

A Mistake to be avoided in the Interpretation of Empedocles fr. 100.

Dr D. O'Brien in his interesting article 'The effect of a simile: Empedocles's theories of seeing and breathing' (*JHS* xc [1970] 140-79) unfortunately reverts to D. J. Furley's view¹ that, in the clepsydra simile of Empedocles fr. 100, air must be parallel to air and water to blood. This involves him in interpretations which have no basis in the text of Empedocles. It is obvious, from the clear parallelism of sentence structure presented by Empedocles and duly noted in my article of 1960,² that water is parallel to air, and air to blood. The relevant lines are (as quoted from Ross by Dr O'Brien):

ὥσπερ ὅταν παῖς
κλεψύδρῃ παίξεισι διειπετέος χαλκοῖο—

10 εὔτε μὲν αἰλοῦ πορθμὸν ἐπ' εὐειδεῖ χειρὶ θεῖσα
εἰς ὕδατος βάπτῃσι τέρεν δέμας ἀργυφέοιο,
οὐδεις ἄγγοσδ' ὄμβρος ἐσέρχεται, ἀλλὰ μιν εἴργει
ἀέρος ὄγκος ἔσωθε πεσὼν ἐπὶ τρήματα πυκνά,
εἰσόκ' ἀποστεγάσῃ πυκνὸν ῥόνον αὐτὰρ ἔπειτα

15 πνεύματος ἐλλείποντος ἐσέρχεται αἷσιμον ὕδωρ.
ὡς δ' αὐτως, ὅθ' ὕδωρ μὲν ἔχη κατὰ βένηθα χαλκοῦ
πορθμοῦ χωσθέντος βροτέω χροῖ ἠδὲ πόροιο,
αἰθὴρ δ' ἐκτὸς ἔσω λελημένος ὄμβρον ἐρύκει
ἀμφὶ πύλας ἠθμοῖο δυσσηχέος ἄκρα κρατύνων,

20 εἰσόκε χειρὶ μεθῆ, τότε δ' αὖ πάλιν, ἔμπαλιν ἢ πρίν,
πνεύματος ἐμπύπτοντος ὑπεκθέει αἷσιμον ὕδωρ.
ὡς δ' αὐτως τέρεν αἶμα κλαδασόμενον διὰ γυῖων
ἀπίοτε μὲν παλίνωρον ἀπαίξειε μυχόνδε,
αἰθέρους εὐθὺς ῥεῦμα κατέρχεται οἴδματι θῶν,

25 εὔτε δ' ἀναθρώσκη, πάλιν ἐκπνέει ἴσον ὀπίσσω.

The general sense is:

Just as, in the case of the clepsydra, water comes in and out through the sieve in accordance with movements of air on the other side of the sieve:

So, in the case of breathing, air is breathed in and out through holes at the back of the nostrils in accordance with movements of blood on the other side of the holes.

The form is:

Just as, in circumstances A, effect B occurs:
So also, in circumstances A', effect B' occurs.
The circumstances are given in subordinate clauses (genitive absolutes, 'when' clauses); the effects (either air coming in and out, in the case of breathing; or water doing the same, in the case of the clepsydra) are given in main clauses. A must necessarily be parallel to A', and B to B'. To take A parallel to B', and B to A', as Dr O'Brien does, is not just to misinterpret Empedocles: it is to mistranslate him.

The point is made clearer still, if Dr O'Brien's general interpretation of the passage is examined. I italicise those parts of his interpretation which either do not occur in the Greek of Empedocles or else are clean contrary to it. I emphasise that Dr O'Brien

¹ D. J. Furley, 'Empedocles and the Clepsydra', *JHS* lxxvii (1957) 31-4.

² N. B. Booth, 'Empedocles' Account of Breathing', *JHS* lxxx (1960) 10-15. Throughout the present note I have assumed as correct the interpretation of ῥινῶν as 'nose', for which arguments are presented in my earlier article; but the argument of this present note does not depend in any way on that assumption.

gives this as his *interpretation* of the passage; it is not meant to be a translation. But even an interpretation should bear some resemblance to the original. This is what he says:

'1. Lines 8-13. Water cannot enter the clepsydra when it is full of air . . . *In the same way, blood cannot enter the lungs when they are full of air.*

'2. Lines 14-5. When the girl's hand is taken from the top of the clepsydra, water enters. *In the same way, blood enters the lungs when we breathe out.*

'3. Lines 16-9. When water fills the clepsydra and the top of the clepsydra is closed, *air cannot enter. In the same way, air cannot enter the lungs when they are full of blood.*

'4. Lines 20-1. When the girl's hand is taken from the top of the clepsydra, *air enters the clepsydra and water rushes out. In the same way, blood rushes out of the lungs when we breathe in air.'*

To start with, nothing is said about the lungs in Empedocles's account (lines 22-6); nor is there any justification, in the text of Empedocles, for *inferring* that they are involved. (Empedocles has already told us, in the earlier part of the fragment, that the blood moves up and down tubes partly filled with blood.) Secondly, Dr O'Brien interprets Empedocles as saying:

(1) Blood enters the lungs when we breathe out (under lines 14-5).

(2) Blood rushes out of the lungs when we breathe in air (under lines 20-1).

Well, give all liberty to a man who is interpreting rather than translating; but these two statements are clean contrary to the following two statements of Empedocles (since they invert the 'when' clauses):

(1) When the blood rushes back up again, air is breathed out (line 25).

(2) When the blood rushes away to the inmost part, air is breathed in (lines 23-4).

Empedocles talks of air coming in and out in accordance with the movements of the blood; Dr O'Brien talks of blood coming in and out in accordance with the movements of the air. This is not an interpretation; it is a flat contradiction.

Under lines 16-9 Dr O'Brien gives the interpretation 'Air cannot enter'. But where Empedocles refers to air in these lines, he says (line 18):

αἰθὴρ δ' ἐκτὸς ἔσω λελημένος ὄμβρον ἐρύκει.

By no stretch of the imagination can these words be interpreted to mean 'Air cannot enter'. Dr O'Brien is thinking, no doubt, of the air above the clepsydra which cannot enter because of the girl's hand; but Empedocles makes no mention of that particular air and says nothing whatever about it not being able to enter. What kind of interpretation is this, which pays so little attention to what Empedocles *does* say, so much to what he does *not* say? The italicised words under lines 8-13 and in the second sentence under 16-9 occur nowhere in the text of Empedocles, nor can they possibly be inferred from the text. Empedocles speaks only of breathing in and out; he says nothing about any pauses at either end of each breath, nor would it be in the least relevant to his account to say anything of such pauses. This is one

of the points at which details of the clepsydra analogy have no parallel in the account of breathing.³ Finally, under lines 20–1, Dr O'Brien writes '... air enters the clepsydra and ...'; this is all right, provided that we note that 'air enters the clepsydra' is in genitive absolute construction in the Greek, which means that 'water rushes out' is the event, while 'air enters' is the circumstance that gives rise to the event. An interpretation which does not recognize the dependence of clauses in the Greek is not just a wrong interpretation; it is a mistranslation.

Dr O'Brien's interpretation should therefore be rewritten as follows:

1. Lines 8–13. Water cannot enter the clepsydra when it is full of air. . . . (There is nothing in the account of breathing which corresponds to this; I infer that it merely sets up the situation in the clepsydra.)

2. Lines 14–5. When the girl's hand is taken from the top of the clepsydra, then as the air leaves the clepsydra, water enters through the holes in the bottom of the clepsydra. (In just the same way, when the blood rushes back from the upper part of the tubes, immediately behind the nostrils, into the inmost part, a stream of air enters the tubes through the holes at the back of the nostrils. Lines 23–4, supported by 1–8.)

3. Lines 16–9. When water fills the clepsydra and the top of the clepsydra is closed, the air (outside, according to Regenbogen) holds in the water. (There is nothing in the account of breathing which corresponds to this; I infer that it merely fills out the detail of the clepsydra analogy.)

4. Lines 20–1. When the girl's hand is taken from the top of the clepsydra, then as air falls into the clepsydra, water rushes out. (In just the same way, when the blood rushes back up the tubes again, air is breathed out. Line 25, also line 8.)

This interpretation has the advantage that it includes Empedocles's statements, the whole of Empedocles's statements, and nothing but Empedocles's statements. Dr O'Brien and D. J. Furley both depend heavily on the *a priori* argument that it is implausible that Empedocles would have used air in two opposite senses in the two legs of the similitude. This is a typical example of an *a priori* argument which runs counter to all the evidence of the text itself; and even *a priori* it has no necessary truth, since 'implausible' is a matter of opinion (about which I disagree with them, for reasons stated in my earlier article, p. 13 lines 11–23). Their error, like that of so many other scholars before them, has been to prefer unsound *a priori* reasoning to a careful examination of the text.⁴

N. B. BOOTH.

*Department of Mathematics,
Polytechnic of North London*

³ See my article in *JHS* (1960) 13, lines 24–35, where I have argued that we are not to expect that *all* details of the clepsydra analogy should be relevant to the comparison. (This argument disposes also of Dr O'Brien's criticism of my interpretation on the grounds that I have got things 'somehow upside down'; see p. 152 of his article.)

⁴ I would commend other scholars like Professor W. K. Guthrie, Dr G. Lloyd and Professor G. A. Seck who have not followed this error and who have been kind

The Scene on the Panagjurishte Amphora: a New Solution

In *JHS* xciv (1974) 38 ff. (with PLATES IV–V), J. G. Griffith discusses the subject-matter of the scene on the late fourth-century amphora discovered in 1949 at Panagjurishte in Bulgaria, in which a group of four determined-looking men armed only with swords attacks a house-door which has just been half-opened by a startled servant of diminutive stature. Connected, apparently, with the assault is a trumpeter, and finally there is another pair (not obviously involved in the action) consisting of a bearded figure, taken to be a seer since he holds 'a liver, lobe and all', which he shows to his more youthful companion.

Griffith has little difficulty in exposing the improbability of earlier attempts to identify a mythological scene—Achilles discovered at Scyros, the Seven against Thebes, or the preliminaries to the murder of Neoptolemus at Delphi, and proposes a novel view that the attackers are *komastai*, whether the occasion is a 'genre-scene' from comedy, or a characteristic scene from real life, in either of which cases help in identifying the individuals would be unnecessary and irrelevant. But I must confess that I find this proposal far-fetched: the attempts to account also for the trumpeter and seer are desperate enough, but he really fails to make a credible case for the use of swords in such escapades, even granted the violence often referred to in literary evidence¹ about the *komos*, whether fisticuffs among rivals for the favours of the courtesan or mistress, or the use of cudgels, levers and torches to break down, or burn, the door by the 'exclusus amator'.

For it seems to me that even the passage he cites from Philostratus (*VS* i 2 p. 485 Olearius) disproves this, *pace* his observation (p. 47) that the remark 'loses all point unless swords might on occasion be used for this purpose'. When Philip attacked Byzantium, the philosopher Leon reproachfully addressed him *τί παθὼν πολέμου ἀρχεῖς; τοῦ δ' εἰπόντος "ἡ πατρις ἢ σὴ καλλίστη πόλεων οὐσα ὑπηγάγετό με ἐρᾶν αὐτῆς καὶ διὰ τοῦτο ἐπὶ θύρας τῶν ἐμαντοῦ παιδικῶν ἤκω", ὑπολαβὼν ὁ Λεὼν "οὐ φοιτῶσω", ἔφη, "μετὰ ξιφῶν ἐπὶ τὰς τῶν παιδικῶν θύρας οἱ ἄξιοι τοῦ ἀντερᾶσθαι οὐ γὰρ πολεμικῶν ὀργάνων ἀλλὰ μουσικῶν οἱ ἐρῶντες δέονται.*" Surely this reproof assumes a total *inappropriateness* of swords to the occasion of Philip's sardonic comparison, in contrast to the *ὄργανα*² enough to give general support to my interpretation; the relevant references are listed in Dr O'Brien's article. See also K. Wilkens in *Hermes* xcv (1967) 138, (n. 3 and relevant text). I would commend Dr O'Brien for his conscientious assembly of material and for a number of sensible comments.

¹ Headlam's note on Herodas ii 34 provides a convenient list of appropriate Greek examples.

² The contrast of the equipment of war and the *komos* is made in similar language by Posidonius (*ap. Athen.* 176c) describing a disorganized rabble going to war with *κώμων*, *οὐ πολέμων*, *ὄργανα*. The elaborate contrast of the 'komos of Ares' with a true revel in Eur. *Phoen.* 784 ff. (*σὺν ὀπλοφόροις . . . κῶμον ἀναυλότατον προχορεύεις*) loses much of its piquancy if one does not notice the Greeks' firm recognition of the incongruity. Cf. also Ar. *Ach.* 978 ff.