore continuous (219a12, 220a28-31).
- (d) 20. 27–9. Distance ( $\mu \acute{\epsilon} \gamma \epsilon \theta o_s$ ) contains prior and posterior, and so therefore does movement, and so again does time (219a 16–19)
- (e) 20. 30-4. We say that we are dealing with time when the soul says that there are two Nows, prior and posterior. (My account summarizes a very difficult passage, which is almost a repetition of *Physics* 219 a 25-9. The manuscript text is corrupt, but Waitz has restored it convincingly by looking back at Aristotle.)
- (f) 20. 34-43. Two proposed definitions of time, both rejected by Aristotle, are rejected, with reasons. This follows *Physics* 218a 33-b9, but for the first time something entirely new is added. Aristotle says that the view that time is 'the sphere itself' is too naive to be worth arguing against. Our author, however, does argue against it, saying that the reason for proposing it was that both the sphere and time are 'containing' ( $\pi \epsilon \rho \iota \epsilon \kappa \tau \iota \kappa \acute{a}$ ), but (a) this is not a valid argument presumably because it is of the form A is B, C is B, therefore A is C, which has an undistributed middle and (b) containing is a relative term, and what the sphere contains, namely all bodies, is different from what time contains, namely things that are coming to be and passing away.
- (g) 20.43-21.8. The view that time is movement or change is also rejected (218b8-19).
- (h) 21.8-20. Time is the number of movement, both numbering and numbered. This partly follows Aristotle's definition (219b5-8), but differs from it in important respects. I propose to leave discussion of this till later.
- (i) 21. 20–7. Time is also the measure of rests, because they too are in flux, and have their beginning and end in time. (This has some connection with *Physics* 221 b7–32, but is not very close to it. The reference to flux  $(\dot{\rho}o\dot{\eta})$  in this connection is foreign to Aristotle.)
  - (j) 21. 27-31. Time is divided into past and future at the Now, which is like the
     <sup>d</sup> ώς συνελόντα εἰπεῖν del. ms.

point  $(\sigma\eta\mu\epsilon\hat{i}\nu)$  in a line and the 'jerk'  $(\kappa\hat{i}\nu\eta\mu\alpha)$  in movement. (This is a vast simplification of Aristotle, taking a little from 222 a 10–12, 231 a 21–b 20, and 241 a 2–4, but ignoring many subtleties.)

(k) 20. 31-5. Time is useful because it gives an order to events. (This short section picks up something from 218 a 25-30, and perhaps 222 a 22-7, but is not very close to it.)

This brings us to the end of the Aristotelian section. It may be seen as preliminary to the category question which follows, and if so the most important point made is that time is quantity – specifically, the number of movement.

The author of this section clearly had an excellent knowledge of Aristotle's *Physics*. It is worth noticing that Philoponus (*In Cat.* 5. 16–18 Busse) says that Boethus believed that one should begin the study of Aristotle with physics, because its subject-matter was the easiest for a beginner. Against this, however, it might be said that since Aristotle says so little about the category of When, either in the *Categories* or anywhere else, it would be natural for any writer to turn to the *Physics*.

[Waitz p. 21, line 35] Τινές μεν οὖν τὸν χρόνον ὥσπερ δὴ καὶ τὸν τόπον οὖ τῷ ποσώ, τοις δε πρός τι συνέταξαν διά το μεν τον χρόνον μέτρον είναι κινήσεως, τον δὲ τόπον περιεκτικὸν σώματος καὶ πέρας τοῦ περιέχοντος, ἐν σχέσει δὲ εἶναι ταῦτα καὶ διὰ ταῦτα ὑποκεῖσθαι τοῖς πρός τι. φαμὲν δὴ ὡς τὸ μέτρον εἴτε ἐπ' ἀριθμοῦ τὸν λόγον ἐκδέξῃ εἴτε ἐπὶ μεγέθους διττόν ἐστιν, ἢ γὰρ αὐτὸ καθ' αὑτὸ θεωρεῖται η κατὰ τὴν πρὸς τὸ μετρούμενον ἀναφοράν· καὶ ώς μὲν καθ' αὑτό, ποσὸν καὶ τῶν ποσών πάντων ἀρχή, ώς δὲ πρὸς τὸ μετρούμενον, πρός τι ἃν εἶη. ώσαύτως δὲ καὶ τὸ τῆς κινήσεως μέτρον ὁ χρόνος, ὡς μὲν καθ' αὐτὸ καὶ διάστημα ἔχον, ποσὸν αν είη τι, ως δε προς την κίνησιν, πρός τι, καὶ οὐδεν ἄτοπον κατ' ἄλλας καὶ ἄλλας ἐννοίας εἰς διαφόρους κατηγορίας ἀνάγεσθαι. ὡσαύτως δὲ καὶ περὶ τοῦ (Waitz p. 22) τόπου. ὅτι κατὰ μὲν τὴν διάστασιν ἐπιφάνειά ἐστι καὶ κατὰ τοῦτο ποσόν, κατὰ δὲ την πρός τὸ περιεχόμενον σχέσιν οὐδὲν θαυμαστὸν εἰ καὶ ὁ τόπος εἰς τὸ πρός τι ἀνάγοιτο ὥσπερ καὶ ὁ χρόνος. οὐκ ἔστιν οὖν ὁ χρόνος ἡ τοῦ ποτὲ κατηγορία, ἀλλ' οὐδὲ τὸ ον ἐν χρόνω. ὁ μὲν γὰρ χρόνος ποσόν, τὸ δὲ ον ἐν χρόνω οὐσία τυχόν. ἀλλ' οὐδὲ τὸ συνθετὸν ἐξ ἀμφοῖν. ἀπλη γὰρ ἡ κατηγορία, ψιλη δὲ μόνη ἡ σχέσις τοῦ πράγματος πρὸς τὸν χρόνον εἰδοποιεῖ τὴν τοῦ ποτὲ κατηγορίαν, οἶον τὸ ἐν χρόνω είναι τουτέστιν αὐτὸ τὸ χρονίζειν. ὥσπερ δὲ ἄλλο μέν ἐστι φρόνησις, ἄλλο δὲ τὸ κατὰ φρόνησιν, τουτέστι τὸ φρονείν, καὶ τὸ μέν ἐστι ποιότης, τὸ δὲ τοῦ ποιείν, οὕτω καὶ ὁ χρόνος καὶ τὸ ἐν χρόνω εἶναι διέστηκε καὶ ὁ μέν ἐστι ποσόν, τὸ δὲ τῆς τοῦ ποτὲ κατηγορίας δηλωτικόν. ὅταν γάρ τι πράγμα ἔτερον ὂν τοῦ χρόνου καὶ οὐχ ὡς μέρος χρόνου λαμβανόμενον σχέσιν έχη<sup>α</sup> πρὸς τὸν χρόνον καὶ διὰ τοῦτο ἐν χρόνω έστίν, δι ωσπερ ή έν Σαλαμινι ναυμαχία έν τῷδε τῷ χρόνῳ, τότε ἄλλη κατηγορία γίνεται, ή τοῦ ποτὲ ἄλλη οὖσα παρὰ τὸ ποσὸν εἰδοποιουμένη μὲν ἐν τῷ διίστασθαι τοῦ χρόνου θεωρουμένη δὲ [ὁ μὲν] $^{c}$  ἐν χρόνω.

[18] Καὶ χρόνου μὲν διαφοραὶ παρεληλυθώς ἐνεστώς μέλλων, τοῦ δὲ ποτὲ τὸ χθὲς αὕριον τήμερον, τὸ μὲν οἰκείως ἔχον πρὸς τὸ παρελθὸν τὸ δὲ πρὸς τὸ μέλλον τὸ δὲ πρὸς τὸ ἐνεστώς, εἰ πρὸς τὸ νυχθήμερον ἀποβλέψεις· εἰ δὲ πρὸς τὸν τοῦ ἡλίου κύκλον, ἀντὶ μὲν παρελθόντος τὸ πέρυσι, ἀντὶ δὲ τοῦ μέλλοντος τὸ εἰς νέωτα, ἀντὶ δὲ ἐνεστώτος τὸ τῆτες. λοιπὸν δὲ καὶ ἀορίστως ἐστὶ λαβεῖν διαφορὰς τοῦ ποτέ· πρὸς μὲν τὸ παρὸν τὸ ἤδη καὶ ἄρτι, πρὸς δὲ τὸ παρελθὸν τὸ πάλαι, πρὸς δὲ τὸ μέλλον τὸ οὕπω. [25] καὶ ὁ μὲν χρόνος ἄπειρος, εἴπερ ἡ γένεσις συνεχής, τὸ δὲ ποτὲ πεπέρασται, ὅτι καὶ ἡ ἐν αὐτῷ πρᾶξις πεπερασμένη καὶ ὁ μὲν χρόνος οὐκ ἐν χρόνω, τὸ δὲ ποτὲ τὸ ἐν χρόνω εἶναι δηλοῦ.

<sup>&</sup>lt;sup>a</sup> ἔχει pr. m.

b ἐστιν ms. Cf. Simpl. In Cat. 347. 3: ἢ Waitz. c ὁ μèν secl. Waitz.

[28] Τοῦ δὲ ἔν τινι ένδεκαχῶς λεγομένου λέγεται γὰρ ἔν τινι ὡς τὸ συμβεβηκὸς έν τῆ οὐσία καὶ ὡς τὰ μέρη ἐν τῶ ὅλῳ καὶ τὸ ὅλον ἐν τοῖς μέρεσι καὶ ὡς τὸ εἶδος έν τη ύλη καὶ ἔτι μέντοι ὡς τὸ γένος ἐν τοῖς εἴδεσι καὶ τὰ εἴδη ἐν τῷ γένει καὶ πρὸς τούτοις τὰ τῶν ἀρχομένων ἐν τῶ ἄρχοντι καὶ τὰ τοῦ ἄρχοντος ἐν τοῖς ἀρχομένοις καὶ τὸ ὡς ἐν ἀγγείω καὶ τὸ ἐν τόπω καὶ χρόνω τοσαυταχῶς οὖν λεγομένου τοῦ ἔν τινι ἄξιον ἀπορήσαι, διὰ τί κατὰ μόνας τὰς δύο σχέσεις ταύτας ἴδιαι κατηγορίαι συνέστησαν. λέγομεν δή: τὰ μὲν ἄλλα σημαινόμενα τοῦ ἔν τινι συμπληρωτικά ἐστιν άλλήλων ώς τὰ μέρη καὶ τὸ ὅλον καὶ τὰ γένη καὶ τὰ εἴδη καὶ τὸ ἄρχον καὶ τὸ άρχόμενον. τὰ δὲ οὐ δυνάμενα χωρὶς ὑποστῆναι ώς τὸ ἐν ὕλη εἶδος καὶ ώς τὸ ἐν ύποκειμένω συμβεβηκός, ὅπερ καὶ μορφὴ τοῦ ὑποκειμένου γίνεται· διὸ καὶ καλεῖται κατ' ἐκεῖνο τὸ ὑποκείμενον οἷον λευκὸν καὶ ηὐξημένον καὶ ἐπὶ ἄλλων κατηγοριῶν των τη οὐσία ὑπαρχουσων. πως οὖν αν εἴη ἐν τούτοις τὸ ἔτερον ἐν ἑτέρω κυρίως, ὅτε μηδέ εἰσιν ἁπλῶς ἔτερα ἀλλήλων κεχωρισμένα καθ' ὑπόστασιν, ἀλλὰ κατ' ἐπίνοιαν μόνην καθ' ἣν τὰ γένη χωρίζομεν; διὰ τοῦτο μὲν οὖν οὐδὲ κατηγορίας ἰδικῆς ἔκαστον τῶν τοιούτων ἐκρίθη ἄξιον, τὰ [Waitz p. 23] μέντοι ἐν χρόνω καὶ ἐν τόπω· έν τούτοις γὰρ μόνοις, ἐπεὶ τὸ μὲν περιέχει τὸ δὲ περιέχεται, ἑκατέρου τὴν ἑαυτοῦ φύσιν διασώζοντος καὶ μηδετέρου μέρους τοῦ ἐτέρου γινομένου μηδὲ συμπληροῦντος τὸ ἔτερον. ἐν γὰρ τούτοις μόνοις αὐτὸ τὸ ἔν τινι φύσις τις ἀφωρισμένη γίνεται κατὰ τὴν σχέσιν ὑφεστῶσα. διὰ ταῦτα καὶ κατηγορίας ἰδίας ἐκάτερον τούτων ἠξίωται· φανερώτατα γὰρ τὰ ἐν χρόνω καὶ ἐν τόπω ὅντα ἐτερά ἐστι τοῦ χρόνου καὶ τοῦ τόποῦ· τοιγαροῦν καὶ τὰ αὐτὰ τῷ ἀριθμῷ ἄλλοτε καὶ ἄλλοτε ἐν ἄλλω γίνονται τόπω καὶ

I will now summarize the second part:

- (1) 21. 35 22. 17. Some have assigned time, like place, not to Quantity but to Relation, because it is measure. But measure can be looked at in two ways, as quantity as well as relation. Further, time is not the category under which When falls; When can be defined in terms of thing and time.
  - (m) 22. 18-25. The differentiae of time and of When are different.
  - (n) 22. 25–7. Time is infinite, but When is finite.
  - (o) 22. 28 23. 8. There are eleven senses of 'in something'.

When ('in time') and Where ('in space') are the only two cases where a category arises, because all other uses of 'in something' are in one way or another dependent on something else.

Several sections of this are to be found almost word-for-word in that part of Simplicius' commentary on the *Categories* called 'On When and Where' (340–57 Kalbfleisch), but scattered piecemeal. In it Simplicius sometimes deploys his own arguments, but he also makes considerable use of Iamblichus' lost commentary on the same work. Archytas, Andronicus, and Plotinus play a prominent part in the discussions, and there is also a reference to Boethus. It is not always clear whether Simplicius is drawing on Iamblichus or directly quoting from these authors: in the case of Archytas it seems to be sometimes the one and sometimes the other.<sup>5</sup> But I am inclined to think that the passages which resemble the Waitz document all come from Iamblichus.<sup>6</sup>

<sup>5</sup> At 350. 10 it is clear that it is Iamblichus who refers to Archytas, but at 352. 22 Simplicius appears to be quoting directly.

<sup>&</sup>lt;sup>6</sup> The first passage, 345. 1–7, is covered by the words of Iamblichus quoted in the following line. The second, 347. 1–4, is right at the end of what seems to be a long quotation from Iamblichus. The rest of 347 and 348 contain many passages. This section does not seem to be a direct quotation from Iamblichus, but his name reappears at 349. 10 and he may well be behind what comes earlier. The next section, 349. 19–31, is more difficult: it contains two adjacent

A large part of this section is devoted to the question whether time is itself a category under which When falls, and likewise place a category under which Where falls. At 342. 20–5 this view is attributed to Archytas and Andronicus, and this is repeated at 347. 6–7, with Plotinus added at 347. 15 and 19. There follow some arguments and counter-arguments, which are not attributed directly to anybody, but the name of Boethus is mentioned in such a way as to connect him with them. I suggest that the arguments are wholly or mainly the work of Andronicus, and that most of the counter-arguments are due to Boethus.<sup>7</sup>

The arguments and replies are:

(1) (Simplicius 347, 19-21) Yesterday, today, and last year are parts of time, and should therefore be assigned to time.

My comment. This is connected with Cat. 2a2, where Aristotle gives yesterday and last year as examples of When. It is here implied, though not stated, that since these examples of When are parts of time, When itself must be subordinated to time.

Reply (347. 21-3). They are not parts of time, but contain a relationship  $(\sigma \chi \acute{\epsilon} \sigma \iota \nu)$  of the things which are in time to time, and these two (concepts) are different.

My comment. Waitz 22. 18–25 (section (m) above) contains a distinction between the differentiae of time – past, present and future – and those of When, of which yesterday, last year, and 'of old'  $(\pi \acute{a} \lambda a\iota)$  are related to past, tomorrow, next year, and 'not yet'  $(o \breve{v} \pi \omega)$  to future, and today, this year, and now  $(\breve{\eta} \delta \eta, \breve{a} \rho \tau \iota)$  to present. The rest of the reply given by Simplicius has parallels elsewhere, as we shall see.

(2) (Simplicius 347. 23-5) If yesterday is *past time*, or a measure of time, it will be a compound, if *past* is one thing and *time* another, and When will be two categories and not one simple one.

Reply (347, 26-32). (a) What is animal and rational and mortal will then be three categories and not one.

My comment. There is no parallel to this in the Waitz passage.

(b) Yesterday is not simply past time: it is the bare relationship of thing to time that is the essence of yesterday.

My comment. The last part of this is similar to Waitz 22. 6-7.

(3) (Simplicius 347. 32-5) If 'when' means 'that which is in time', if it is a thing, like Socrates when you say 'Socrates existed last year', it is in a different category; if it means 'time', that too is in a different category; and if it means the compound it will not be in a single category.

passages of Waitz with their order transposed, and follows what appears to be an objection by Simplicius to Iamblichus at 349, 15. It is not impossible, however, that it should be a return to Iamblichus. The final passage, 356. 26–30, is not apparently near to anything from Iamblichus, but may yet have come from him. In addition, the passages I refer to at 134–5 come at the end of a collection of problems and solutions and Iamblichus is quoted as the authority for a number of these (e.g. 131. 10–17) and may be the source of these passages as well. Moraux, op. cit., p. 148, however, believes that Porphyry's lost work  $\Pi \rho \delta_S \Gamma \epsilon \delta \delta \lambda \epsilon \iota o \nu$  was an intermediary.

7 At first sight the arguments might be those of Archytas rather than Andronicus. The Archytas in question is in fact the Pseudo-Archytas who wrote the  $\Pi\epsilon\rho$  τοῦ καθόλου λόγου quoted at length by Simplicius in this commentary, and also in his commentary on the *Physics*. Although Simplicius and most other commentators thought it was by the Pythagorean philosopher who was Plato's friend, it cannot be earlier than Aristotle's *Categories*. Thomas Szlezák in his *Pseudo-Archytas über die Kategorien* (Berlin, 1972), pp. 13–19, gives persuasive arguments for dating it to the period of renewed interest in the *Categories* which followed the work of Andronicus. In addition to Simplicius' long quotations couched in the artificial Doric affected by neo-Pythagorean philosophers, we possess a full Koine text. There are no arguments in it of the kind we are looking for, and for this reason, as well as on the grounds of date, it is reasonable to attribute these to Andronicus.

Reply (347. 35–7). It is neither the thing, nor time, nor the compound of these, that makes the category of When, but the bare relationship of thing to time.

My comment. This is very close to Waitz 22. 3-6. 'It is not time that is the category of When, but it is not what exists in time either, for time is quantity, and what exists in time is substance; but it is also not the compound of both. For the category is simple, and the bare relationship of thing to time alone makes the category of When.' This in its turn is very close to Simplicius' reply (b) to argument 2 above.

After giving this set of arguments and replies Simplicius goes on (348. 12): 'And Boethus supposes that time is one thing and what partakes of time and is in time another...' While this does not absolutely require us to suppose that what goes before also comes from Boethus, it does bear that interpretation.

The report of Boethus' views goes on: 'and year and month are time, but year-long and month-long are what partake of time, just as thought  $(\phi \rho \delta \nu \eta \sigma \iota s)$  belongs to one category, and what is by thought  $(\tau \grave{o} \kappa \alpha \tau \grave{a} \phi \rho \acute{o} \nu \eta \sigma \iota \nu)$  i.e. thinking  $(\tau \grave{o} \phi \rho \rho \nu \epsilon \hat{\iota} \nu)$ , to another, and the one belongs to Quality, and the other to Action: so do time and what is connected with time (κατὰ χρόνον) differ'. The first part of this is a variant of the point we have already considered in my comment on the reply to argument 1; the second, about thought, is identical in content, and very close in expression, to Waitz 22. 8-11, where, however, there is the additional sentence at the end: 'the one is quantity, the other indicative of the category of When'. Here, then, we have a passage in Waitz which is directly attributed to Boethus by Simplicius.

Simplicius 347. 1-4 is almost identical with Waitz 22, 12-16.8 It runs: 'When something which is different from time, and is not taken as a part of time, has a relation to time and for this reason is in time, as the Battle of Salamis is in this particular time, then another category arises, that of When, which is another beside that of Quantity.' Kalbfleisch prints this as the end of a long quotation from Iamblichus which begins at 345. 8, and which contains a number of similarities with Waitz' passage, though it is in a more diffuse style. Waitz' author again has an addition, extending the last sentence with 'being created in being distinguished from time but looked at as in time'.9 Simplicius 348. 27–349. 1 resembles very closely Waitz 22. 28 – 23. 6; both ask how it is that although there are eleven senses of 'in something', only 'in time' and 'in place' give rise to categories. Both list the eleven senses, and the lists are identical in content and in order. This is remarkable because while many commentators list senses of 'in something', no others agree with this list, and they differ quite considerably among themselves.10

- <sup>8</sup> It even has the reading  $\epsilon \sigma \tau \iota$ , which was in Waitz' manuscript, but which he wished to change
- to  $\frac{\pi}{4}$ .

  Simplicius' comment (347. 4-5), 'And this is the view of Aristotle', is puzzling, but it may
- <sup>10</sup> Apart from Alexander and Plotinus, discussed below, I have found Plotinus, Enn. 6. 1, 4 (nine senses), Porphyry, In Cat. 77. 18 – 78. 21 (nine), Themistius, In Phys. 108. 6 – 111. 3 (eleven plus one), Ammonius, In Cat. 26. 32 – 27. 2 and 29. 5–17 (both eleven, but not identical. Busse athetizes the earlier passage), Philoponus, In Cat. 32. 7-26 (eleven), Olympiodorus, In Cat. 47. 3-21 (eleven), Elias, In Cat. 149. 16-34 (eleven plus one), John of Damascus, Dialectica  $\lambda\theta'$  p. 106 Kotter (eleven), Sophonias, In Cat. 6, 12–17 (this is the anonymous commentary CIAG xxiii, ii) and Simplicius himself, In Cat. 46. 5 ff. (eleven plus one) and In Phys. 551. 11 - 553. 11 (eleven plus one). Sophonias is derived from Simplicius, In Cat. 348, but even his list differs from that given by Simplicius here (and Waitz), and from all the others. There are two separate activities, to count and comment on Aristotle's own list, and to produce a list with exactly eleven items, any extra ones being mentioned separately. I hazard the guess that the canonical number of eleven originated with Boethus.

The starting-point for the majority<sup>11</sup> is Aristotle's list at *Physics* 4, 210a15–24, which, according to how you count, lists eight or nine senses, but omits some important ones which Aristotle himself uses elsewhere.<sup>12</sup>

Simplicius' and Waitz' list contains all but one of Aristotle's – the exception is 'in the good, and generally in the end' – expands Aristotle's 'in a vessel and in place' to two items, adds 'and the affairs of the ruler in the ruled' to 'the affairs of the ruled in the ruler', '13 and adds two items which are in fact used by Aristotle – 'in time' and 'the attribute  $(\tau \delta \ \sigma \nu \mu \beta \epsilon \beta \eta \kappa \delta s)$  in the substance'. '14 Since the total is said to be eleven no item can have fallen out.

After the list Simplicius and the Waitz document diverge. The latter argues that only 'in time' and 'in place' can be the basis of categories because the rest can either be paired off – whole in parts and part in whole, species in genus and genus in species, ruler in ruled and ruled in ruler – or cannot exist separately, like form in matter and attribute in substance. Only in the case of time and place does the thing which is in one of them exist independently.

Simplicius, having given the lists, and asked why only these two cases give rise to categories, brings in Plotinus (349. 5) who had a shorter list (see n. 10 above) but asked the same question, and Iamblichus (349. 10–15) who worked through Plotinus' list to dispose of it in various ways. After an objection to Iamblichus' account we return to Waitz at 349. 19, which takes up 22. 45 – 23. 5 – 'only those cases where one thing contains and the other is contained, each keeping its own nature and neither becoming part of the other nor complementing the other'. For in these alone the 'in something' becomes a definite nature  $(\phi \dot{\omega} \sigma_i s)$ , existing according to relation  $(\sigma \chi \dot{\epsilon} \sigma_i \nu)$ . After two sentences not in Waitz Simplicius continues with 22. 37–45 (= 349. 26–34) which examines the individual cases. Thus the whole of Waitz' long passage is found in Simplicius, but divided into two sections with their order transposed.

Simplicius, after a short discussion of place as well as time, brings back Iamblichus at 350. 10, and the Stoics, Plato, and the Pythagoreans are discussed at length; but at 356. 26–30 he suddenly raises the question of the use of time, and repeats Waitz 21. 32–6, after which Archytas returns.

Let us now look at Waitz 21. 35-46, which I translate:

'Some have assigned time and place not to Quantity, but to Relation, because time is the measure of movement, and place contains body, and is the limit of the container, and these are in relation ( $\tilde{\epsilon}\nu$   $\sigma\chi\tilde{\epsilon}\sigma\epsilon\iota$ ) and for this reason belong to the category of Relation ( $\tau\sigma\hat{\iota}s$   $\pi\rho\acute{o}s$   $\tau\iota$ ). But we say that measure, whether it takes its reckoning over number or over length is twofold, for it is looked at either in itself or according to its comparison with what is measured. And in itself it is quantity and the starting-point

- <sup>11</sup> The exception is Alexander of Aphrodisias, *In De Anim.* 13. 10 14, 3. which seems to be his own list, set up for the purpose of discussing how the soul might be in the body. Plotinus (*Enn.* 4. 3. 20–1) has a different list from that mentioned in n. 10; H. J. Blumenthal (*AGP* 50 (1968), 255–61), cautiously argues that Plotinus could have read Alexander.
- <sup>12</sup> Aristotle also refers to 'in something' at *Metaph*.  $\Delta$ , 1023 a 23-5, but only to say that it follows the senses of  $\xi \chi \epsilon \iota \nu$ , which he has just listed. This is not very helpful.
- <sup>13</sup> It seems to me possible that Aristotle originally listed this item too. It could easily have been lost by homoeoarcton.
- This sense is important in the *Categories*, e.g. 1a 20-b9. It was apparently connected with the *Physics* as early as Eudemus (Simp. *In Phys.* 128). For more on this see below p. 407.
- <sup>15</sup> 'In a vessel' is not considered, perhaps because Aristotle seems to treat it as one item with 'in place'. At 350. 3 Simplicius gives an explanation of this kind, but it is not in Waitz.
- <sup>16</sup> At 160, 12–15 Simplicius lists Boethus as one of those who used both  $\tau \dot{\alpha} \pi \rho \dot{\delta} s \tau \iota$  and  $\tau \dot{\delta} \pi \rho \dot{\delta} s \tau \iota$  in connection with the category.

of all quantities, but looked at with regard to what is measured, it would be relative. Similarly time, the measure of movement, looked at in itself and as having an interval, would be some quantity, but with regard to movement, relative, and there is nothing absurd about referring something to different categories according to different ways of looking at them.'<sup>17</sup>

The argument here is clear, but the target is not. If the passage is by Boethus, the target is likely to be Andronicus. It must be a Peripatetic, for  $\pi\rho\delta s$   $\tau\iota$  is a Peripatetic category, and the only Peripatetic likely to be interested in category problems before Boethus is Andronicus. But if Andronicus postulated that time was itself a category, could he also have subordinated it to another category?

Simplicius again gives us a clue: at 134. 5 he refers to Andronicus making place and time categories, and subordinating to them Where and When, and after some discussion of this point goes on (134. 25): 'If anyone thinks one should assign time to Relation, because it is the measure of movement, measure must be divided into two parts, either in itself or *via* the reference to what is measured. And in itself measure is quantity, and is the starting-point *and genus* of all quantities'. The rest of the passage is very similar to the rest of the Waitz passage. Simplicius does not say explicitly that this is a reply to Andronicus, but it would read very well as such.

The remaining evidence about Andronicus' views on categories is:

- (i) Simplicius (*In Cat.* 342. 21–5) links him with Archytas not only in having time and place as categories, but also in preserving the number of categories as ten.
- (ii) But at 63. 22 he is linked with Xenocrates<sup>19</sup> as having limited the categories to substance and relation.
- (iii) And at 157. 18-21 Andronicus alone is said to have placed relation after all the categories because it is a  $\sigma_X \acute{\epsilon} \sigma_{iS}$  and like a 'sucker'.<sup>20</sup>

One is left guessing about all this. I suggest that he had two supercategories of substance and relation, and placed time, although itself a category, under the supercategory of relation. Then the argument against him would be telling if quantity came under the supercategory of substance.<sup>21</sup>

At 348. 8 Simplicius says that 'some people' are confused, and develops the idea, which we have already met, that When and its related terms like 'last year' can be looked at in two ways. <sup>22</sup> At 348. 17 he says 'But to take time ( $\chi \rho o \nu i \zeta \epsilon \iota \nu$ ) indicates what is in time, and not time. For time does not take time, because time is not in time, and  $\chi \rho o \nu i \zeta \epsilon \iota \nu$  belongs to When, even if it uses the (grammatical) form of Action'. Part of this takes up a single sentence at Waitz 22. 8 – 'as to be in time is the same as  $\chi \rho o \nu i \zeta \epsilon \iota \nu$ '. That sentence does not fit well into its context as it stands, and it seems to me possible that Waitz' text, which rests on a single manuscript, has lost something here which resembled what Simplicius gives.

Simplicius goes on (348. 21–2) to a new point, that time is infinite, but When limited, which repeated Waitz 22. 25–7. Here, however, Waitz' text is the fuller, having the

- <sup>17</sup> Waitz connects this with Cat. 11 a 27, but that passage is not very close.
- 18 Simplicius goes on (134, 33 135, 6) to discuss place in the same way, taking up the reference to it as containing body which we find at Waitz 22, 1-3, but in an expanded form.
- <sup>19</sup> Since Zeller it has been supposed that Xenocrates was criticizing Aristotle. But this can be only an assumption.
- This takes up Nic. Ethics 1096a 22, where Aristotle says that the  $\pi\rho\delta$ s  $\tau\iota$  is like a sideshoot and accident of what is.
  - <sup>21</sup> Moraux, op. cit., p. 103 has a rather different account.
- <sup>22</sup> This resembles Waitz 22. 18–25, but there are so many differences that neither seems directly derived from the other.

extra clause 'if genesis is continuous' to balance the clause 'because the action  $(\pi\rho\hat{a}\xi\iota_{S})$  in it is limited', which they both have.<sup>23</sup>

Before leaving the second part of Waitz' document, let us look at Simplicius, In Cat. 49. 31 - 50. 9. This deals with a puzzle about Aristotle's account of 'in a subject' as being 'in something not as a part, and not being capable of existing separately from what it is in' (Cat. 1a24-5). For individual substances are in time and in place, not as parts, and not as capable of existing separately from time and place, and they should therefore be seen as 'in a subject'. Boethus replied to this that (a) moving things were not wholly in the place in which they moved, and (b) by the same argument they would also not be in a particular time, for time flows continuously and is always different. If then they are in time at all they are in time as a universal only. But according to Aristotle universals were not entities<sup>24</sup> but 'in something', and therefore what was itself in something could not be in the universal.

This compressed and obscure argument may perhaps be interpreted thus:

- (a) Moving things are not in place in the relevant sense because they do not remain in any one place.
- (b) All things, moving or not, are not *in time* in the relevant sense because they do not remain in any one time.<sup>25</sup> If they are in time at all, they are only in time as universal. But since universals themselves are in something, other things cannot be in them. Therefore things cannot be in time at all.

Since it is not clear why things cannot be in things which themselves are in something, this argument is not compelling, and it is not likely that Boethus would have wished to say finally that substances are not in time at all.

Simplicius goes on to provide a solution to the difficulties, suggesting the addition of  $\dot{\nu}\pi\dot{\alpha}\rho\chi\sigma\nu$ , or  $\dot{\epsilon}\nu\nu\pi\dot{\alpha}\rho\chi\sigma\nu$ , to the original definition. Since things are not in place and in time in the sense of  $\dot{\nu}\pi\dot{\alpha}\rho\chi\epsilon\nu$ , the problem ceases to arise. Simplicius does not say whose solution this is. It could be a further contribution of Boethus, but it is not clear that it is so, and it does not get him out of the difficulty he has created for himself, that things are not in place or time at all. So all we get from this passage is confirmation that Boethus was interested in 'being in time'. 26

We now turn to the first part of Waitz' document. There are also indications in the commentators that Boethus' views were similar to some of those found here. Simplicius (In Cat. 433. 23 – 434. 19) gives a full account of his views on rest, which, like Waitz 21. 20–7, refers to time as flowing,<sup>27</sup> and concludes (434. 18–19) 'but perhaps neither movement nor rest is in relation to time, if time is the number of movement'. Since there has been no reference earlier to time as the number of movement, this looks like an ad hominem argument and suggests that Boethus did indeed hold that time was the number of movement. Themistius and Simplicius in their commentaries on the

Simplicius has an odd sentence immediately afterwards, about When being banished from the divine – 'but these things must be included because of the customary use of language'. This seems to be his own comment. Sophonias, In Cat. 54. 28-9, clearly using Simplicius, has this sentence, and immediately before it has the missing clause  $\epsilon i \pi \epsilon \rho \dot{\eta} \gamma \epsilon \nu \epsilon \sigma i s \sigma \nu \epsilon \chi \dot{\eta} s$ , which suggests that it was originally in Simplicius' text.

 <sup>24</sup> Actually - 'the universal was not ἐν ὑποστάσει, and if it was, it was not τι'. ἐν ὑποστάσει is a post-Aristotelian expression, and presumably Boethus' own (cf. καθ' ὑπόστασιν at Waitz 22. 45).
 25 This is in harmony with the doctrine of Waitz 21. 20-7.

<sup>&</sup>lt;sup>26</sup> The same problem, with a similar solution, is discussed by Dexippus (*In Cat.* 22. 26 – 23. 16 Busse).

<sup>&</sup>lt;sup>27</sup> Waitz 21. 21 supports the reading  $\kappa \alpha \tau \dot{\alpha}$  συμβεβηκόs at Aristotle, *Physics* 221a8. The source of this passage may be Boethus' commentary on the *Physics*.

Physics add two more pieces of information: Themistius 160. 26–8, Heinze (= Simpl. 759. 18–20 Diels), <sup>28</sup> tell us that Boethus said that 'nothing prevents number (or perhaps the countable) <sup>29</sup> existing apart from the one who counts' and a little later at 163. 5–7 (= Simpl. 766. 16–19), that he said that 'no measure exists by nature, but both measuring ( $\tau \dot{o} \mu \epsilon \tau \rho \epsilon \hat{i} \nu$ ) and numbering ( $\tau \dot{o} \dot{a} \rho \iota \theta \mu \epsilon \hat{i} \nu$ ) are our work'. This refers to Aristotle, Physics 223a 16–19, which links time, number and soul, and suggests that Boethus adopted a critical attitude to that passage just as at Waitz 21, 9–20 there is a critical attitude to Aristotle's view that time is the number of movement only as numbered, not as numbering.

It is not easy to reconstruct Boethus' views on time as the number of movement. To begin with, Aristotle's own account was not entirely clear. At 219 b 5–9 and 220 b 8–9 he says that time is the numbered, and not that with which we number, 30 but at 223 b 15–23 he says that time is measured by movement and movement by time, which suggests that time is here number numbering movement. Or again it could be said that though time is measured by the circular movement of the universe (223 b 19) it in turn numbers all other movements. Again, with regard to the soul, Aristotle argues thus (223 a 22–9): 'If it is impossible for there to be someone who will count, it is impossible for there to be anything countable, so that clearly there could not be number either. For number is either the counted or the countable. But if nothing else can count except soul, and of soul, mind, it is impossible for there to be time if soul does not exist, unless that which time is exists, e.g. if movement can exist without soul. For prior and posterior exist in movement, and time is these things qua countable'.

Boethus, according to Simplicius, agreed with Aristotle that counting and measuring are the work of the soul, but he seems to have differed from him in making time as number yet independent of the counter, just as the perceivable is independent of the act of perception. The second quotation must be seen as part of an argument that time is not merely measure or number, because it is independent of the soul, but measure is bound up with the soul.

All this is consistent with the view expressed at Waitz 21. 8–20, where time is the number of movement, both as numbering and as numbered – numbered by the circular movement of the universe, but in turn numbering that and all other movements. This gives a kind of independence to time, though it is open to criticism: in what sense can it be said that time actually numbers or counts?

Simplicius, as we have seen, doubted whether time could be the number of movement if movement and rest were relations ( $\sigma\chi\acute{\epsilon}\sigma\epsilon\iota s$ ) to time. Boethus certainly held the latter view, and it is probable that he held the former. He does not himself discuss their relationship in the material we have nor, presumably, was any such discussion known to Simplicius. But his skill in argument suggests that he would have had no great difficulty in answering Simplicius, perhaps by his device of looking at things in different ways.

So far I have dealt with the content of the Waitz document; now I turn to the language and style. The language is post-Aristotelian: the use of  $\sigma\chi\dot{\epsilon}\sigma\iota s$  is later than Aristotle, and words like  $\pi\epsilon\rho\iota\epsilon\kappa\tau\iota\kappa\dot{\epsilon}s$  first recorded as used by Zeno,  $^{31}\chi\rho\rho\nu\iota\kappa\dot{\epsilon}s$  and

<sup>&</sup>lt;sup>28</sup> Since Simplicius refers to Alexander here, Moraux, op. cit., p. 170 thinks that both Themistius and Simplicius were using Alexander.

<sup>&</sup>lt;sup>29</sup> Themistius has τὸν ἀριθμόν, Simplicius τὸ ἀριθμητόν. Simplicius gives Alexander's solution, that Boethus was right if the existence of number lies in being counted, but the countable can exist apart from being counted. This seems to support Simplicius' reading.

<sup>30</sup> Though at 219b8 Aspasius supports the opposite reading.

<sup>31</sup> SVF 1. 33. Zeno uses it of heaven.

 $\delta\eta\lambda\omega\tau\iota\kappa\dot{o}s$  also suggest a later date. But these and other expressions<sup>32</sup> are consistent with a first-century date,<sup>33</sup> and the concise and direct style, and the absence of references to later commentators, also suggest a fairly early date.

It has been suggested that we have here a late compilation from Simplicius, but it is easier to believe that the Waitz text was written as a whole and not put together like a jigsaw puzzle. If so, it must be earlier than Simplicius and, if he got even parts of it from Iamblichus, earlier than him too. It is difficult to relate it to Plotinus, but that proves nothing, either way. Iamblichus died in A.D. 326, and I can find no earlier terminus ante quem. But since the earliest surviving commentary on the Categories is that of Iamblichus' near-contemporary Porphyry, that is hardly surprising. Alexander appears to have known Boethus' work directly, but his commentary on the Categories is lost.

If this is indeed part of Boethus' work on the Categories, we may ask if there is any evidence of a similar study of the category of Where. We have noticed a number of passages where Boethus deals with place as well as time (see n. 18 above), and clearly some of his arguments about When could be adapted without much difficulty to Where. Simplicius' own discussion of Where (357–64) contains very little that is likely to be from such a work, but at 142. 34–6 there is a sentence: 'Above and below signify not place, but the category of Where, as yesterday and today signify not time, but When, that is  $\tau \delta$   $\kappa a \tau \dot{\alpha}$   $\chi \rho \delta \nu \sigma \nu'$ . This is so similar to the general line taken by Boethus and the Waitz fragment about time, that it is hard to believe that it is not his: the only difficulty is that it is immediately followed by  $\tau a \hat{\nu} \tau \alpha \gamma \dot{\alpha} \rho \kappa \alpha \lambda \tau \dot{\alpha}$   $\dot{\alpha} \lambda \nu \delta \rho \rho \nu \iota \kappa \omega \delta \kappa \epsilon \hat{\iota}$ . While this suggests that the view was held by someone else as well as Andronicus, it is odd that Andronicus is mentioned at all.

Finally, if it is true that the Waitz document is by Boethus and that Simplicius got his information about Boethus from Iamblichus, it is remarkable how faithful Simplicius' wording is to the original.

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 $<sup>^{32}</sup>$  νυχθήμερον, and  $\tilde{\omega}\rho a$  as a fixed measure of time, which, as H. B. Gottschalk tells me, is associated with Hipparchus' work at the end of the third century B.C.

<sup>&</sup>lt;sup>33</sup> Simplicius, *In Cat.* 58. 29 – 59. 4 has three adjectives formed with -ik- in seven lines of Boethus.

<sup>&</sup>lt;sup>34</sup> Porphyry, *In Cat.* 107. 25–30 Busse, ascribes this view to Herminus, the teacher of Alexander of Aphrodisias. Busse, referring to Simplicius, wonders if Andronicus is meant instead of Herminus, but at 59. 17 Porphyry seems to imply that on another topic Herminus summarized Boethus, and it is rather Andronicus who seems out of place.