

XXII · ALEXANDER PHILALETHES (*AP.*)

A · INTRODUCTION

One of the more intriguing later Herophilans, Alexander Philalethes ('the Truth-Lover') seems to have lived roughly from 50 B.C. to A.D. 25.¹ No later than 7 B.C. he apparently succeeded Zeuxis² as leader of the famous Herophillean school at the temple of Men Karou, near Laodicea (in present-day Turkey) on the great Eastern trade-route, and he soon attracted pupils who became distinguished Herophilians, among them Aristoxenus³ and Demosthenes Philalethes.⁴

Alexander himself was, however, not trained in the Herophillean school – either in Alexandria or in Asia Minor – but at first was a follower of Asclepiades of Prusias-on-Sea, a Bithynian 'atomist' who also practised medicine in Rome.⁵ With the obvious exception of Herophilus, who was trained under the Coan physician Praxagoras,⁶ no other Herophillean is known to have joined the ranks of the Herophilans, let alone become their leader, after being trained by an outsider. Yet there seems little doubt that Alexander not only had

been a student of Asclepiades but also remained strongly under his influence after assuming the leadership of the Herophillean school, at least if Alexander's surviving views may be used as a yardstick.

Vindician (or whoever wrote the tantalizing fragment *De semine* in the twelfth-century Codex Bruxellensis 1348–59) reports that Alexander 'amator veri appellatus', i.e. Philalethes, was a student (*discipulus*) of Asclepiades,⁷ and even if one were inclined to interpret this statement metaphorically – not that Vindician is liberal or licentious with his metaphors – there is enough evidence to suggest a close relationship. Caelius Aurelianus, for example, implies that Alexander and Asclepiades held identical views on lethargy,⁸ and the author of a famous papyrus in the British Museum, best known as Anonymus Londinensis, states that they had an identical theory of digestion.⁹ Furthermore, the Anonymus introduces 'the followers of Asclepiades and Alexander Philalethes' as though these were all adherents of the same school of thought.¹⁰

Although crucial parts of the papyrus are riddled with lacunae and virtually illegible, two passages even seem to suggest that Alexander in physiological contexts used the same kinds of arguments that the atomists had used. While Asclepiades was not an orthodox atomist, he was a corpuscular materialist who apparently substituted for 'atoms' the notion of corpuscules or molecules (*ὄγκοι*) as the ultimate, discrete (but perhaps not indivisible) constituents of all bodies¹¹ – a

¹ *AP.* 9.

² *AP.* 12. Caelius Aurelianus' reference to Alexander as 'Alexander of Laodicea in Asia' [sc. Minor] does not necessarily imply that Alexander was born in Laodicea, but could instead be a reference to his position as leader of the Herophillean school near Laodicea.

³ *AP.* 6. Some critics have argued that Alexander's *Opinions* (τὰ δεικνόντα), a work in at least five books (see *AP.* 3), was used as a direct source by Anonymus Londinensis, and while it cannot be demonstrated conclusively, a good case can be made for this hypothesis. Cf. Diels, 1893b and 1893a: 111–12. A doxographic orientation has also been attributed to Alexander's treatise *On Seed* (*AP.* 9), but the sequence *dixit* . . . *dixit*, etc. (see Chapter vii, T191) does not confirm beyond doubt that Vindician's [?] entire report is ultimately derived from Alexander's *On Seed*. See Diels, *DG*, pp. 185ff.

⁴ *AP.* 7: οἱ περὶ Ἀσκληπιοῦ καὶ Ἀλέξανδρου τῶν Φιλαλήθων. The text is, however, mutilated and 'Asclepiades' is the conjecture of F. Kenyon (accepted by Hermann Diels and W. H. S. Jones).

⁵ Cf. S. E., *P.* 3: 32 (ὄγκιον ὄγκοι) and *M.* 10: 318 (= *Adv. Phys.* 2: 318); ps-Galen, *De historia philosophia* 18 (*DG*, p. 610, lines 21ff.); ps-Galen, *Introducō sine medicina* 9 (xiv, pp. 698–9K); Galen, *Ad Pisonem de theriaca* 11 (xiv, pp. 250ff.); εἰ τὴν γὰρ ἔξ

¹ Strabo (c. A.D. 64–23) refers to both Alexander and the latter's predecessor Zeuxis as his own contemporaries (*AP.* 1), and this might indicate that Alexander was a younger contemporary. On 'Philalethes' see D. L. 1.17; Benedictum, 1978.

² Strabo, who completed most of his *Geography* by 7 B.C., reports that Alexander had already succeeded Zeuxis as leader of the school at the time of writing. Cf. Chapter xx1. A and Ch. xx1 n. 13.

³ *AP.* 2 Chapter xxv, *Ar.* 3.

⁴ Cf. *AP.* 3, and Chapter xxvii, *DP.* 1 and *DP.* 3.

⁵ On Asclepiades of Bithynia, on whom Wellmann, 1896a, initially passed harsh judgment ('In der Geschichte der ärztlichen Charlatanerie nimmt Asklepiades eine hervorragende Stelle ein'), see above Chapter II, n. 47, and Scarborough, 1975; Dilthey, 1922: 247ff.; Heidel, 1911: 111–72; Ueberweg & Praechter, 1926: Appendix p. 138*; Lonic, 1965a: 126–43; G. Häring in Mette & Wintner, 1968: 78–81; Albutt, 1921: 177–91; Rawson, 1982. Cf. Ch. II, T1, T1.6. Chapter II, T9–T11.

notion previously advanced by Heraclides of Pontus¹² – but in some respects he remained close to Epicureanism. One of the crucial distinctions Epicurus had employed in his ‘Canon’ or theory of method and knowledge is the one between visible and invisible reality, or between what is perceptible by the senses (e.g. sweet, bitter), and what is apprehensible by reason alone (e.g. atoms, void). Although the basic distinction goes back to the Presocratics, some of the terminology – especially λόγῳ θεωρητῶν or διὰ λόγου θεωρητῶν – is specifically Epicurean.¹³ The same distinction, with the same Epicurean terminology, seems to have been expropriated by Asclepiades and then used by Alexander. Thus they use a theory of invisible passages (*poroi*), ‘apprehensible only by reason’, through which invisible corporeal emanations and intrusions – presumably of molecules or subsensory molecular clusters – take place.¹⁴ One of the arguments advanced to substantiate this theory concerning invisible passages is also of Epicurean provenance: body cannot pass through body.¹⁵ In function and legitimation the invisible *poroi* accordingly correspond closely to Epicurus’ and Democritus’ notion of the void. Unfortunately no further details survive concerning the specific physiological uses to which Alexander put these principles, but their provenance seems clear.

Whereas some Herophileans had become interested mainly in Hippocratic philology and in pharmacology,¹⁶ thereby emphasizing the same areas of inquiry as their Empiricist rivals, Alexander was primarily interested in physiology and gynaecology (at least if the extant testimonia allow any such generalization). Not only the general adaptation for physiological purposes of the principles of ὄγκοι and τῶποι or corpuscles and invisible passages – in a manner corresponding to atoms and void – and the theory of visible as well as invisible emanations from the body, but also a strong interest in a traditional Herophilean stronghold, pulse theory, is attested for Alexander. He produced two definitions of the pulse, called ‘objective’ and ‘subjective’ respectively. His so-called ‘objective’ definition – ‘the pulse is an involuntary contraction and distention of the heart and the arteries, such as can become apparent’¹⁷ – represents an orthodox Herophilean position. First, relatively early in the history of pulse lore, the Herophileans Bacchius and Zeno had already introduced ‘distention’ (*diastasis*) as an alternative to Herophilus’ use of ‘dilation’ (*diastole*),¹⁸ and second, the emphasis on the responsibility of both the arteries and the heart for pulsation dates back to Herophilus himself.¹⁹ Third, Alexander’s phrase ‘such as can become apparent’ is apparently a reply to those who had questioned whether all ‘parts’ of the pulse are perceptible by our tactile sense, and Alexander seems to elaborate upon this issue in his second or so-called ‘subjective’ definition of the pulse: ‘The pulse is the beat of the continuous, involuntary motion of the arteries *against one’s touch*, and the interval occurring after the beat.’²⁰ Here, too, Alexander is solidly in the Herophilean camp: the Herophilean Chrysermus also found it necessary to emphasize in his definition of the pulse that it ‘can be apprehended by sense-perception’, perhaps in answer to the charge that Herophilus had not been explicit on this point.²¹ If

δρόμου καὶ τοῦ κενοῦ κατὰ τὸν Ἐπικουρίου τε καὶ Διουσκορίτου λόγου συνεστήθηκε τὰ πῶτα, ἢ ἕκ τινῶν ὄγκων κατὰ τὸν ἱερῶν Ἀσκληπιιδῶν...

For a somewhat different use of ὄγκος by the atomists themselves, cf. Democritus 68A1 (D.L. 9.44), 68A37DK; Epicurus *Letter to Herodotus* 52–54, 56–7, 69; *Letter to Pythocles* 105; fr. 21.3, 30.24, 34.14 Arrighetti (2nd ed.).

¹² On Heraclides Ponticus, see S.E., *loc. cit.* (n. 11); fr. 118–23 Wehrli (vol. 7). Although it has often been argued that Heraclides took over his theory from the Pythagorean Euphantus, there is no evidence that Euphantus, though he used atomistic notions, introduced the concept ὄγκος (cf. 51A1–4DK). Furthermore, while Heraclides’ ‘molecules’ are capable of being affected – i.e. perhaps, as some have argued, divisible – and exhibit qualitative differentiation, the ‘atoms’ introduced by Euphantus are explicitly said to be ‘invisible bodies’ (51A1–2 and A4DK) – an expression used by Euphantus, says the doxographer Aëtius (*Placita* 1.3.19; DG, p. 286), to designate the Pythagorean corporeal units [monads]. Cf. Lomte, 1965a; Burkert, 1962: 38, 319 n.17; Wehrli, 1967–9: vol. VII, pp. 101–3; Tamery, 1898. See also Thesleff, 1965: 6, line 1, and p. 23, note on line 22. Cf. Gutschalk, 1980: 37–57.

¹³ Cf. Epicurus, *Letter to Herodotus* 47 and 62 (pp. 43–57 Arrighetti); *id.*, *Kyriai Doxai* 1 (= *Genomologium Valtianum* 1), p. 121 Arrighetti. On Epicurus’ use of θεωρητῶν see Furley, 1971: 615. ¹⁴ *AP* 5 and *AP* 7. ¹⁵ *AP* 5.

¹⁶ Cf., for example, Chapters xi (Andreas), xiv (Bacchius), xv (Zeno), xxiii (Apollonius Mys).

¹⁷ *AP* 3.

¹⁸ Cf. Chapter XIV, Ba.2. Bacchius, is, however, not consistently reported to have used *diastasis* instead of *diastole*. In another passage, Galen attributes the use of *diastole*, not *diastasis*, to Bacchius; cf. Ba.1. For Zeno’s usage see Chapter xv, ζη.1 (and cf. ζη.2: the arteries ‘are distended’, διστέονται).

¹⁹ Chapter vii, T148, T153–T155.

²⁰ *AP* 3.

²¹ Chapter xx, Cr.1. Chrysermus’ pupil, Heraclides of Erythrae, apparently no longer found perceptibility a controversial issue and jettisoned this part of

Alexander shared the sensualistic epistemology of his teacher Asclepiades, this particular elaboration upon Herophilus' definition might have been of special significance. The addition of 'and the interval' is a pointed departure from Herophilus (cf. Ch. VII.A.4, p. 277).

Other physiological problems which interested Alexander include digestion and nutrition: 'In the belly nutriment is merely cut up and made into juice, and a certain predisposition is effected in it but definitely not an assimilation to what is akin'²² — a view opposed to that of the Anonymus Londinensis²³ and numerous other ancient authors, including Aristotle (who taught that the heat in the stomach also sets the important process of concoction in motion).²⁴

Alexander's approach to the nature of blood again reveals the sensualistic confidence of the materialist: 'Whatever blood is *in appearance*, of such a kind it is also in its faculties, viz. something simple and uniform.'²⁵ Despite his theory that blood is a mixture of the elements earth and water (with air sometimes listed as a third ingredient), Aristotle had, of course, classified blood among the *homoiomerē* (things having parts like each other and like the whole), and Alexander's emphasis on its 'uniform' nature might be a corruscular theorist's version of the Aristotelian emphasis on its homoeomeric or 'uniform' character.²⁶

A closely related problem to which Alexander Philalethes turned his attention is the origin and nature of male 'seed'. Like Aristotle, Herophilus, and physicians of the Pneumatic school of medicine (especially Athenaeus), Alexander accepted the theory of the haematogenous origin of 'seed': 'The essence of seed is the froth of the blood.'²⁷ This theory put him squarely in opposition to the atomists,

Chrysermus' definition; see Chapter XXIV, *HE.2*. Cf. also Chapter VII, T160-T161, where Herophilus' views (on arterial motions perceptible to one's touch) in fact seem to be expressed clearly.

²² *AP.6*.
²³ *Ibid.*

²⁴ Cf., for example, Aristotle, *De anima* 2.4.416b2-30; *Parts of Animals* 2.3.650a2-2.4.651a19 and 3.1.4.674a9-676a5; *On Respiration* 8.474a25-8. (See also *Meteorologia* 4.2.379b12-4.3.381b22.) For the role of concoction in reproduction cf. *Generation of Animals* 3.2.753a18ff. (cf. also 4.1.765b15ff.; 5.6.786a17ff.).

²⁵ *AP.8*.

²⁶ Cf. Aristotle, *Parts of Animals* 2.2.647b10-648a23, and 2.3.649b20-2.6.652a23.
²⁷ A testimonium concerning Book I of Alexander's treatise *On Seed* (*AP.9*). How many books this work comprised is unknown, but Vindician's [?] mention of Book I suggests that there were at least two.

because Epicurus had revived the pangenesis theory shared by Democritus and some Hippocratic²⁸ — i.e. the theory that all parts of the body contribute substantively to the formation of 'seed'. Here, as in his sphygmology, Alexander's Herophillean loyalties seem to dominate, whereas in most other areas his sympathies with Asclepiades' corpuscular physics seem to have gained the upper hand in the contest between teacher and pupil.

In his work *Gynaecology* — a treatise in at least two books²⁹ — Alexander addressed himself to problems discussed both by Asclepiades and by some Herophilleans. Thus, on the controversial question whether there are any diseases peculiar to women, his negative answer lines him up on the side not only of Herophilus³⁰ and the Herophillean Apollonius Mys³¹ but also of Asclepiades³² (and hence on the opposite side of the Herophillean Demetrius of Apamea³³ and the Asclepiadean Lucius³⁴). On another question, however, viz. the nature of 'the female flux', he apparently took over Demetrius' definition, but with a restrictive modification.³⁵

It remains unclear whether the Alexander to whom Galen ascribes several remedies — two compounds for headaches, one a *ephorsion* for catarrh and coughing — is in fact Philalethes, and I have therefore listed them among the *Dubia*.³⁶ In view of a slightly later Herophillean's strong therapeutic interest both in headaches and in *ephoristia* or

²⁸ Cf. Lesky, 1950: 1294-1343 (= pp. 70-119); Ch. VII.A.5 *supra*.

²⁹ Soranus mentions Book I of Alexander's *Gynaecia*, implying that it consisted of at least two books (*AP.10*).

³⁰ *AP.11*. See Chapter VII, T193-T194.

³¹ Chapter XXIII, *AM.7*.

³² Soranus, *Gynaecia* 3.2 (*CMG* IV, pp. 94-5 Ilberg) = *AP.11*.

³³ Chapter XVI, *DA.18*.

³⁴ Soranus, *loc. cit.* This Lucius (Νοῦκος Ἰβερῶν; *Βασιλειος P*) is probably not identical with the famous pharmacologist Lucius or Teuklos (ὁ κοδῆν/τητῆς) with whom Asclepiades' Pharmacology studied (cf. Galen, *De compositione medicamentorum per genera* 3.9 (XIII, p. 648K); Kind, 1927a), but rather the Lucius or Tisius whom Caelius Aurelianus quotes in his *Chronic Diseases* 2.1.59, 2.7.111, 4.3.78-9. Cf. also Wellmann, 1900a: 366; Kind, 1927b.

³⁵ For Demetrius of Apamea's definition, see Chapter XVII, *DA.17*. Whereas Demetrius had defined the 'female flux' as 'a flow of fluid matter through the uterus over an extended period of time' (*DA.17*), subsurning under 'fluid matter' vaginal discharges of four different colours and with two different kinds of effects, Alexander seems to restrict his definition of 'female flux' to menstruation by substituting 'a greater amount of blood' for 'fluid matter'.

³⁶ *AP.14a*, *AP.14b*, *AP.15*.

common remedies,³⁷ it is tempting to suggest that Philalethes, too, wrote on these problems and that these three drug prescriptions are his work. But this argument remains too speculative to emancipate them from their uncertain status.

Finally, Alexander's work *Opinions*, in at least five books (*AP.3*), is a further link in a doxographic chain that seems to stretch back to Herophilus himself.

The picture which emerges from the few extant testimonia is therefore that of an eclectic physician with strong theoretical interests who represented an amalgam of the principles of Asclepiades' corpuscular theory and Herophilus' pulse theory, but who nevertheless inspired the continuation of a relatively orthodox Herophilean school in Asia Minor for at least a further generation.

B. TEXTS

- AP.1* Strabo, *Geographica* 12.8.20 (580c). See also Appendix, III, *infra*.
AP.2 Galenus (ex Aristoxeno?), *De pulsuum differentiis* 4.10 (VIII, p. 746K)
AP.3 Galenus (ex Aristoxeno?), *De pulsuum differentiis* 4.4-5 (VIII, pp. 725-7, 731K).
 See below, Chapter xxviii, *DP.1*.
AP.4 Galenus (ex Aristoxeno?), *De pulsuum differentiis* 4.10 (VIII, p. 744K)
AP.5 Papyrus Londinensis 137 (= Anonymus Londinensis, *Litrica Menonia*), 38.58-39.13 (*Supplementum Aristotelicum* III.1, p. 73 Diels)
AP.6 Papyrus Londinensis 137 (Anon. Lond.), 24.27-35 (p. 44 Diels)
AP.7 Papyrus Londinensis 137 (Anon. Lond.), 35.21-9 (p. 65 Diels)
AP.8 Papyrus Londinensis 137 (Anon. Lond.), 35.53-36.2 (p. 66 Diels)
AP.9 Vindicianus (?), *De semine fragmentum Bruxellense* (Wellman, 1901: p. 208; Jaeger, 1938a: 191).
 See above, Chapter VII, T191.
AP.10 Soranus, *Gynaecia* 3.43 (*CMG* IV, p. 122 Ilberg). See Chapter VII, T203-T204; cf. Drabkin, 1951: 87.
AP.11 Soranus, *Gynaecia* 3.2 (*CMG* IV, pp. 94-5). See above Chapter VII, T193-T195.
AP.12 Caetus Aurelianus, *Celeres vel acutae passiones* 2.1.5-6
AP.13 Galenus, *De pulsuum differentiis* 4.16 (VIII, p. 758K)

³⁷ Apollonius Mys; see Chapter xxiii, *AM.10-47*.

Dubia

- AP.14a* Asclepiades Iunior apud Galenum, *De compositione medicamentorum secundam locos* 2.1 (XII, p. 557K)
AP.14b Asclepiades Iunior apud Galenum, *De compositione medicamentorum secundam locos* 2.2 (XII, p. 580K)
AP.15 P.-Galenus, *De remediis parabilibus* 3 (XIV, p. 510K)
AP.16 Codex lat. Vendôme 109 (s.XI), fol. 58r. (Wickersheimer, 1966: 176-7)
AP.17 Iohannes Alexandrinus, *Commentaria in librum De sectis Galeni*, proem. 2r5-8 (p. 14 Pritchett)
AP.18 Agnellus Ravennas(?), *In Galeni De sectis comm.* 4 (p. 22 S.U.N.Y., Arethusa Monogr. 8)