THE MOVING POSSET ONCE AGAIN:
HERACLITUS FR. B 125 IN CONTEXT

This article has been prompted by two recent interesting papers on the reading of Heraclitus' fragment **B** 125 as quoted by Theophrastus, *De uertig.* 9.[1] Here are, with full apparatus (such as they will appear in the Theophrastean chapter of my *Traditio Heraclitea*)[2] the three main texts[3] I shall be dealing with.

[1] M. M. Mackenzie, 'The Moving Posset Stands Still: Heraclitus Fr. 125', *AJPh* 107 (1986), 542–51; N. van der Ben, 'Theophrastus, *De vertigine*, Ch. 9, and Heraclitus *Fr.* 125', *AJPh* 109 (1988), 397–401.

Having been strongly advised to give up the initial goal of this paper—to pinpoint some rather typical logical flaws in both former and present day textual criticism of our Heraclitean sources—I cannot but refer the interested reader to my earlier publications on the subject: S. N. Mouraviev, 'Comment interpréter Héraclite: vers une méthodologie scientifique des études héraclitéennes', *Ionian Philosophy* (Athens, 1989), 270–79; id., 'Comprendre Héraclite. [Réflexions sur la méthode des études héraclitéennes suggérées par deux éditions françaises des fragments de l'Ephésien],' *Âge de la Science* 3 (*La philosophie et son histoire*) (Paris, 1990), 181–232.

It is a pleasure to acknowledge here my debt to an anonymous referee [*Rec. an.*] of an earlier version of this paper whose remarks and queries helped me to get rid of some blunders and omissions (the blame for the remaining still lies on me of course).

[2] See S. N. Mouraviev (Murav'ëv), 'Traditio Heraclitea (A). Corpus fontium veterum de Heraclito', *Vetnik Drevnej Istorii* (1984) no. 171, 31–44; (1985) no. 173, 16–28; no. 174, 30–5; no. 175, 35–42; (1986) no. 178, 33–67; (1990) no. 193, 41–60; (1992) no. 200, 36–52. These sections contain the whole of the Heraclitean direct tradition (without the uncertain allusions and reminiscences) from Epicharmus to Aristotle (full texts, with relevant context, full apparatus, and Russian translation). An improved and enlarged edition with French translation and commentary of the whole of Heraclitus' tradition is now underway. See: S. N. Mouraviev (ed.), *Heraclitea, Édition critique complète des témoignages sur la vie et l'œuvre d'Héraclite d'Éphèse et les vestiges de son livre*, II, *La Tradition antique et médiévale*, A. *Témoignages et citations*, 1. *D'Épicharme à Platon et Héraclide le Pontique* (Moscow, Paris, Myrmekia, 1993); Aristotle, Theophrastus and the Hellenistic tradition of Heraclitus will constitute the bulk of the forthcoming vol. 2 (i.e. of *Heraclitea* II.A.2).

The apparatus criticus is 'full' in the sense that I have included all the MSS readings and modern conjectures which I found in the extant modern editions of our three texts (see references in the main text) and of Heraclitus' fragments (see upper apparatus) as well as in the relevant literature (see footnotes); no collation or autopsy of the MSS is implied and involuntary omissions and errors are always possible. In the present case, I have drawn some additional information from (i) Schneider's old edition of Theophrastus, (ii) Forster's 1933 *CQ* article (see n. 7, below), and (iii) the critical remarks of *Rec. an.* [n. 1] who cited his own unpublished collations of the MSS of *De uert.* (Mackenzie used those of R. W. Sharples). The point of giving such a 'full' apparatus is, of course, to provide the reader with the means to form his own opinion on the subjects treated and the way they are treated (see n. 4). Collating the innumerable manuscripts of the many hundreds of texts we have on Heraclitus is unfortunately out of the question.

[3] For the context, see Mackenzie, op. cit. [n. 1], 542, and below. With the exception of the quotation (where she reproduces Wimmer's reading) I depart from her text only twice: in line 76 = 48, where I restore συνεχῶς after καί₁ and in line 86 = 3 where I correct the corrupt ἄλλοτε into ἅμα τε (an obvious reading suggested both by the context—cf. lines 90 = 7 and 95 = 11—and palaeography: ΛΛ is often a corruption of *M*). See below, n. 4.—Another emendation I suggest is οὐ δεῖ μίαν...κινεῖσθαι (for οὐδεμίαν...κινεῖται) in lines 21–2 of Pseudo-Alexander's *Probl.*

(a) *De uertig.* 9–10 (III, p. 138, 76 [1862] = p. 402, 47 [1866] Wimmer; cf. I, p. 809–10
& IV, p. 775–7, Schneider);

(b) Eiusdem loci *paraphr.* ap. [Alexandr.] *Probl.* IV 42 (p. 11, 13, Usener) = [Arist.]
Problemata inedita II 42 (Arist. [Paris, Didot] IV, p. 299, 31, Bussemaker)

(a)	I	(b)
γίνεται δ' ἴλιγγος καὶ ὅταν εἰς		διὰ τί ἰλιγγιῶσιν εἴς τε
48 τὸ αὐτὸ | βλέπωσι καὶ συνεχῶς		ταὐτὸ βλέποντες κᾶν κύκλον
ἐπατενίζωσιν ὃ καὶ ἐπαπορεῖται		14 κινούμενον ἴδωσιν; ἄτο|πον γάρ
49 διὰ | τί ποτε κινουμένης κύκλωι		τι τὴν ἠρεμίαν τῆι κινήσει
50 τῆς ὄψεως καὶ ἠρεμούσης | συμ-		ταὐτὸν ποιεῖν ἐναντία ὄντα.
βαίνει τὸ αὐτὸ πάθος· ἄτοπον		
γὰρ τὸ ὑπ' ἐναντίων.|		
51 αἴτιον δὲ τοῦ μὲν ἐν τῆι	II	
κυκλοφορίαι τὸ εἰρήμενον· τοῦ |		
52 δ' ἐν τῆι ἐπιστάσει καὶ τῶι		
ἀτενισμῶι		
53 διότι τὰ ἐν τῶι | κινεῖσθαι σωζο-	III	15 ὅτι διίστησι καὶ ἡ στάσις | τὰ ἐν
ᾳμενα διίστησι καὶ ἡ στάσις· τῆς		τῶι κινεῖσθαι σωζόμενα; τῆς
54 ὄψεως | δὲ στάσης, ἑνὸς μορίου,		ὄψεως γὰρ στάσης, ἑνὸς μορίου,
καὶ τἆλλα τὰ συνεχῆ ἐν τῶι ||		16 καὶ τὰ ἄλλα συνεχῆ ἐν | τῶι
403 ἐγκεφάλωι ἵσταται.		ἐγκεφάλωι ἵσταται·
διιστάμενα δὲ καὶ χωριζόμενα	IV	
2 τὰ | βαρέα καταβαρύνει καὶ		
ποιεῖ τὸν ἴλιγγον. τὰ γὰρ |	} Cf. VI	
3 πεφυκότα κινεῖσθαι τήνδε τὴν		
4 κίνησιν ἅμα τε | καὶ συμμένει		
διὰ ταύτην·		
εἰ δὲ μή, καθάπερ Ἡράκλειτός	V	ὁ δὲ κυκεών, ὥσπερ καὶ
5 | φησι, "καὶ ὁ κυκεὼν δι-		Ἡράκλειτός φησιν, ἐὰν μή τις
ίσταται κινούμενος" |		ταράττηι, ⟨δι⟩ίσταται.|
	VI	17 τοῦτο δὴ δεῖ νοῆσαι πάσχοντα καὶ
		τὰ ἐν τῆι κεφαλῆι. χωριστὰ μὲν
Cf. IV {		18 γὰρ καὶ ἠθροισμένα | εἰς ταὐτὸ
		τὰ βαρέα βαρύνει καὶ ποιεῖ τὸν
		ἴλιγγον. ἡ μὲν οὖν ἠρεμία διὰ
		τοῦτο ποιεῖ ἴλιγγον.
6 (10) εἴη δ' ἂν καὶ τῆι κυκλοφορ-	VII	19 ἡ | δὲ δίνησις τὰ βαρέα καὶ τὰ
ίαι αὐτὸ τοῦτ' ἀποδιδόναι· |		κοῦφα διίστησι, τὰ μὲν βαρέα εἰς
7 διίστησι γὰρ ἡ δίνη τά τε βαρέα		τὸ μέσον, τὰ δὲ κοῦφα ἐπὶ τὸ |
8 καὶ κοῦφα δέον ἅμα | εἶναι τὰ		20 ἔσχατον, δέον ἅμα τούτω εἶναι.
μὲν εἰς τὸ μέσον ἄγουσα τὰ δ'		
εἰς τὸ ἔσχατον.|		

9 ποιεῖ δὲ καὶ τὸ κύπτειν ἰλίγγους VIII   διὰ τοῦτο καὶ τὸ κύπτειν ἰλίγγους
10 διὰ τοῦτο· χωρίζεται | γὰρ τὰ   ποιεῖ· χωρίζεται γὰρ τὰ μὲν |
    βαρέα καὶ ἐλαφρά, τὰ μὲν ἄνω   21 βαρέα κάτω, τὰ δὲ ἐλαφρὰ ἄνω.
    τὰ δὲ κάτω· |

11 δεῖ δὲ ἅμα εἶναι καθάπερ IX   φανερὸν δ' ἐκ τούτων ὅτι οὐ δεῖ
    ἐλέχθη.   22 μίαν κίνησιν τὰ ἐν τῆι | κεφαλῆι
                                        κινεῖσθαι.

(c) Eiusdem loci *epitoma* ap. Photii *Bibl.* cod. 278, p. 526ᵇ40 (VIII, p. 162, Henry)
527ᵃ   [I] γίνονται ἴλιγγοι καὶ ὅταν βλέπωσι συνεχῶς καὶ ‖ ἐπατε-
νίζωσιν. ὃ καὶ διαπορεῖται, τί δή ποτε κύκλωι κι|νουμένης τῆς
ὄψεως καὶ ἠρεμούσης τὸ αὐτὸ πάθος συμ|βαίνει. [II] τὸ δ'
αἴτιον τῆς μὲν κύκλωι φορᾶς εἴρηται·| διὰ τί δὲ ἐν τῆι ἐπιστά-
5   σει καὶ τῶι ἀτενισμῶι τὸ αὐτὸ | συμβαίνει πάθος; [III] διότι τὰ
ἐν τῆι κινήσει σωιζόμενα | ἡ στάσις διίστησι. στάσης οὖν
τῆς ὄψεως, καὶ τὰ ἄλλα | συνεχῆ τὰ ἐν τῶι ἐγκεφάλωι ἵσταται.
[IV] ἱστάμενα δέ, καὶ συν|διίσταται καὶ χωρίζεται τὰ βαρέα,
καὶ καταβαρύνει, καὶ | ποιεῖ τὸν ἴλιγγον. [VII] καὶ ἡ κύκλωι
10   φορὰ δὲ διίστησι | τὰ βαρέα καὶ τὰ κοῦφα. [VIII] ποιεῖ δὲ καὶ
τὸ κύπτειν ἰλίγγους·| καὶ γὰρ ἐν τῶι κύπτειν χωρίζεται τὰ
βαρέα καὶ τὰ ἐλα|φρά, τὰ μὲν ἄνω, τὰ δὲ κάτω· [IX] δεῖ δὲ ἅμα
εἶναι καθάπερ ἐλέχθη.

    (a) **402, 48** ἐπατ. et **49** τῆς—**403, 5** κιν.] Walzer, ad fr. B 125 ‖ **402, 51**
αἴτιον—**403, 8**] Lassalle, I, p. 75-6₊ₙ ‖ **403, 1** διστάμενα—**5** κινούμενος] Marcovich,
fr. 31 (a) ‖ **2** τὰ—**6** ἀποδιδόναι] Kirk, p. 255 ‖ **2** τὰ—**5** κιν.] Bywater, ad fr. 84 ‖ **4**
εἰ—**5** κιν.] Schuster, fr. 85 (p. 253-4₁) ‖ **4** καθάπερ—**5** κιν.] Kahn, fr. 77 ‖ **5**
καί—κινούμενος] DK B 125; Bywater, fr. 84; Wheelwright, fr. 50; Mansfeld, fr.¹71
= ²72; Diano, fr. 18; Colli, fr. A 66; Conche, fr. 131; Roussos², fr. 31 ‖ **5** κυκεών
(seorsum)] Roussos¹, fr. 43
    (b) **13** διά—ἴδωσιν et **15** τῆς ὄψεως—**16** ἵσταται] Walzer, ad B 125 ‖ **16** ὁ
δέ—ἵσταται] Bywater, ad fr. 84, Marcovich, fr. 31 (a¹)

    (a) [ABCDEQ Ald]⁴ **402, 47** τὸ αὐτὸ] τοῦτο ABCE Ald [Rec. an.] ‖ **48** ₁καὶ
συνεχῶς ABCDE Ald [Rec. an.]: καὶ praeb. Wimmer ‖ **50** αὐτὸ om. ABCDE Ald
[Rec. an.] ‖ ὑπ'] ὑπὸ τῶν ABCD Ald [Rec. an.] ‖ **53** καὶ ⟨χωρίζει⟩ Marcovich, ft.
recte (cf. **403, 1** χωριζόμενα) ‖ **54** δὲ στάσης Usener, (conl. (b) **15**; cf. etiam (c) **6**) ad
h.l., p. XIII, 11, acc. Wimmer, et al.: διάστασις AQ Ald: διαστάσει ci. Lassalle, I
75-6ₙ, post ὄψεως punctuans ‖ **403, 1** ἵσταται Usener, (conl. (b) **16**; (c) **8**), acc.
Wimmer, et al.: an συνίσταται (cf. LSJ s.u. B.V)?: συνίστασθαι AQ Ald: διίσταται
Grangerius, acc. Schneider ‖ **3** ἅμα τε scripsi (cf. **7, 11** ἅμα εἶναι): ἄλλοτε AQ Ald,
def. Kirk, *HCF* 255: †ἄλλοτε† 'non sanum (expectes δῆλον ὅτι u. sim.)' Marcovich:
σώζεται ci. Wimmer, acc. Bywater, Walzer ‖ **4–5** εἰ δὲ μή...καὶ ὁ κυκεὼν διίσταται
AQ Ald: εἰ δή [μή]...διίσταται ⟨μὴ⟩ ci. Bernays, acc. Usen., Byw.: εἰ δέ [μή]...δ.

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⁴ Since Wimmer refers only to AQ Ald and *Rec. an.* [n. 1] to ABCDE Ald, but not to Q, it is
not altogether impossible that Q coincides with B C D or E. It goes without saying that a new
edition of the *De uert.* is badly needed and would probably entail many improvements in my
apparatus. Until then I prefer to retain Wimmer's text whenever it makes little difference.

⟨μή⟩ (ut uid.) Diels, *H*² *FVS*²⁻⁴ DK ad fr.: εἰ δὲ μή...δ. ⟨μὴ⟩ perperam Schuster, Walzer, Kirk, Marcovich: εἰ μὲν δή... συνίσταται (διίσταται Lassalle) Heinse: εἰ δὲ μή...καὶ ὁ κυκλεύων (conl. (b) 16) δὲ ἵσταται ⟨μὴ⟩ Forster: εἰ δὲ μή...· ἵσταται (sine δὲ) Mackenzie, acc. (sed etiam ἐπίσταται ci.) v.d.Ben ‖ 5 κινούμενος AQ Ald edd.: κυκεύμενος (cf. (b) 16 ταράττηι) concieci (ap. *REG* 98 [1985] 132, ubi lapsu κυκού-scriptum est): κυκώμενος nunc Roussos² fr. 31 ‖ 6 αὐτὸ] τὸ αὐτὸ ABCDE Ald [Rec. an.] ‖ 9 τοῦτο] fort. ταὐτό?

(b) [ABCDEGMNOPRSTV] **14** γὰρ τὸ ci. Usener fort. recte ‖ ταὐτὸ (editio) Paris. ‖ διότι P ‖ **15** τὰ om. P ‖ ἐν add. Usen. (conl. (a) **402, 52**): om. codd ‖ στάσις B ‖ τοῦ ἑνὸς Paris. (dissentientibus Bussemakeri codicibus) ‖ τἄλλα B ‖ **16** κυκεών Usen. (conl. (a) **405, 5**): κυκλεύων codd., ret. Bollack-Wismann, 340 ‖ φησιν—ταράττηι cod. Madr. (teste Forster): φησι, κἂν μεταταράττηι Paris (diss. Buss. codd.) [et cett. codd. teste Rec. an.] ‖ μή del. Mackenzie v.d.Ben ‖ διίσταται Usener (conl. (a) **403, 5**): ἵσταται codd. ‖ **17** ταὐτὸ ci. Usen. fort. recte ‖ δὴ δεῖ] δεῖ δὲ S ‖ πάσχοντα] φάσκοντα P ‖ κεφαλῆι· χωριστὰ μὲν Usener: κ. χ.· τὰ μὲν P: κ. χωρίς· τὰ μὲν Paris. S ‖ **18** βαρύνει καὶ om. Paris. ‖ τούτων ἴλλιγγα B ‖ **19** διίστησι—κοῦφα₂ om. B ‖ **20** τούτω] τούτωι τῶι O: τούτου τὸ Paris. S (P): ταῦτα ci. Bussemaker, ‖ **21** φανερὰν Bussem. ‖ ὅτι om. Paris. O ‖ οὐ δεῖ μίαν... **22** κινεῖσθαι scripsi: οὐδεμίαν...κινεῖται codd.: 'fort. addendum ἄτοπον?' ci. Usen.

(c) [AM] **5** πάθος συμβαίνει Bekker e vulg.: συμβ. π. A: non liquet M ‖ **8** συνδιίσταται M: συνίσταται A

This Heraclitean quotation in Theophrastus was first adduced by Bernays[5] who immediately corrected it in a manner which made it say just the opposite of what was written in the manuscripts, namely: καὶ ὁ κυκεὼν διίσταται ⟨**μὴ**⟩ κινούμενος. This reading has had the good fortune of being accepted by scores of scholars, or rather all of them except, on the one hand, Lassalle, Schultz, and Bollack–Wismann[6] who stuck to the MSS, and, on the other, Forster, Mackenzie and van der Ben[7] who adopted other corrections. On what grounds was Bernays' conjecture made and accepted?

Most strangely, none of its partisans, to my knowledge, ever attempted to formulate his reasons explicitly—so obvious did they look. (The only subject ever discussed was whether the preceding εἰ δὲ μή was to be emended to εἰ δή, as suggested by the same Bernays, or could be retained.)[8] These obvious reasons are: (i) the MSS reading gives an impossible sense: Heraclitus cannot be thought of as stating something so contrary to what he is known to have believed;[9] (ii) the context in Theophrastus requires an example proving that some things are held together by motion and disintegrated by rest; (iii) the paraphrase of Theophrastus' text by Pseudo-Alexander/Pseudo-Aristotle supports this emendation.[10]

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[5] J. Bernays, *Heraclitea.* Diss. (Bonn, 1848), 6–7 = id., *Gesammelte Abhandlungen*, I (1885), 6.

[6] F. Lassalle, *Die Philosophie des Herakleitos des Dunklen von Ephesus* (Berlin, 1858), 75ff.; W. Schultz, 'Die Kosmologie des Rauchopfers nach Heraklits Fragm. 67', *Archiv für Geschichte der Philosophie* 22 (1909), 202–3, n. 15; J. Bollack-H. Wismann, *Héraclite ou la Séparation* (Paris, 1972), 340f.

[7] E. S. Forster, 'Further Emendations in the Fragments of Theophrastus', *CQ* (1933), 140–41; Mackenzie, op. cit. [n. 1], 549–51; van der Ben, op. cit. [n. 1], 397, 400–401.

[8] Cf. G. S. Kirk, *Heraclitus. The Cosmic Fragments* (Cambridge, 1954; ²1962), 255. Before Bernays the reading εἰ δή (with an additional μὲν before δή) was already used by Heinse—whose other emendation (συνίσταται for διίσταται) had an effect somewhat similar to that of Bernays' ⟨μὴ⟩.   [9] Cf. Mackenzie's formula quoted below (n. 12).

[10] Kirk, op. cit. [n. 8], ib.

Are these good reasons? The first and main one is *not*; it is methodologically vitiated since it implies a *petitio principii*: how are we to know what Heraclitus really meant if we use our prejudices—whether right or wrong—about what he 'must' have meant as a sufficient reason to modify the very basis of our knowledge? As to the other two, they are methodologically sound, and all depends on whether they are *true*.

Unfortunately, ever since 1848, when Bernays proposed his reading, and up to 1986, when Mackenzie's article appeared, nobody ever really took the trouble of checking it up.[11] Mackenzie did so and she found out that Theophrastus' context requires an example of just the opposite of what was thought, that *no* correction of the quotation is needed and that Bernays' reading (including its modern variant where the first $\mu\acute{\eta}$ is preserved) is *incompatible* with it. The arguments she adduced are sound and inescapable (see below). Thus was refuted the second reason.

And nobody as yet has seriously examined the third argument which, as I shall show, is just as groundless as the second.

What happens next? A very curious thing. Having come to her conclusion, instead of making the next natural step, i.e. recognizing that the transmitted version of the fragment is the only one to deserve confidence and trying to understand what Heraclitus could have meant by this, Mackenzie retreats under the impact of... the first argument against this transmitted version: 'the fragment that Theophrastus' text *must* contain,' says she, '*cannot* be Heraclitean' (p. 549).[12] Whence her hypothesis that 'it could... be a modification by Theophrastus of some Heraclitean original' (ib.). And she reconstructs this original by emending the quotation into $\acute{o}$ $\kappa\upsilon\kappa\epsilon\grave{\omega}\nu$ $\H{\iota}\sigma\tau\alpha\tau\alpha\iota$ $\kappa\iota\nu o\acute{\upsilon}\mu\epsilon\nu o\varsigma$ (p. 549–51).

But what then was the point of analysing the context? If the context *is* indicative of the way a quotation should be read (as is normally the case), then one should pay heed to what it indicates; if it is not, then it is no use analysing it at all; and if the only purpose of the analysis was to refute the previous readings, then Mackenzie has simultaneously 'prerefuted' her *own* reading too. One cannot use two different standards at the same time, one for other people's readings and another for one's own.

But this is not yet the end of the story. Then in comes van der Ben, who accepts Mackenzie's *emended* 'original' (which Theophrastus supposedly modified) and tries (not very successfully in my opinion) to squeeze it *back* into Theophrastus' context, i.e. to interpret the latter in a way compatible with this corrected quotation. As a result we come to a fantastic situation when a quotation, after having been corrected on no other valid grounds than its expected sense (the fallacious first argument), is then used as a criterion to reinterpret the very context which refutes its reading! I leave it to the reader to decide what can be the intrinsic value of results obtained in such a curious fashion.

In the preceding short sketch I have deliberately avoided all questions of detail so that the awkward logic of some of my predecessors be as clear as possible. Now I am going to substantiate my own way of dealing with the whole question. In doing this I shall of course particularly insist on the capital importance of the logical and

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[11] Though Schultz, op. cit. (n. 7), 203 n. 15, seems to make the same point.

[12] 'The present version... is manifestly false... Heraclitus was certainly addicted to para-dox..., but his paradoxes are of a veridical type—that is they do not assert falsehoods, whether obvious or otherwise' (Mackenzie op. cit. [n. 1], 548f.). That this is patently *false* is proven, e.g., by fr. B 3 which states that the Sun is the width of a human foot. This example is enough to show how slippery are arguments of this kind.

methodological aspects of the problem, and shall be somewhat less categoric as regards the possible concrete solutions, since philology, unlike mathematics, rarely yields a hundred percent reliable results and *errare* (after all) *humanum est*—even with the most perfect method.

To begin with: what sources do we have at our disposal?

(i) Theophrastus' text and quotation; (ii) two paraphrases of Theophrastus' text, one rather free, but containing a reference to Heraclitus, by Pseudo-Alexander/Pseudo-Aristotle, and another more close to the original, but without such a reference, by Photius; (iii) a number of allusions and reminiscences (Plato, Epicurus, Chrysippus, Plutarch, Marcus Aurelius, Lucian, Themistius, *Scholion in Iliad.*).[13] The latter sources may be useful when we try to understand the Heraclitean meaning of the fragment, but they contain no clues as to its wording. Therefore we are left with only one *primary* source and two *secondary* ones derived from it. The obvious plan of action is then: (a) analyse each of these three sources for its own sake to understand its purport and content and establish its text (quotation *excluded*); (b) compare them in order to understand how far the two secondary ones depart from the primary, and (if necessary and possible) use them to improve (our understanding of) it; (c) see whether the quotations in Theophrastus and Pseudo-Alexander agree with their respective contexts (and with each other); and finally, (d) if there is no such agreement—*but only in that case*—try to find the simplest way of restoring it by reinterpreting or correcting the fragment (context *excluded*, at least in so far as the correction would alter its general purport).

The context of Theophrastus has already been analysed by Mackenzie. Though correct on the whole, her analysis has two defects which make it rather difficult to follow. First, when examining the general purpose of Theophrastus she needlessly postulates a change of main subject (from dizziness caused by circular motion to that caused by rest). And secondly, she analyses the immediate context while demonstrating at the same time its disagreement with the different *emended* variants of the quotation. All this hides the fairly simple structure of the passage.

Here is how I understand it (my English translation is based on that of Mackenzie, but with some important differences):

[I] Dizziness also occurs when people look at the same thing and gaze fixedly at it. This raises another problem: why, whether the eyes move in circle or are at rest, is the effect the same—this is absurd from opposite causes. [II] The cause of dizziness in circular motion is the one I said; that of dizziness in staring and gazing fixedly [III] is that rest too disintegrates the things which are preserved by motion. When the eyes, one part of the brain, are still, its other parts, being continuous with them, are paralysed. [IV] The heavy parts, being disintegrated and separated, weigh down and cause dizziness. For the parts which are naturally moved by this (or that type of) motion are at the same time held together through it. [V] Otherwise, as Heraclitus says, even the posset disintegrates when it moves. [VII] It would be possible to apply the same explanation to circular motion. For the vortex disintegrates the heavy and the light when they should be together, driving the former to the middle and the latter to the outside. [VIII] Stooping causes dizziness for the same reason too, for it separates the heavy and the light, upwards the former and downwards the latter, [IX] while they should be together, as already said.

The unity of this passage is indubitable, but to my mind its common denominator is not rest as another possible cause of dizziness besides circular motion—this (*pace* Mackenzie 544) is refuted by VII and VIII—, it is the general explanation of dizziness as a result of the disintegration and separation of the light and heavy constituents of

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[13] To the texts cited by M. Marcovich (*Heraclitus. Editio Maior* [Merida, 1967] = *Eraclito. Frammenti* [Firenze, 1978]) under fr. 31 should be added Plat. *Crat.* 439 C 5 (cf. 411 B 7).

the brain due to various causes: keeping one's eyes still (I–IV), moving in circle (VII), or stooping (VIII). The brain consists of parts some of which are naturally still, others naturally mobile.[14] The former are disintegrated and separated into their light and heavy constituents either by the vortex (the centrifugal and centripetal forces) or by a reversal of their natural order (this is the case of stooping: the heavy and light constituents change places under the influence of gravity), the latter by rest (the force of gravity again). The subject treated just before the quotation is the last mentioned: 'The parts which are naturally moved by this (i.e. this or that type of) motion are at the same time held together through it. Otherwise ...' What does this *otherwise* (εἰ δὲ μή) mean?

As already seen by Mackenzie 546 (and probably two or three other scholars before her),[15] it means '*if it is not through this motion that these parts are held together* ... (εἰ τὰ πεφυκότα κινεῖσθαι τήνδε τὴν κίνησιν **μὴ** συμμένει διὰ ταύτην or **μὴ** διὰ ταύτην συμμένει)', and it implies that the apodosis must contain a counterfactual consequence 'tending, by a *reductio ad absurdum* type of argument, to support the principle of natural motion'. Thus the point of the quotation is to show what absurd consequence would follow from a *denial* of Theophrastus' thesis 'what is naturally in motion is held together by this motion'.

So much for the context in Theophrastus. Let us turn now to *Pseudo-Alexander*. I translate:

[I] Why do people get dizzy both when looking at the same thing and if they see something turning in circle? For it is absurd for rest to produce the same effect as motion, since they are opposites. [III] Is it because rest also disintegrates the things which are preserved by motion? For when the eyes, one part of the brain, are still, its other parts, being continuous with them, also stop moving. [V] The posset, as Heraclitus also says, if nobody shakes it, stops (*sic codd.*) [VI] One should understand (this as meaning) that the head's contents undergo this as well. When they are separated and gathered in the same place, the heavy parts weigh and produce dizziness. This is why rest causes dizziness. [VII] As to the vortex, it disintegrates the heavy and the light parts (driving) the heavy to the middle, and the light to the outside, when they should be together. [VIII] This is also why stooping causes dizziness: parts are separated, the heavy ones downwards, the light ones upwards. [IX] It is clear from this that the brain must not be moved by only one (kind of) motion.

Taken by itself,[16] this text makes sense, except for the exact purport of the quotation (V). Judging by the preceding (III) and following (VI) sentences, the second

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[14] Cf. text (b), IX.   [15] Cf. n. 6 and 11, above.

[16] Taking this text by itself does not imply neglecting the fact that it is a paraphrase of another text, the one we just examined, but only considering it for its own sake. The disastrous effects of such a neglect are well illustrated by Emminger who believed he had discovered an unknown fragment! (See A. Emminger, *Die vorsokratischen Philosophen nach den Berichten des Aristoteles* [Würzburg, 1883], 148, and H. Diels, rev. of Emminger, *Jenaer Literaturzeitung* 5 [1878], 9). More astounding and absolutely untenable is the attitude of Bollack–Wismann, op. cit. [n. 6], 340 who, while knowing (?) that it is a paraphrase, still retain the corrupt reading κυκλεύων and translate '(l'animal) qui tourne (l'âne?), s'il n'y a personne pour l'exciter, il s'arrête'. Unless the French scholars are just pulling our leg to show what 'animaux qui tournent' we also are, they are defying any logic. Logically much sounder is Forster's reverse procedure: he emends κυκεών in Theophrastus into κυκλεύων according to the *Probl.* (and then διίσταται into δὲ ἵσταται)—'*the man who whirls round stands still while moving*'—but it fails to cope with two facts: the opposite roles played by the quotation in these texts (see below in the text) and the existence of a number of other testimonia showing that Heraclitus did indeed use the *kykeon* simile (see n. 13 and the corresponding text).

word *stops* (ἵσταται) is corrupt.[17] The first ἵσταται being already paralleled by μὴ ταράττηι, one would expect here a verb denoting some *consequence* of this coming (of the brain/posset) to a standstill, not a repetition of the same idea.

Comparison with Theophratus contributes to a better understanding of the paraphrase, which is remarkable for a number of features. First, it follows closely its original and asserts practically the same. Secondly, it departs notably from it as far as the syntax of the immediate context and the wording of the quotation are concerned (V). Thirdly, its explanation of stooping (i.e. having one's head upside down) is mistaken: the heavy parts should have been said to be driven *up*wards, and the light *down*wards (VIII, cf. Theophrastus). Finally, it lucidly states the logical consequence of all this reasoning: the brain needs to be moved by different types of motion (IX). Of these features, the most important to us is of course the second. Leaving out for the time being the content of the quotation, let us stress one point: it is syntactically independent from the context and, therefore, *cannot* express the counterfactual consequence of the denial of anything in this context.[18] Another interesting point is that the introductory sentence of Theophrastus (IV) has been turned into an explanation of the posset simile (VI): just as the posset etc., so also the brain etc. Thus the point of the quotation here is to *illustrate* the separation of the heavy and the light parts caused by the stopping of the brain, not to demonstrate the absurdity of the opposite view.

Comparison with Theophrastus also makes it obvious how ἵσταται is to be corrected: διίσταται. So much has already been suggested long ago by Usener ad loc.

And now we are in a position to explain the difference between the two quotations, that of Theophrastus and that of Pseudo-Alexander's paraphrase, why they state different things, the first saying that the posset disintegrates when it *is* moved, and the second asserting that it disintegrates when it *is not* shaken. This discrepancy was the third argument adduced in favour of Bernays' correction which made them say the same thing. But the first quotation, the original one, is introduced by εἰ δὲ μή (*otherwise*...), while the second, as we noted, has no introduction of any sort. Moreover, while the condition which this εἰ δὲ μή negates is stated in the former text *before* the quotation, in the second it comes *after* it, as an *explanation* of the simile. Knowing that, should we be surprised to find a negative particle μή in the second 'quotation', and none in the first? Not at all. Simply, the anonymous paraphrast replaced the *reductio ad absurdum* type of argument of Theophrastus by a straightforward analogy. Instead of saying 'if parts which are naturally in motion

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[17] Mackenzie, op. cit. [n. 1], 549 also believes that 'to say that if the posset is not shaken it stands still...[is an] awesome banality', but since she needs the word ἵσταται to support her reconstruction of Heraclitus' 'original' wording, she proposes to read it 'figuratively' as 'it preserves its nature', but even this figurative reading, if possible, does not work without the correction she makes to the text (see below n. 20).—And may I point here to another logical flaw in her reasoning: how could such a *secondary* source as Pseudo-Alexander have preserved a correct Heraclitean reading (ἵσταται) if, according to herself, the author of the *primary* source had deliberately altered it (into διίσταται) 'to make his case about natural motion' (ib.)? Unless the paraphrast knew Heraclitus' supposed original saying from somewhere else and corrected his main source (Theophrastus) on purpose—an unwarranted supposition which Mackenzie's appeal to a 'current'—but wholly unattested—'Peripatetic tradition' (550) does not help to save,—this is sheer nonsense. See also n. 21.

[18] Had Mackenzie applied to the context of the quotation in Pseudo-Alexander the method she so successfully used in Theophrastus, she would have seen that the former cannot be 'announcing a falsehood' (549) since it lacks the very thing which motivated her conclusion concerning the latter: a denial of the fact that natural movers are preserved by their motion.

were not held together by this motion, then even the posset would[19] disintegrate when moved', the paraphrast chose to say 'just as the posset does really disintegrate when it is not ($\mu\acute{\eta}$) stirred, so does the brain when the eyes are kept still'.[20] A little reflection suffices to understand that there is no contradiction between the two formulas, notwithstanding their strikingly different forms.[21]

So much for Pseudo-Alexander. Next comes Photius. But since his text is just a shortened version of Theophrastus, it is of little use translating it. Its interest lies in that it confirms most of what our MSS preserved of Theophrastus' text as well as two modern conjectures (both by Usener).[22] Unfortunately the Byzantine patriarch skipped the whole Heraclitean passage and is therefore of no help to us in understanding its role and establishing its text.

There remain three points which I believe it necessary to make.

First, I want to reply to those who, no doubt, will say that Bernays' *double* emendation does not affect the general meaning of the passage and moreover completely restores the balance with Pseudo-Alexander's paraphrase. Mackenzie objects (547-8) that his reading gets into trouble with $\kappa\alpha\acute{\iota}$, 'even', and is logically inconsistent. Whatever the truth, it makes no difference to us. The important point is that it requires two corrections totally unwarranted by the context and the only motivation of which (as of those defended by Forster, Mackenzie and van der Ben) is the resulting sense. And though the fact that Bernays, unlike Wimmer, Kirk and others, tried to preserve the internal consistency of the text (this is the sole reason for his deletion of $\mu\acute{\eta}$ in the protasis) is laudable *per se*, it cannot outweigh the original consistency of the transmitted text.

And the second point I want to make (though without insisting too much on it since the question requires further examination and cannot *in principle* be solved at this early stage[23] of our investigation) is that even the 'unheraclitean' meaning of fr. B 125 resulting from this analysis[24] could be fairly easily turned into a 'Heraclitean' one simply by supposing that the philosopher too was stating the counterfactual consequence of some irreal condition. In other words, that there was some $\epsilon\grave{\iota}$ $\delta\grave{\epsilon}$ $\mu\acute{\eta}$ in Heraclitus' text as well. As to the Heraclitean context, the realm to which the philosopher applied this simile could perhaps be deduced from the sources of the third

[19] That such an irreal apodosis does not necessarily require here $\H{\alpha}\nu$ + optative has been convincingly shown by Mackenzie, op. cit. [n. 1], 546-7.

[20] This refutes the correction advocated by Mackenzie, op. cit. [n. 1], 549 and v.d.Ben, op. cit. [n. 1], 400 n. 5 (who would both delete this $\mu\acute{\eta}$).

[21] It would certainly be interesting to know what triggered this rewording of Theophrasus' original. (A study of the paraphrast's method might be helpful, and a possible explanation is suggested at the end of this paper.) Yet, as already said (n. 17), nothing so far indicates that he has had any independent knowledge of Heraclitus' saying. Therefore, and even though such an independent knowledge is not altogether impossible, before this is confirmed by some newly found evidence we must stick to the one we have and consider the original quotation in Theophrastus as being more true to Heraclitus than its rewording by Pseudo-Alexander. Otherwise, we would be building on sand.   [22] See apparatus to (a) lines 54 and 1.

[23] I.e. at the philological stage as opposed to the hermeneutical (for this distinction and the problem of the relation between textual criticism and philosophical interpretation, see Mouraviev, 'Comment interpréter Héraclite...' [n. 1], 273-7).

[24] Neither Lassalle, op. cit. [n. 6], I 76 (who equates $\kappa\iota\nu o\acute{\upsilon}\mu\epsilon\nu o\varsigma$ with $\sigma\upsilon\nu\iota\sigma\tau\acute{\alpha}\mu\epsilon\nu o\varsigma$), nor Schultz, op. cit. [n. 6], 203 n. 15 (for whom H. used this image 'um zu zeigen, daß auch die stets wirbelnden Dinge, die Gestirne und die Himmelswölbung, nicht ewig sind'), nor Bollack-Wismann, op. cit. [n. 6], 340 (who see in it a paradox illustrating, 'par l'exception, la constance d'une loi') found it to be such.

group, the allusions and reminiscences (see above and n. 13). All these texts (except the different versions of the biographical anecdote about Heraclitus' advice to the Ephesians) concur at any rate in linking the posset simile to eternal flux and world order (or rather disorder), i.e. place it in a cosmological context. But to say more at this stage would be to be indulging in sheer guesswork.

Finally, fairness requires that I mention a wholly different solution to the problem recently suggested to me by Prof. Myles Burnyeat.[25] There is another way of construing εἰ δὲ μή, he says: as meaning not εἰ δὲ τὰ πεφυκότα κινεῖσθαι ... μὴ (...) συμμένει (see p. 40 above), but εἰ δὲ τὰ πεφυκότα κινεῖσθαι ... μὴ κινεῖται τήνδε τὴν κίνησιν 'if these parts which are naturally moved ... are no longer moved by this motion'. Then ... the consequence is no longer counterfactual and the conjecture of Bernays is necessary indeed and finds even some support in Pseudo-Alexander's parallel version of the quotation.

What can be said about that?

First, that all other things being equal it still seems safer not to correct a transmitted text which makes a good enough sense without correction.

Second, that the Greek εἰ δὲ μή seems to be more precise than the English 'otherwise' in that it normally points to the *main* verb of the preceding sentence (as would also 'if not' in English): 'The parts which are naturally moved by this motion are at the same time held together through it. *If not ...*' What does this 'if not' normally mean? Obviously: '*If* they are *not* held together ...' This does not totally exclude the other answer but makes it less likely than the normal one.

Third, that the version of Pseudo-Alexander is better explained *not* by any independent knowledge of his concerning the contexts of the original 'saying', but by the accidental omission of IV, i.e. of the very point which εἰ δὲ μή denies, by the subsequent correction of this then senseless εἰ δὲ μή into ὁ δὲ κυκεών, and by a reformulation of the following text (V and VI) so as to compensate this omission, i.e.: first, to replace the counterfactual consequence of the lost denial by a straightforward conditional construction: ὁ δὲ κυκεών, ἐὰν μή τις ταράττηι ... and, second, to restore the omitted part in the form of an explanation.[26] (This would also help explain the awkward τοῦτο δὴ δεῖ νοῆσαι κτλ ...)

May I conclude by reminding the reader that I am not the first to defend the transmitted text, already upheld by Lassalle, Schultz, and Bollack–Wismann (see above, n. 6). What I do seem to be the first to do is to insist on how crucial it is to be fully aware of all the logical implications of one's procedures and modes of argumentation and of the intrinsic validity of the methods one uses.

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[25] Private letter to author (July, 1994).

[26] One should not forget that unless you used separate scraps of papyrus, and particularly when you were completing a scroll, accidental omissions while copying created serious problems. If you did care about preserving the omitted part, either you had to rewrite the whole roll, or to modify the original in order to insert it where it was still possible.