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Empedoclean Epistemology

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ABSTRACT: Presocratic, and particularly Empedoclean, epistemology has long been the object of intense debate. Unbridgeable (or apparently so) contrasts emerge in the large output of the Agrigentine philosopher, as far as epistemology is concerned. They may partially overlap with the differences among the poems ascribed to him. But sometimes such discrepancies can be traced even inside one and the same work. An obvious example of the first kind is the contradiction between frr. 2-3 D.-K., on one hand, which belong to the περὶ φύσεως and support a cautious empiricism, and, on the other hand, frr. 131-134 D.-K. (especially frr. 133-134), which belong to an undetermined poem, but surely convey a much greater confidence in Empedocles' own capacity of possessing and imparting reliable theological knowledge, although such knowledge is unattainable through the senses. An example of the second kind concerns the contradiction between fr. 2, which insists on the poorness of human means of knowledge, and fr. 3, which recalls religious limits imposed on human knowledge but also encourages investigation through each of the senses.

This contribution will clarify the terms of such contrasts, and try to explain their meaning.

Another crucial aspect of Empedoclean epistemology will be taken into consideration — i. e. the relationship between thought and perception; and the author will argue against any straight identification between the two. Attention will be dedicated to specific connections of epistemology with different works by Empedocles, including the lost Proem to Apollo.

KEY-WORDS: Empedocles; Epistemology; Perception; History of Philosophy; Ancient Philosophy.

RESUMO: A epistemologia pré-socrática, e particularmente a Empedocliana, tem sido durante muito tempo objeto de intenso debate. Contrastes intransponíveis (aparentemente?) emergem na grande produção do filósofo agrigentino, no que diz respeito à epistemologia. Talvez possam sobrepor-se parcialmente com as diferenças entre os poemas que lhe são atribuídos. Mas, por vezes, tais discrepâncias podem ser detectadas até mesmo dentro de uma mesma obra. Um exemplo óbvio do primeiro tipo é a contradição entre os fr. 2-3 D.-K., por um lado, que pertencem ao περί φύσεως e sustentam um empirismo cauteloso, e, por outro lado, os fr. 131-134 D.-K. (especialmente os fr. 133-134), que pertencem a um poema indeterminado, mas certamente transmitem uma confianca muito maior na própria capacidade de Empedocles de possuir e transmitir conhecimentos teológicos fiáveis, embora estes sejam inatingíveis pelos sentidos. Um exemplo do segundo tipo diz respeito à contradição entre o fr. 2, que insiste na poesia dos meios humanos de conhecimento, e o fr. 3, que recorda os limites religiosos impostos ao conhecimento humano, mas também encoraja a investigação através de cada um dos sentidos.

Esta contribuição irá clarificar os termos de tais contrastes, e tentar explicar o seu significado.

Outro aspecto crucial da epistemologia Empedocliana será levado em consideração: a relação entre pensamento e percepção; e o autor irá argumentar contra qualquer identificação direta entre os dois.

A atenção será dedicada a conexões específicas da epistemologia com diferentes obras de Empédocles, incluindo o perdido Proêmio a Apolo.

PALAVRAS-CHAVE: Empédocles; Epistemologia; Percepção; História da Filosofía; Filosofía Antiga.

1. Introduction

The present paper analyzes some of the foundations of Empedoclean epistemology (frr. 2–3,¹ and, on the other side, frr. 131–134). The fragments concerning how knowledge is gained (frr. 4, 84, 89, 101, 102, 103, 105, 106, 107, 108, 109, 110) will also be briefly dealt with. I aim at (1) an understanding of the correlation between the two different sets of epistemological fragments mentioned above as "foundations", on one side, and the contrasting contents of different Empedoclean writings, on the other;² and (2) an insight into the relationship between "thought" and "perception" in Empedocles in light of the role of blood.

2. An analysis of frr. 2 and 3

There is a wide difference between the predominantly empirical approach in frr. 2–3,³ on one side, and the dogmatic way of introducing the subject-matter in frr. 131–134.

For the moment, I will analyze the structure and contents of frr. 2–3, and then argue that the two supposedly independent fragments, preserved by Sext. *adv. math.* 7.122–125, form just one.

¹ I read an earlier version of this paper at the IAPS 7th Conference in Delphi on 28th June 2022. I thank Prof. R. McKirahan for that opportunity. I also wish to thank the anonymous Reviewer B for his kind words and his remarks. Of course, all responsibility for the contents of the paper lies with me. — All fragments (fr./frr.) and testimonies (A) of Empedocles and other Presocratics are quoted from D.–K. (unless differently specified); all translations are mine.

² On the number of Empedocles' works see Santaniello (2022).

³ Both fragments surely belong to the *Physical Poem*, as they are totally or partially addressed to Pausanias, and discuss knowledge of nature. In fr. 2 Pausanias is clearly the disciple addressed in ll. 8–9. In fr. 3 σε (l. 6) refers to Pausanias according to many, though they build the sentence in different ways (Karsten 1838, 176; Bignone 1916, 143–144; Wilamowitz 1929, 652 n1; Wright 1981, 161; Laks–Most 2016, 391; Curd 2016, 47 n22; Primavesi 2021, 442–445, fr. 43; *contra* Kranz 1949, 361 n4; D.–K. 1, 310; Zafiropulo 1953, 232; Cerri 2001, 193); anyhow, Pausanias is certainly meant from l. 9 on, since it is he who will obtain knowledge.

στεινωποὶ μὲν γὰρ παλάμαι κατὰ γυῖα κέχυνται· (fr. 2)πολλά δὲ δείλ' ἔμπαια, τά τ'ἀμβλύνουσι μερίμνας. παῦρον δὲ ζωῆσι βίου μέρος ἀθρήσαντες ώκύμοροι καπνοῖο δίκην ἀρθέντες ἀπέπταν αὐτὸ μόνον πεισθέντες, ὅτω προσέκυρσεν ἕκαστος 5 πάντοσ' έλαυνόμενοι. τὸ δ' ὅλον <πᾶς> εὔγεται εὑρεῖν· ούτως οὐτ' ἐπιδερκτά τάδ' ἀνδράσιν οὐτ' ἐπακουστά ούτε νόω περιληπτά. σὺ <δ'> οὖν, ἐπεὶ ὧδ'ἐλιάσθης, πεύσεαι· οὐ πλεῖόν γε βροτείη μῆτις ὄρωρεν. άλλὰ θεοὶ τῶν μὲν μανίην ἀποτρέψατε γλώσσης, (fr. 3)έκ δ' ὁσίων στομάτων καθαρὴν ὀχετεύσατε πηγήν. καὶ σέ, πολυμνήστη λευκώλενε παρθένε Μοῦσα, άντομαι, ὧν θέμις ἐστὶν ἐφημερίοισιν ἀκούειν, πέμπε παρ Εὐσεβίης ἐλάουσ εὐήνιον ἄρμα. 5 μηδέ σέ γ'εὐδόξοιο βιήσεται ἄνθεα τιμῆς πρὸς θνητῶν ἀνελέσθαι, ἐφ' ῷ θ' ὁσίης πλέον εἰπεῖν θάρσεϊ - καὶ τότε δὴ σοφίης ἐπ'ἄκροισι θοάζειν. άλλ' ἄγ' ἄθρει πάση παλάμη, πῆ δῆλον ἕκαστον, μήτε τιν' ὄψιν ἔχων πίστει πλέον ἢ κατ' ἀκουήν 10 ή ἀκοὴν ἐρίδουπον ὑπὲρ τρανώματα γλώσσης, μήτε τι τῶν ἄλλων, ὁπόση πόρος ἐστὶ νοῆσαι, γυίων πίστιν ἔρυκε, νόει θ' ξι δῆλον ἕκαστον.

Here there are two differences from the D.–K. text. At fr. 2.9, I have restored the *lectio tradita* (cp. n10 below), with Bollack (1969) 2, 7, Kingsley (2002) 366 n78, L.–M. (2016) 388, and Primavesi (2021) 442; instead, Karsten (1838) 90, Stein (1852) 30, and D.–K. propose πεύσεαι οὐ πλέον ἠὲ κτλ. I have also restored the *lectio tradita* at 3.13 θ' ἡ with Bollack (1969) 2, 11 and Laks–Most (2016) 392. Below follows my translation:

"In fact, narrow are the resources spread all over the limbs; (fr. 2)And many sudden distresses blunt the mind. Having observed little of life in their existences, Doomed to a quick death, they fly off, lifting up like smoke, Persuaded each one just of what they have met with by chance, Being driven here and there. And <everyone> boasts to have found the whole. So, it is not for men to see or to hear these things Or to comprehend them. <But> you, since you have withdrawn here, You will learn; mortal understanding does not reach higher." However, gods, avert the madness of those men from my tongue, (fr. 3)And make a pure stream flow from a holy mouth. And you, much-remembering, white-armed, maiden Muse, I beseech, the words which it is right for ephemerial beings to hear, Send them from Piety, while driving a chariot obedient to the rein. (To Pausanias?) And may the flowers of well-famed honour not compel you To gather them from mortal men, so as to say more than is right, Boldly — and then sit on the heights of wisdom. But consider how each thing is clear by means of every power, Trusting no seeing more than what hearing suggests 10 Or no echoing ear more than the details provided by taste. And of all other limbs, through which there is a way to knowing, To none deny your faith, and know in the way each thing is clear."

Fr. 2.1–8a deplores that men, impaired by the manifold miseries of life and by its brevity, are persuaded only of what falls under their limited experience, and do not grasp "the whole", though they pretend they do — so difficult is it both for the senses and the mind to gain true knowledge.⁴

At some distance from fr. 2.1–8a, Sextus introduces fr. 2.8b–9. In spite of the previous lines, these explain that as a result of his living in

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⁴ The target of this polemic allusion might be Parmenides among others (cp. Gheerbrant 2017, 68). En passant, it should be remarked that in fr. 39, clearly directed against Xenophanes, Empedocles mentions those "who have seen little of the whole"; therefore (here in fr. 2, and perhaps also in fr. 3.1, with regard to the unspecified $\tau \tilde{\omega} \nu \mu \tilde{\nu} \nu$) the polemic is likely to be aimed at illustrious philosophers by downgrading them to the level of ordinary people.

isolation Pausanias will obtain as much knowledge as human intelligence can grasp.

As to fr. 3, in ll. 1–2 Empedocles explicitly beseeches gods not to allow the madness of some to contaminate his tongue; in ll. 3–5 he asks an unnamed Muse to impart a lesson of moderation and piety; finally, in ll. 6–13, he invites (probably) Pausanias to mistrust the dangerous charm of fame, and respect the limits imposed to human knowledge by divine law;⁵ the disciple should adopt a cautious line of research, and, by careful reflection, select the aptest sense to acquire knowledge, case by case.

So, it sounds as though a contradiction were to be detected between fr. 2.1–8a, on one side, and, on the other, fr. 2.8b–9 + fr. 3. Are the mind and the senses capable of acquiring a reliable knowledge (as in fr. 3) or are they not, with few exceptions (as in fr. 2)? The two passages almost seem to imply an *ante litteram* example of εἰς ἑκάτερον ἐπιχειρεῖν.⁶ But, by looking upon frr. 2–3 as just one fragment, it is easier to answer.

Fr. 2 moves from a total lack of confidence in man's knowledge to confidence in Pausanias' capacity of reaching the highest possible level of human understanding (presumably by grasping the links which make one reality of what is perceived⁷ — the analogy with the $\lambda \acute{o} \gamma o \varsigma$ accessible only to Heraclitus is on hand). Instead, fr. 3 moves from (a) an

⁵ It is unlikely that Empedocles should first beseech the Muse to draw inspiration from Piety (l. 5) and then again ask her not to violate divine law (ll. 6–8). On the other hand, as Empedocles has already required the gods to avert madness from his mouth (ll. 1–2), it seems to be natural to gather that ll. 6–13 are addressed to Pausanias. Cp. n3 above.

^{6 &}quot;To defend one thesis and the contrary."

⁷ Τὸ δ'ὅλον (fr. 2.6) is probably picked up by τάδε (fr. 2.7–8): see von Fritz (1946) 15 ("τάδε...: ... the fundamental truth about the structure and evolution of the universe"); Wright (1981) 156 ("τάδε, the general subject, almost equivalent to τὸ ὅλον"). We can also understand τάδε simply as "the elements" (Bollack 1969, 2, 15–16): the object of knowledge in the *Physical Poem* cannot be anything else than the elements, whether regarded as combined into particular "mortal things" or as the whole of reality. The knowledge of nature is equated to elements themselves in fr. 110.

invocation to the gods (l.1) not to let Empedocles himself imitate the madness of some (probably the arrogant presumption of those who claim to know the "whole" while they do not), and (b) from a prayer addressed to the white-armed Muse that she inspire teaching well inside the limits of what man is allowed to learn (ll. 2–5) to (c) an exhortation to resist the temptation of vanity, and (d) another not to reveal more than is permitted (ll. 6–8) — both exhortations being probably directed at Pausanias. This lesson of moderation is extended to the means of knowledge (ll. 9–13): Pausanias shall not privilege any sense over the other, but seek after knowledge through the aptest sense case by case — vóel θ' $\tilde{\eta}$ δ $\tilde{\eta}$ λον $\tilde{\epsilon}$ καστον ("know in the way in which everything is clarified").

Already in 1923 did H. Fränkel consider the two fragments (really three, as presented by our source) just as one, on the ground that Sextus summarizes the contents of the lines following immediately upon fr. 2, and then introduces fr. 3, which seems to overlap with such contents.⁸ But, independently from Fränkel's demonstration and in spite of the contrary opinion of many,⁹ I am persuaded that the hypothesis that fr. 3 followed directly upon fr. 2 is corroborated by the pattern of the argumentation in the two passages: in fr. 2, up to l. 8a, the outlook on man's progress in knowledge goes more and more pessimistic; whereas, starting from fr. 2, ll. 8b–9 and then in fr. 3, Empedocles gets more and more confident in the possibility of acquiring reliable knowledge. Now, this two-direction process — destruction and generation, denial and assertion: first scarce hope of learning, then expectation of attaining the highest knowledge — is characteristically Empedoclean, and this

 8 Fränkel (1923) 276–277 (his fr. 4 is our fr. 3); he confirmed his position in his last years: (1974) 129. Also Zafiropulo (1953) 232 thought that fr. 3 followed immediately after fr. 2, but he unnecessarily supposed that $\tau \tilde{\omega} \nu$ did not refer to men (" $\tau \tilde{\omega} \nu$ est ici un neutre, il désigne ce que l'esprit est incapable d'éclaircir mais dont les mortels, en leur folie,

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aiment pourtant à discourir").

⁹ Many scholars deny that fr. 3 followed immediately upon fr. 2: see, for instance, Calzolari (1984) 78; some (like Bollack 1969, 2, 7–11; Primavesi 2021, 440–444) insert fr. 111 between frr. 2 and 3; but, as I have tried to show in Santaniello (2022) 202–206, fr. 111 was rather the proem of the Ἰατρικὸς λόγος.

strengthens my proposal of making just one of the two supposedly separate fragments. 10

3. Some points to be made

a. νόος and νοεῖν

It is well-known that $v\acute{o}o\varsigma$ ($vo\~{u}\varsigma$) has been variously taken to mean either "thought" or "intuition" in fragments from both archaic poets and presocratic philosophers. N\'{o}o\varsigma is generally not linked with a specific bodily organ (although exceptions are known), unlike "thought" which is nowadays believed to have its see in the brains. Besides, Aristotle's and Theophrastus' difficult witnesses concerning φρόνησις and αἴσθησις, and the incomplete information provided by the fragments have led many to believe that Presocratics and, among them, Empedocles absolutely saw no difference between thought and sensation. This has been taken to be substantially true by eminent

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 $^{^{10}}$ It is easy now to see that fr. 2.9 should not be corrected as proposed by Karsten, Stein, and D.-K.: Empedocles means to celebrate Pausanias' opportunity to acquire the highest knowledge ever reached by man, whereas the rest of mankind fails to grasp τὸ δ'ὅλον.

¹¹ The standard works concerning the role of $vo\tilde{v}\varsigma$ in Homer, Hesiod, and the Presocratics are von Fritz (1943), (1945), (1946), and (1971), where this function is described as (originally, at least) the capacity of quickly collecting information from the senses in order to react to a situation — substantially, exercising intuition more than thought. This position, very commonly accepted, is challenged by Lesher (1999) 247 n19, and (2001²) 101–102. Some at least of the papers collected in Stella, ed. (2016) show how influential von Fritz's ideas still are.

¹² Exceptions: for instance, see Thgn. 1163–1164 (ὀφθαλμοὶ καὶ γλῶσσα καὶ οὕατα καὶ νόος ἀνδρῶν / ἐν μέσσφ στηθέων ἐν συνετοῖς φύεται "eyes and tongue and ears and mind / Grow in the middle of the breast of wise men"), and already Hom. *II*. IX 554–555 (χόλος.../οἰδάνει ἐν στήθεσσι νόον "rage swells the mind in the breast"); XVIII 419 (τῆς ἐν μὲν νόος ἐστὶ μετὰ φρεσὶν κτλ. "and now they [the handmaids] had minds in their φρένες"). On the position of the φρένες see below n38.

scholars like A. A. Long and others.¹³ I will come back to this later. Here the point I want to make concerns a different, though connected, matter.

Emp. fr. 2.7–8a is frequently compared to Xenophan. fr. 24: "The whole (of god) sees, understands, hears." Here, the fact itself that the verb voεῖ refers to an action not explicitly connected with any bodily organ suggests a cognitive activity of a wider scope and a higher level than the mere sensation; and the association of voεῖν with ἀκούειν and ὁρᾶν to express the fullness of god's perception should not prevent us from assigning a specific meaning to voεῖν — a vision sweeping all over the world, as befits the rule of Xenophanes' "new" god.

In fact, the Colophonian's fr. 25 is interesting too: "but (*scil.* god) effortlessly shakes all things with his mind"; ¹⁵ this time a bodily organ is mentioned (φρενὶ), but, in order to signify the "mind", Xenophanes resorts to the specification νόου, which suggests an operation unconnected with any physical organ. So, I would translate νοεῖ (fr. 24) as "understands" or even "thinks", and νόου φρενὶ (fr. 25) as "with his mind". God's shaking the world surely pursues an end; otherwise, his total devotion to knowledge, by means both of senses and intellect (see fr. 24), would be meaningless.¹⁶

But the variety of functions (senses and thought) assigned to man by Emp. fr. 2.7-8a greatly contrasts with god's capacity of putting the

¹³ Arist. Metaph. Γ 5.1009b 12 ... διὰ τὸ ὑπολαμβάνειν φρόνησιν μὲν τὴν αἴσθησιν... "because (these philosophers) consider intellection to be sensation"; de an. Γ 3.427a 19–20...δοκεῖ δὲ ... τὸ φρονεῖν ιὅσπερ αἰσθάνεσθαι τι εἶναι "understanding seems to be something like perceiving"; Theophr. De Sens. 10=Emp. A 86 ... ἡ ταὐτὸν ἡ παραπλήσιον ιὸν τῆ αἰσθήσει τὴν φρόνησιν.. "...because understanding is the same as or something like sensation". See Long (1966), Sassi (2016); contra Fränkel (1960) 31 n4, Curd (2016). Any modern translation of φρονεῖν οr φρόνησις is in danger of being approximate or partial: cp. Long (1966) 267; Mansfeld (1996) 160 n9.

¹⁴ Οὖλος ὁρᾶ, οὖλος δὲ νοεῖ, οὖλος δὲ τ'ἀκούει. — For the comparison see Aronadio (2005) 6: "palese il riecheggiamento di Senofane."

¹⁵ Άλλ' ἀπάνευθε πόνοιο νόου φρενὶ πάντα κραδαίνει.

¹⁶ The mere dative φρενὶ "would not unambiguously make reference to god's role as thinker;" the world is "linked with a divine intelligence" (Lesher 2001, 106–107; cp. Fränkel 1973, 331 n11). On god's plan see Benzi (2016) 6: "the greatest god's noos provides the foundation for the cosmic order of phenomena."

whole of himself in every cognitive operation, as is highlighted by the repetition of $o\tilde{\nu}\lambda o\varsigma$ in Xenophanes. Therefore, as far as man is concerned, the distinction among "seeing" and "hearing", on one hand, and "understanding", on the other, should not be doubted, all the less so because the disjunction $o\tilde{\nu}\tau\epsilon...o\tilde{\nu}\tau\epsilon...o\tilde{\nu}\tau\epsilon...$ underlines such distinction.¹⁷

Besides, in at least one case in Empedocles' works vóo ς is associated with the knowledge of something which is not attainable with the senses: fr. 17.20–26.18

... καὶ Φιλότης ἐν τοῖσιν, ἴση μῆκός τε πλάτος τε· 20 τὴν σὺν νόφ δέρκευ, μηδ' ὅμμασιν ἥσο τεθηπώς· ἥτις καὶ θνητοῖσι νομίζεται ἔμφυτος ἄρθροις, τῆ τε φίλα φρονέουσι καὶ ἄρθμια ἔργα τελοῦσι, Γηθοσύνην καλέοντες ἐπώνυμον ἠδ' Ἀφροδίτην· τὴν οἴ τις μετὰ τοῖσιν ἑλισσομένην δεδάηκε 25 θνητὸς ἀνήρ· σὺ δ' ἄκουε λόγου στόλον οὐκ ἀπατηλόν.

Look at her with your mind, and do not stare in astonishment;

She is honoured by men as set deeply in their limbs,

And, thanks to her, they have loving feelings and achieve works of friendship,

Calling her Joy by name and Aphrodite;

No mortal man is aware of her whirling

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Among them (the elements); you listen to the undeceitful progress of my discourse."

"...and Love among them (the elements), equal in length and breadth; 20

17 My opinion contrasts with Bollack's (1969) III, 1, 15, who believes that ἐπιδερκτά and ἐπακουστά should be opposed to νόφ περιληπτά, "mais sans voir dans cette activité compréhensive de la pensée (νόος) une faculté distincte des perceptions sensorielles". On his part, Mansfeld admits that Empedocles acknowledged a "distinction", although "minime", "entre perception et savoir" (1996, 177), "une distinction primitive mais indéniable" (1999, 326), but he deems that the Acragantine put "ces modes de connaissance sur le même niveau" in fr. 2.7–8 (1999, 333 n24). See also Aronadio (2005) 9–10. — By the way, although I am very far from platonizing Empedocles, I submit that these words may have inspired Plat. *Tim.* 28A: ... τὸ μὲν δὲ νοήσει μετὰ λόγου περιληπτὸν ("...that which is comprehensible by thought with a rational account...").

¹⁸ I translate νομίζεται as "is honoured", following Bollack (1969) 2, 18 ("Elle qu' honorent les hommes"). — On this passage see von Fritz (1946) 18; Wright (1981) 170.

Here, in l. 21, the exhortation to look upon the action of Φιλότης with the eyes of the mind has long been recognized as reminiscent of, or influenced by, Parmenides' lesson. Scholars have often focused on the latter's fr. 4.1.19

And what, then, are we to make of the end of Emp. fr. 3 (ll. 9-13)? L. 9, ἄλλ'ἄγ'ἄθρει πάση παλάμη, πῆ δῆλον ἕκαστον, is interesting. In the sense of "consider, reflect", we would expect the verb $\dot{\alpha}\theta \rho \dot{\epsilon} \omega$ to be followed either by no instrumental or by the dative $v \dot{\omega} \omega$, like in Bacchyl. Epin. 5.8.20 Instead, Pausanias is required to test each sense as an epistemological means (fr. 3.9), and then he is exhorted to obtain knowledge (voeiv) through the best way. It is meaningful to contrast fr. 3.9-13 with fr. 2.7-8: the lines from fr. 2 are likely to concern research on the foundations of reality,21 whereas fr. 3.9-13 (where the verb νοέω occurs twice) recommends the right procedure in acquiring knowledge about single things or phenomena. With all the greater conviction, then, I insist that the words νόω ἐπιληπτά be taken at their full value, as distinct from ἐπιδερκτά and ἐπακουστά: particularly, the foundations of reality $(\tau \acute{\alpha} \delta \epsilon)$ can be the object of intellectual comprehension even more than of sight or hearing. And I have already referred to the significant role of vóoç when Empedocles comes to grip with an invisible entity like one of the δυνάμεις, Love

¹⁹ Λεύσσε δ'ὁμῶς ἀπεόντα νόφ παρεόντα βεβαίως ("see that things far-away are to the same degree steadfastly present through your mind": for the reading ὁμῶς see Kraus forthcoming). Cp. Bignone (1916) 405 (who quotes Parm. fr. 4 as fr. 2); Wright (1981) 170. Also Bollack (1969) III, 1, 67 cannot help quoting the same Parmenidean fragment, but, according to him, in the Empedoclean passage "σὺν νόφ δέρκευ ne se réfère pas à *la vue de l'esprit* par opposition aux sens, mais au contraire à une perception sensorielle plus intense et plus vaste, conjuguée et coordonnante."

²⁰ φρένα εὐθύδικ[o]ν / ἀτρέμ' ἀμπαύσας μεριμνᾶν/δεῦρ' <ἄγ' ε> ἄθρησον νόφ ("Let your righteous heart enjoy a quiet rest from cares, and look upon here with your mind").

²¹ See n7 above.

(17.21).22

The concept of voe \tilde{v} evolved from Homer to Parmenides and Empedocles. Von Fritz supposed that a gradual shift from the meaning of "quickly putting together the information provided by the senses (in order to respond to some situation or danger)" to the more general meaning of "thinking" occurred between Xenophanes' and Heraclitus' times. But, in my opinion, Xenophanes' frr. 24 and 25 already imply that God's vóoç does not react to contingencies, but rather keeps a steady control of $\pi\acute{\alpha}v\tau\alpha;^{23}$ so, I suppose that the shift was prepared a little earlier than was believed by von Fritz and is perhaps still commonly believed.

Now, let us go on with our survey to get a clearer definition of the relationship among sensation and thought.

b. Sensation and thought

Empedocles cultivates a less specific and abstract notion of vóoç than Parmenides. And a quick glance through the fragments leaves us with the clear impression that the Acragantine likes $\phi p \dot{\eta} v$ much better than vóoç, probably because the former is a bodily organ. 24

As far as sensation and thought are concerned, we can roughly distinguish, if only for the sake of convenience, at least four sets of fragments and witnesses:

α. A first group includes fragments dealing with the senses: we seem to have more information on smell, which is activated by $\mathring{\alpha}$ πορροαί, "effluences": these are released by "all things" (fr. 89), and

²² A third occurrence of νόος (fr. 136.2 ἀκηδείησι νόοιο) sounds less interesting, as it concerns an example of human mindlessness, the adhesion to traditional cults — a religious and ethical, more than an intellectual, failure. I have also discussed two occurrences (fr. 3.12 and 13) of νοέω out of three. The third one (fr. 84.1 ὅτε τις πρόοδον νοέων κτλ.) corresponds to one of the traditional meanings of the verb, "to plan".

²³ This is connected with the distinction between God and the world which has been underlined by Frère (2017²) 8: "Xénophane – comme il en sera après lui – distingue le Tout Un qu'est Dieu de cet autre Tout qu'est le cosmos."

²⁴ Cp. n38 below.

perceived through πόροι (fr. 101: the dogs who smell traces of other animals; cp. fr. 102). According to Thphr. *De Sensu* A86, 1, Empedocles, as well as Parmenides before him, maintained that knowledge was acquired through a like-to-like (see fr. 109)²⁵ process. Theophrastus also informs us (A86, 7) that all senses work by means of effluences and pores.²⁶ The theme of effluences is connected with other two — all mortal things consist of elements (frr. 17.34–35; 21.9–14; 26), and all things "have consciousness" (fr. 103: "in this way, by the will of Tyche, all things have consciousness"), and even experience pleasure and sorrow (fr. 107: "all things consist of these, *scil.* the elements, combined, and thanks to them they have consciousness and feel pleasure and sorrow").²⁷ This latter feature seems to be connected with the nature itself of the elements, which are alive and (at least potentially) divine;²⁸

 β . The second group includes frr. 110, 4, 106. The process of acquiring and working out knowledge at least partially resembles the process through which sensation is implemented. The disciple should fix the words of the master's lesson (this is one of the possible interpretations of the pronoun $\sigma \phi$ ', "them") fastly in his own $\pi \rho \alpha \pi i \delta \epsilon \zeta$, and then

²⁵ Kamtekar (2009) does not understand this fragment in the traditional way; she thinks that knowledge is the result of the analogy between elements and powers forming the subject and, respectively, forming the object.

²⁶ The role of ἀπορροαί is witnessed by Pl. *Meno* 76C–D (=A 92) for sight, but an alternative explanation for the same sense is offered by fr. 84. This supposed contradiction is noted by Aristotle and by many modern scholars. On this belaboured point see Ierodiakonou (2005) and her survey of opinions at p. 26 n41, to which Bollack (1969) 3, 2, 314–329 should be added; cp. the reconstruction of fr. 84 by Rashed (2018). Πόροι are defined by Long (1966) 260 "channels which interpenetrate all compound bodies"; but the existence of πόροι of the elements is witnessed by Arist. *de gen. et corr.* A, 8.324 b 29–31=A87 (air and water) and Thphr. *de sensu* A86, 7 (fire and water); the earth is likely to be provided with pores too as, in the description of sight, fire is reported to pass through earth and air (*ibid.*). Effluences are mentioned also in order to explain sundry physical phenomena like reflections in mirrors (A88) and magnetism (A89).

²⁷ Fr. 103: Τῆδε μὲν οὖν ἰότητι Τύχης πεφρόνηκεν ἄπαντα. Simpl. Phys. 330.31–331.16 uses this quotation to show that Empedocles acknowledged the role of chance, although only as far as small things were concerned. On this fragment see Laurenti (1999) 131–141. Fr. 107: ἐκ τούτων <γὰρ> πάντα πεπήγασιν άρμοσθέντα / καὶ τούτοις φρονέουσι καὶ ἥδοντ' ἦδ' ἀνιῶνται.

²⁸ According to fr. 35.14, elements lose their immortality when they combine into mortal things.

contemplate the notions acquired. These concern the elements, but also literally *are* the elements.²⁹ We learn this from one of the most impressive and inspired of Empedoclean relics, fr. 110,³⁰ which associates the language of mysteries,³¹ the knowledge of nature, and the recommendation not to let oneself put off away by the miseries of life:

Εἰ γὰρ καί σφ' ἀδινῆσιν ὑπὸ πραπίδεσσιν ἐρείσας εὐμενέως καθαρῆσιν ἐποπτεύεις μελέτησιν, ταῦτά δέ σοι μάλα πάντα δι' αἰῶνος παρέσονται· ἄλλα τε πόλλ' ἀπὸ τῶνδε κτήσεται· αὐτὰ γὰρ αὕξει ταῦτ' εἰς ἦθος ἕκαστον, ὅπη φύσις ἐστὶν ἑκάστῳ.

5 Εἰ δὲ σύ γ' ἀλλοίων ἐπορέξεαι, οἶα κατ' ἄνδρας μυρία δειλὰ πέλονται ἄ τ' ἀμβλύνουσι μερίμνας, ἤ σ' ἄφαρ ἐκλείψουσι περιπλομένοιο χρόνοιο σφῶν αὐτῶν ποθέοντα φίλην ἐπὶ γένναν ἰκέσθαι· πάντα γὰρ ἴσθι φρόνησιν ἔχειν καὶ νώματος αἶσαν.

"If you fix them in your steady organs of thought
And kindly watch them with pure exercises,
They will all be with you through all your life;
And many more will be acquired from them; in fact, they make each thing grow
Into its character, according to the nature of each.

5
But, if you yearn for other things, the way among men
Countless miseries turn up, which blunt the mind,
At once will they forsake you when time comes round,
Anxious to reach their own race;
For know that all things have consciousness and their allotted share of thought."

If the disciple follows these instructions, the notions/elements will beget more of them inside his $\pi \rho \alpha \pi i \delta \epsilon \varsigma$: so, not only is learning the

²⁹ Wright (1981) 259 with bibliography. Cp. Long (1966) 269: "Thoughts and elements are one and the same entity."

³⁰ I accept Bollack's text (1969, 2, 263, fr. 699), which is nearer to the ms. in several points.

³¹ See fr. 110.2.

result of the passage of notions/elements from outside to inside the body of the disciple, but the notions/elements grow inside the disciple himself (from inside to inside), or leave him, if he betrays the teaching received (from inside to outside). Besides, in fr. 4.3, the notions receive the high-sounding name of λ ó γ o ς (which evokes the Heraclitean discourse); the fragment describes the settling of knowledge inside the body as a physical substance.³² Again, fr. 106 describes the growth undergone by human intelligence according to the external conditions.³³ This reminds me of the acquisition of knowledge conceived as a physical substance and its subsequent growth in frr. 4 and 110, and even of the exchange of effluences among "mortal things". Lastly, the contents of fr. 108 correspond to these views; here, at least according to the late commentator Philoponus, the changes undergone in daytime explain alterations in perception as oneiric visions by night;

γ. According to Aristotle, the ἀρχαῖοι believed in the identity of thought (νοεῖν), knowledge (φρονεῖν), and sensation (αἰσθάνεσθαι), as all of them are caused by transformations undergone by the soul; this is what we learn from *de an*. Γ 3.427a17–b7, and *Metaph*. Γ 5.1009b 12–17.³4 Like his master, Theophrastus is persuaded that thought and sensation are far from being the same, but he offers a slightly different interpretation of Empedocles' view on such relationship in *de sensu* 10 (=A86, 10): according to him, understanding would have been the same *or more or less* the same as sensation;³5

δ. In fr. 105, which I read according to Bollack's text (fr. 520),³⁶

³² "Know, once the discourse made to pieces has settled in your inward parts", γνῶθι διατμηθέντος ἐνὶ σπλάγχνοισι λόγοιο. I preserve the *lectio tradita* διατμηθέντος (with Bollack 1969, 2, 13, fr. 27).

³³ "Human intelligence grows according to circumstances", πρὸς παρεὸν γὰρ μῆτις ἀέξεται ἀνθρώποισιν.

³⁴ For the text of two passages see n13 above.

³⁵ No contradiction should be perceived in the circumstance that in *de sensu* 23 and 25 (=Alcmaeo A5) Theophrastus seems to witness a perfect coincidence of thought and sensation, because in both the latter passages he is quickly summarizing Empedocles' views.

³⁶ On this fragment cp. Jouanna (2012) 218-219.

much closer to the mss.,

...αἵματος ἐν πελάγεσσι τετραμμένα ἀντιθορόντος. Τῆ τε νόημα μάλιστα κικλήσκεται ἀνθρώποισιν· αἷμα γὰρ ἀνθρώποις περικάρδιόν ἐστι νόημα.

"...turned along (scil. the elements?) through the sea of blood, which leaps against them. There they (the elements?) specially receive the name of thought by men. In fact, the blood around the heart is thought for men,"

the transmitted reading τετραμμένα (neuter plural), unduly corrected by most editors, may agree with ἀραιότατα (fr. 104):

Καὶ καθ' ὅσον μὲν ἁραιότατα ξυνέκυρσε πεσόντα... 37

"...and in such measure as the finest (pieces of the elements) fell together..."

According to fr. 105.2, the blood around the heart *especially* (μάλιστα) "is" thought. The word νόημα in that line corresponds to Thphr. *De Sensu* 10 (=A86, 10): "(Empedocles says that) therefore understanding (φρονεῖν) is effected *especially* by means of the blood." But the third line of the fragment even contrasts the blood around the

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³⁷ As to the *spiritus asper* on άραιότατα, preserved by the Simplicius mss., and ignored by most editors, see Bollack (1969) III, 2, 453 n1; Chantraine (1968–1980) 101. — Simpl. *Phys.* 331.10–14 does not ascribe this line to the κοσμοποιία, but generically to "Empedocles' Φυσικά"; therefore it may well refer to the elements which can be best blended in the blood of all parts of the body (ἐν τούτφ...μάλιστα κεκρᾶσθαι ἔστι τὰ στοιχεῖα τῶν μερῶν: Thphr. *De Sensu* 10=fr. 420, 10 Bollack), and consequently are also likely to be the subtlest (ἀραιότατα); such elements could well appear to Empedocles to be "turned along" through the blood (τετραμμένα). It is interesting to compare fr. 105 and fr. 98: see McKirahan (2011²) 283 n90.

³⁸ Διὸ καὶ τῷ αἵματι μάλιστα φρονεῖν. — The φρένες (or the πραπίδες), frequently mentioned by Empedocles in connection with knowledge and understanding, are very likely to be identified with the lungs, an organ richly irrorated by blood and set before the heart: Onians (1951) 23–43. Cp. Ireland–Steel (1975). Porphyrius words in introducing the fragment (see de Styge fr. 2, p. 100 Castelletti) confirm that blood, and not the heart, was the see of understanding (Ἑμπεδοκλῆς τε οὕτω φαίνεται ὡς ὀργάνου πρὸς σύνεσιν τοῦ αἵματος ὄντος λέγειν).

heart with the rest of the body: one might gather that thought is the produce of the blood circulating around the heart, while perception — a less refined process — is effected by the rest of the body (although also the rest of the body like all mortal things and the elements themselves "think and feel" to some degree, as we have seen); it should be noted that thought is mainly reserved to blood around the heart by Empedocles, while it is assigned to blood altogether by Theophrastus.

As a matter of fact, both by the use of the word $v\acute{o}\eta\mu\alpha$ (which could not be deprived of its Parmenidean echoes)³⁹ in fr. 105 and by means of the locution $v\acute{o}\omega$ perilynpta in fr. 2.8, Empedocles had started to differentiate thought from sense. The possibility that, according to Empedocles, thinking depended upon the effluences permeating the pores and vehicled by the blood to the heart was envisaged, although with some uncertainty, by Long, resumed by Wright, and is even taken for granted by Jouanna and Sassi, but the evidence is incomplete. Anyhow, this supposed circulation of the effluences through the blood would provide no proof of the equivalence of thought and sensation in Empedocles.

4. A conflict in Empedoclean epistemology

At the beginning of $\S 2$ I have touched upon the harsh contrast between the empirical approach to the knowledge of nature in fr. 2/3 and the dogmatic approach to theology in the four frr. 131–134.⁴¹

³⁹ According to Coxon (1986) 209, "νόημα is the concept entertained, as distinct from its entertainment (νοεῖν, νόος)."

⁴⁰ Long (1966) 268-270; Wright (1981) 252; Jouanna (2012) 206-207; Sassi (2022) 11.

⁴¹ At fr. 131.1 εἰκ ἄρ' is a reading very close to the *lectio tradita*, which I accept against the *vulgata* εἰ γὰρ: see Gallavotti (1975) 161–162. This reading shows the proemial character of fr. 131, which rules out the possibility that the four fragments come from the same poem as fr. 2/3 (i. e. fr. 131 and the three following cannot come from the *Physical Poem*). On ἀθέσφατος see Fränkel (1923) 282.

In Santaniello (2022) 206–222 I have argued that the latter four fragments are part (perhaps together with fr. 142) of the lost *Proem to Apollo*, and I have analysed the hymnical character of these lines. On the whole cp. Solmsen (1980).

- fr. 131 εἰκ ἄρ' ἐφημερίων ἕνεκέν τινος, ἄμβροτε Μοῦσα, ἡμετέρας μελέτας <ἄδε τοι> διὰ φροντίδος ἐλθεῖν, εὐχομένω νῦν αὖτε παρίστασο, Καλλιόπεια, ἀμφὶ θεῶν μακάρων ἀγαθὸν λόγον ἐμφαίνοντι.
- fr. 132 ὄλβιος, δς θείων πραπίδων ἐκτήσατο πλοῦτον, δειλὸς δ', ῷ σκοτόεσσα θεῶν πέρι δόξα μέμηλεν.
- fr. 133 οὐκ ἔστιν πελάσασθαι ἐν ὀφθαλμοῖσιν ἐφικτόν ἡμετέροις ἢ χερσὶ λαβεῖν, ἦπέρ τε μεγίστη πειθοῦς ἀνθρώποισιν ἁμαξιτὸς εἰς φρένα πίπτει.
- fr. 134 οὐδὲ γὰρ ἀνδρομέη κεφαλῆ κατὰ γυῖα κέκασται, οὐ μὲν ἀπαὶ νώτοιο δύο κλάδοι ἀίσσονται, οὐ πόδες, οὐ θοὰ γοῦν(α), οὐ μήδεα λαχνήεντα, ἀλλὰ φρὴν ἱερὴ καὶ ἀθέσφατος ἔπλετο μοῦνον, φροντίσι κόσμον ἄπαντα καταΐσσουσα θοῆσιν.
- fr. 132 "Happy he who has acquired a wealth of divine knowledge,
 Disgraceful he who has an obscure opinion about the gods."
- fr. 133 "It is not possible to bring (the divine) nearer to us, so that it may be reached With our eyes or grasped with our hands, by which means widest The way of persuasion falls into the minds of men."
- fr. 134 "In fact, he is not provided with a man's head on his body,
 Nor do two branches shoot from its back,
 No feet, no swift knees, no woolly genitals,
 But he is only a holy, sovereign mind,
 Darting through all the world with quick thoughts."

In fr. 131 Calliopeia is called by her name, unlike the anonymous Muse of fr. 3. Besides, the latter is asked to inspire the poet a teaching well inside the limits of Piety, whereas in fr. 131 Calliope is simply to stand by Empedocles, and no limit is prescribed to him while he is going to disclose "a good discourse concerning the blessed gods" — from the start he is sure that his discourse will be good. Lastly, there is a decisive difference between fr. 2/3 and fr. 131 as to the means by which knowledge is acquired: according to fr. 2/3, this includes the mind and each of the senses; according to fr. 131, instead, the poet is already in possession of true knowledge of the gods.

Fr. 132 confirms the happy condition of him who has acquired (ἐκτήσατο) safe knowledge about the gods.

Fr. 133 is the most interesting of the four fragments from the epistemological point of view; it declares that $\tau \hat{o} \theta \epsilon \tilde{i} o v$, i. e. the divine as a whole, is not to be perceived through the senses.

Now, on what grounds am I so sure that this idea of the divine is incompatible with the *Physical Poem*? Here are two important clues. The first: because the quick thoughts of the Holy Mind can hardly be imagined as corporeal in their darting throughout the kosmos (otherwise, perhaps, the word φροντίσι would have been out of place).⁴² And, if this were simply a sort of immanentist theology, simply another way of describing the divine life animating the elements, Empedocles would not have been likely to mention the "thoughts" of the Holy Mind. At least the incorporeality, if not the immateriality, of the Holy Mind, although far from being universally accepted, has been

⁴² φροντίς means "thought", "care" (LS s. v.; cp. Chantraine 1968–1980, 1228 "soin, souci, sentiment, pensée").

recognized by many scholars.43

And here is the second clue. The Περὶ φύσεως concerns "things that can be seen" (fr. 23.10), which originate from the elements (fr. 21.12–14: θεοὶ δολιχαίωνες, cp. fr. 23.8–11). Instead, the gods or τὸ θεῖον or Apollo concerned in frr. 131–134 (cp. the sources quoted by D.–K.) are absolutely not perceptible through the senses. Therefore, they cannot be mistaken with the gods, limited in time as "long-lived" and perceptible through the senses, described in frr. 21 and 23.44

5 Final remarks

The analysis of both fr. 2/3 and of the other epistemological fragments and witnesses dealt with in section 3.b suggests that Empedocles made the first steps towards the assertion of a role of the mind distinct from that of sensation. On the other side, frr. 131–134 do not seem to fit the context of his two main works. I am not persuaded by the attempt effected by many to force these latter precious relics into the empiricism of the *Physical Poem* or, even less, into the Aphrodite-

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⁴³ Immateriality: Alt (1987) 396–397 ("ein nicht-elementares Sein"). Incorporeality: already clearly stated by Fränkel (1923) 281 ("körperlosen Gott"); see, in more recent times, Curd (2005) 157 n25: "The holy *phren* has no body and it is clearly better than a human"; cp. Curd (2013). Sider (2022) 55 includes "incorporeality" among the "notions invented" by Presocratics. I cannot accept several supposed identifications of the Holy Mind: Sphairos (Jaeger 1947, 162; Zuntz 1971, 218; Primavesi 2008, 258–259); the whole physical cycle (Darcus 1977, 181–185); Love (Van der Ben 2019, 33–34). Tzetzes' claim (*Chiliad*. VII 522) that the fragment came from the third book of the Περὶ φύσεως has raised endless polemics: this supposed third book may well have been a miscellany including the $K\alpha\theta\alpha$ ρμοί and passages from the lost works.

⁴⁴ Fr. 23.10: ὅσσα γε δῆλα γεγάκασιν. Fr. 21.12–14:...θεοὶ δολιχαίωνες τιμῆσι φέριστοι. αὐτὰ γὰρ ἔστιν ταῦτα, δι'ἀλλήλων δὲ θέοντα/γίγνεται ἀλλοιωπά· τόσον διὰ κρῆσις ἀμείβει ("long-lived gods, excellent in honours. It is right them, but, by running through one another, /they alter their shapes; so much does the mixing change them"); cp. fr. 23.8. For the identification of the "long-lived gods" with the elements see Santaniello (2012) 303–304, and the bibliography quoted there, nn8 and 9.

centred mythology of the *Purifications*.⁴⁵ But, no matter whether those fragments belong to the *Proem to Apollo* (as I deem likely) or not, they show the awareness that not all objects are perceivable through the senses — the distinction between τὰ ἀφανῆ and τὰ θνητά ("invisible things" and "mortal things") dates at least from Alcmaeon of Croton.⁴⁶ Fr. 134 offers a trace of an anti-traditional cult of Apollo (as indisputably witnessed by its source, Ammonius) — something similar to what, in connection with Orpheus, M. L. West called an intellectual cult of the sun — an aspect of the Empedoclean teaching which is underestimated.⁴⁷ But the series of fragments 131–134 represents an important stage in the intellectual history: as Parmenides' mind in his fr. 4, although in a different way, Empedocles' mind, being aware of the god or of the gods, brings even what is out of reach for the senses nearer to us.

⁴⁵ For instance, Wright (1981) 94 places fr. 131 almost at the beginning of the *Physical Poem* (as fr. 3) and frr. 132–133–134 at the end of the same work; and D.–K., followed by Bollack (2003), assign all fragments 131–134 to the *Purifications*.

⁴⁶ Alcmaeon fr. 1: περὶ τῶν ἀφανέων, περὶ τῶν θνητῶν κτλ. (τὰ ἀφανῆ are the objects unattainable by senses; τὰ θνητᾶ, the "mortal things", those attainable). Of course, apart from this distinction, Alcmaeon fr. 1 seems to be much nearer to skepticism than to Empedoclean empiricism.

⁴⁷ West (1983) 13. More on this in Santaniello (2022).

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