

## PLATO AND MEDICAL TEXTS: SYMPOSIUM 185c–193d<sup>1</sup>

The dramatic date of *Smp.*<sup>2</sup> is 416 (Agathon's first tragic victory); the date of narration is c. 400 (from 172c, many years since Agathon left Athens); the date of composition is perhaps c. 380 (from 193a2, allusion to events of 385).<sup>3</sup> The only certainty in this supposed chain of construction is the final link: writing by Plato. A further certainty is that many medical works, including many treatises of the Hippocratic Corpus, were in circulation by the last decades of the fifth century.<sup>4</sup> The language of medicine seen in the speeches of Eryximachos and Aristophanes,<sup>5</sup> two of the first five speakers who discourse on *eros*, is here discussed.

It has frequently been noted that Eryximachos uses medical terminology akin to that of particular Hippocratic works, notably *Flat.*, *Vict.* 1, *VM*. It has been observed too that Aristophanes draws on general medical ideas such as those presented in *Nat. Hom.* and *Vict.* 1. More specific parallels, especially with the surgically technical *Artic.*, are here outlined, and it is argued that Aristophanes' play on medical ideas is more extensive, and his expression more technical, than hitherto realized; that certain techniques of anatomical exposition are favoured; that Hippocratic didactic expressions are present, and several idioms characteristic of Ionic prose can be isolated. This Platonic parody of an Aristophanic parody of Hippocratic discourse is seen to be important evidence for the dissemination of medical material in the late fifth and early fourth century, and a demonstration of the extent to which this pervaded intellectual discourse. Finally, the nature of Plato's own extensive medical knowledge and the clever use he makes of it in these interlocking speeches is briefly discussed.

Eryximachos, who presides over the debate, is a real person from a real medical family (Pl. *Prt.* 315c, *Phdr.* 268a; cf. X. *Mem.* 3.13.2). The name (lit. 'combating retching'), was probably an auspicious one in a medical family (retching and vomiting being a regular part of medical symptoms and treatment) but is treated with bathos, as here Eryximachos combats merely a fit of hiccups.<sup>6</sup> His prescriptions at 185d–e are given in

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<sup>2</sup> The following works are cited by author's name alone. Editions: R. G. Bury (Cambridge, 1909 and 1932<sup>2</sup>); L. Robin (Platon IV.2, Budé edn, Paris, 1929); K. J. Dover (Cambridge, 1980). Translations: W. Hamilton (Harmondsworth, 1951 and repr.); R. Waterfield (Oxford, 1994). Other works: P. Cordes, *Iatros*, *Palingenesia* 39 (1994); R. B. Rutherford, *The Art of Plato* (London, 1995), ch. 7 'The Symposium'.

<sup>3</sup> For bibliography on questions of chronology, see W. K. C. Guthrie, *A History of Greek Philosophy* 4 (Cambridge, 1975), 365, nn. 2 and 3.

<sup>4</sup> There was of course no 'Hippocratic Corpus' at this date. See E. M. Craik, *Hippocrates: Places in Man* (Oxford, 1998), 1–8.

<sup>5</sup> On Eryximachos, see L. Edelstein, 'The role of Eryximachus in Plato's *Symposium*', *TAPhA* 76 (1945), 85–103, repr. in O. and E. L. Temkin (edd.), *Ancient Medicine: Selected Papers* (Baltimore, 1967), 153–71; D. Konstan and E. Young-Bruehl, 'Eryximachus' speech in the *Symposium*', *Apeiron* 16 (1982), 40–6; on Aristophanes, K. J. Dover, 'Aristophanes' speech in Plato's *Symposium*', *JHS* 86 (1966), 41–50; H. Neumann, 'On the comedy of Plato's Aristophanes', *AJPh* 87 (1966), 420–6.

<sup>6</sup> The name is not Plato's invention; but may have motivated his invention of the incident of the hiccups (Bury, xxix).

serious medical vein with repeated use of the 'medical' adjective *ἰαχυρός*: Aristophanes should hold his breath (cf. *ἀπνευστί*, *Int.* 12) or 'induce' a sneeze (*κινεῖν*, the medical term for digestive manipulation; and for a sneeze stopping hiccups, cf. *Aph.* 6.13). In his speech, Eryximachos agrees with the previous speaker Pausanias that there are two *erotes*, but alters and extends his argument. Eryximachos argues that there are two *erotes* in Nature, not just in human life; that these must be kept in balance; and that the doctor, being concerned with similar manipulation of bodily balance, understands such matters.

Much attention has been paid to this speech, but critics disagree on the tenor of Plato's presentation. Eryximachos is commonly dismissed as pompous, pedantic, and pretentious, the object of satirical caricature; but some find him rather a person of authority and distinction, given a sympathetic treatment.<sup>7</sup> The ideas of the speech owe something to the cosmological speculation of Herakleitos, Empedokles, and others, but are more closely related to current medical theories on bodily repletion and depletion. Parallels for both content and expression may readily be found in many Hippocratic works (*Flat.* 1, *Nat. Hom.* 7, 9, *VM* 9, *Vict.* 1.2, 2.56, 3.72, 3.75; cf. also the bromides of *Aph.* 2.22). In other respects too Hippocratic attitudes and locutions are adopted: for example, the stress initially on medical *technē* and mention later of the professional practitioner; the idea that 'change' is part of good medical practice. Thus, Eryximachos seems to be presented as an exemplar of his profession, holding stereotypical medical views (not unrelated to current views on the physical world) and expressing them in conventional medical language.

No writings attributed to Eryximachos have survived,<sup>8</sup> though it is probable that such a distinguished Athenian practitioner made some contribution to medical debate, and not impossible that some of his words or ideas are preserved in the Hippocratic Corpus or by other writers (e.g. Aristotle). Medical treatises were regularly anonymous, and source attribution is always less good than for other writing, including writing on medical subjects by some (e.g. Empedokles and Demokritos), who were conventionally viewed not as practising doctors, but as scientists.

The case of Aristophanes is much more complex. We can first attempt to compare the ideas in his speech with the content of his plays.<sup>9</sup> The quest for similarities yields no

<sup>7</sup> The hostile view of Eryximachos seems to begin with Gildersleeve, who in *AJP* 30 (1909), at 109–10 finds him dishonest, dogmatic, and pedantic; it is followed by Bury (xxviii, 'scientific pedantry'; xxix, 'dogmatic manner'; xxxiv 'awkwardness and monotony . . . tedious'), Robin (LI, 'un esprit de qualité inférieure'; LII, 'il est homme des règlements, des protocoles et des catalogues'), and Hamilton (15, 'strongly and cruelly drawn . . . as a pompous and oracular pedant'; 119, n. 17, '[Plato's] object . . . must be to satirize Eryximachos') who all find the treatment unfriendly. Edelstein (above, n. 5) makes a spirited defence of Eryximachos, arguing that Plato's intention was not to ridicule or scoff. Konstan and Young-Bruehl (above, n. 5) comment on the standard character of the debate (45, n. 1), 'It is remarkable how little these judgments, and even the language in which they are formulated, have changed in the last half century'; they usefully analyse Eryximachos' argument and find (44) 'a degree of systematic exposition and intellectual rigor . . . that is incompatible with sheer parody'. Waterfield is even-handed (Introduction, xxiii), 'It is true that he tends to force phenomena to fit into his scheme (but so did all of the early scientists, in some way or other)'. Rutherford reverts to the view of Eryximachos as (186) 'a . . . richly comic figure' with (187) a 'patronising manner', whose 'self-satisfaction . . . disqualifies him from being a serious contributor'. Cordes is oddly silent.

<sup>8</sup> Bury (xxix) mentions the bold theory of Pfeiderer that the real author of the Hippocratic *Vict.*, here parodied, was Eryximachos.

<sup>9</sup> Rutherford (190, n. 24) isolates these analogies with comedy: 'divine anxiety about missing out on sacrifices' (190c4–5); 'unkind reference to tragic or disturbing effects of recent history' (193a) and 'reference to politicians as passive homosexuals' (192a).

clear results; but *Birds*, closest in date to the dramatic date of *Smp.*, does seem to have some affinities in spirit: myth and cosmogony in the supposed origin of the birds; copious literary (including Aesopic) and scientific allusion, and relative freedom from political comment; play on the gods' dependence on sacrificial offerings. Dover has demonstrated the importance in Aristophanes' speech of fairy-tale or folkloric elements, such as were typically Aesopic; and others have found parody of such thinkers as Empedokles (DK 31 B 57–62) and affinities with other scientific and medical texts, including texts of the Hippocratic Corpus.<sup>10</sup>

The extent to which it engages directly with Eryximachos' presentation seems not to have been noted. Just as Eryximachos alters and extends the argument of Pausanias, so Aristophanes responds to his predecessor in this sympotic setting. In the first place there are several obvious verbal echoes: *κόσμος* of 187d reiterated at 189a, strikingly at the beginning of the speech, and *πλησμονή* of 186c repeated at 191c. Bury is content to find 'caricature' in the resemblance to *Vict.* 1: 'Aristophanes intended to satirize the theories of generation and of sex-evolution which were argued so solemnly and so elaborately by the confrères of Eryximachos.' Rather, Plato makes Aristophanes skillfully echo the tenor of Eryximachos' contribution. The interlacing of the speeches is signalled by Eryximachos' invitation to Aristophanes to 'fill up' any inadvertent gap in his discourse (*ἀναπληρώσαι*, 188e; the simple verb *πληρώω* is much used in describing the parallel medical procedures, *πλήρωσις* and *κένωσις*) and is picked up in Aristophanes' parallel injunction later to Eryximachos not to respond in the fashion of comedy (193b6): the doctor invites the comic poet to follow his medical suit and Aristophanes responds with a para-medical speech; the comic poet then teasingly mocks the doctor by forbidding him to use techniques of comedy.

At the beginning of the speech, Aristophanes explains that his hiccups stopped when he 'applied' (verb *προσφέρειν* used twice, medical *mot juste* of any treatment) a sneeze to them; so that he wonders if bodily 'order' (*τὸ κόσμιον τοῦ σώματος*, a grandiose expression with a scientific tone) depends on such 'noises and tickles'. Coughs and sneezes were recognized as simple treatment for some cases of vertebral dislocation, or slipped disc (e.g. *Artic.* 48). The tone is set, and the metaphor of *eros* as 'doctor' follows. Aristophanes then states that a necessary preliminary to his discourse is to learn 'the nature of man' and his *παθήματα*. The expression 'the nature of man' was a medical catchphrase and stress on the need to begin with 'the nature' of the topic under discussion is a typical Hippocratic introduction found in several treatises, especially on technical subjects where a need to define terms was felt, as at *Artic.* 1, 45 and *Fract.* 3. And the abstract noun *παθήματα* is a common Hippocratic term for pathological conditions (sixty occurrences in the Hippocratic Corpus; and for the conjunction of *φύσις* and *παθήματα*, cf. *Vict.* 1.12).

Aristophanes then proceeds to tell a story (employing the didactic method favoured by Protagoras, also essaying an account of human development, in *Pl. Prt.*) to explain the *ἀρχαία φύσις* of humankind. This phrase is used in medical texts, and especially frequently in *Artic.*, of an original condition, before illness or accident, such as the old, or natural, place to which dislocated bones must be returned.<sup>11</sup> The notion of a primeval human 'nature' that changed and developed with advancing civilization is

<sup>10</sup> Aesop: Dover at 113; for additional details, see Dover's article, above, n. 5. Empedokles: Bury on 189e; see also on 190b 'Aristophanes too can pose as an erudite physicist. His astronomical lore may have come partly from Parmenides, partly from the Pythagoreans.' Hippocratic authors: Bury, xxxi–iii (*Nat. Hom.* and *Vict.* 1); see also on 189a,d,e and 190a,b,e.

<sup>11</sup> Hsch. s.v. *ἀρχαία φύσις*: ἡ πρὸ τοῦ νοσεῖν κατάστασις (παρὰ Ἱπποκράτει).

found also in the Hippocratic Corpus (*VM* 3–5, with reference to dietary requirements). Originally there were three human sexes, or ‘kinds’, and this unusual use of γένος is found twice in *Artic.* 53. Perhaps it is not a coincidence that the context is the myth of the Amazons, and that *Artic.* is the only treatise to make allusion to myth (but cf. *Aer.* 17 on the related Sauromatai, there treated as real, or historical, people). These were male, female and androgynous: composite creatures of conjunction male–male, female–female, or male–female; they had four arms, legs, ears and so on, and two sets of genitals. These ideas are akin to those of early science and medicine on human generation and the differentiation of the sexes, and reflect speculation on the reasons for the formation of twins (*Vict.* 1.3, 27–30, especially 30 on ἀνδρόγυννοι, Parmenides DK 28 A 54, B 18, Empedokles DK 31 A 81); perhaps also some experience of Siamese twins.

In shape the bodies were ‘round’, with the outsides (which later, after bisection, became the backs and the sides of two beings, the fronts being the flat, newly cut parts) forming a ‘circle’,<sup>12</sup> and with a ‘circumferential’ neck on which one head with two faces was set. From a description in similar phraseology of the rounded character of animal and vegetable parts—the stems of plants and the calves, thighs, arms, and trunk of humans (Archytas DK 47 A 23a)—it is clear that the creatures are envisaged not as spherical but as cylindrical, or rather as comprising two cylinders, trunk and neck, set one on top of the other. The words σφαῖα, σφαιρικός, σφαιροειδής existed, but are not used; instead we have περιφερής and κυκλοτερής. These occur, the former fifteen times and the latter four, in the Hippocratic Corpus, where other -ερής adjectives are found, many coined to meet medical needs. Similar language of ‘roundness’ is used by the pre-Socratics of the earth or the moon—and this is relevant to the notion that the creatures correspond in gender, and in the nature of their motion, to sun, moon, and earth. But circularity is a common motif in pre-Socratic thought, especially that of Herakleitos and Empedokles.

These primeval humans conspired against the gods, who retaliated: Zeus bisected them and told Apollo (god of healing in conjunction with his son Asklepios) to stitch up each half as a new whole, in which the cut side would become the front of a new being with two hands, two feet, and so on. In the process, Apollo was to swivel each face through 180 degrees, so that it would see the sectioned part (the head evidently had to be cleft to separate the faces, but this is not stated); and similarly to turn half of the neck (that is, half of the original neck; but it is not clear why the neck has to be turned, as the flat cut side of the two new necks might have been supposed to correspond with the flat cut side of the new semi-cylindrical bodies).

The language used of Apollo’s curative work is that of Hippocratic surgery. Most obviously, the prominent verb ἰᾶσθαι ‘treat’ is the usual one of medical attention and the term τομή is the regular one for surgery by the knife, as a procedure linked with or an alternative to cautery; the verbs διατέμνω or σχίζω are applied to such surgical procedures (see especially *Nat. Pue.* 31 and *Mul.* 1.70); also ἀποδέω is a technical term of bandaging (found especially in the gynaecological treatises; but perhaps only because bandages were much used in their contexts). These may be viewed as ordinary Greek expressions, rather than truly technical terms.<sup>13</sup> But more recondite words too

<sup>12</sup> Bury translates ‘globular’; others prefer ‘spherical’; but the shape is rather ‘circular’, like a wheel, not a ball. Cf. J. S. Morrison, ‘The shape of the earth in Plato’s *Phaedo*’, *Phronesis* 4 (1959), 101–9 at 108–9 and ‘Four notes on Plato’s *Symposium*’, *CQ* 14 (1964), 42–55 at 46–9.

<sup>13</sup> On the problems of assessing ‘technical’ terminology, see K. J. Dover, *The Evolution of Greek Prose Style* (Oxford, 1997), 114–17. On the peculiar problems of isolating medical terms in

occur. The verb (ἐκ)λααίνω is commonly used in the Hippocratic Corpus (especially in the gynaecological treatises) of palliative procedures in the sense ‘ameliorate’ (a condition) or ‘emulsify’ (a drug);<sup>14</sup> and the substantive ‘wrinkles’ is used in cosmetic recipes (also in the gynaecological treatises). More significantly, the attention to the wrinkles around the navel may reflect surgery for ascites at this site, a common procedure (see *Aff.* 22, *Int.* 30–4, *Loc. Hom.* 24). The description τὰ στήθη διήρθρον shows remarkable precision. The word στήθος, usually chest, is remarkably used here as equivalent to στέρον, sternum or breastbone, precisely as in *Artic.* 14–16; cf. LSJ III. The verb διαρθρώ lit. ‘divide by joints’, ‘articulate’ is doubly appropriate: first, to the composition of a new creature (cf. repeated use—eight times—in *Nat. Pue.* to describe aspects of the formation of the embryo), and secondly to the articulation of each new sternum to ribs and clavicles.<sup>15</sup>

As in the Hippocratic treatises, especially in anatomical contexts, similes are extensively used to illustrate points, especially anatomical points: ὥσπερ τὰ σύσπαστα βαλλάντια, 190e; τοιοῦτον ὄργανον οἶον, 191a; ὥσπερ αἱ ψήτται, 191d. Again, as in medical texts, nomenclature is constantly stressed: τὴν γαστέρα νῦν καλουμένην, 190e; ὁ δὲ τὸν ὀμφαλὸν καλοῦσι, 190e; ὁ δὲ νῦν γυναιῖκα καλοῦμεν, 191b. The usual variation between first person for general linguistic naming practice and third person for professional usage is observed. A didactic expression typical of medical and scientific writing is used: μέγα δὲ τεκμήριον. This occurs in the identical form μέγα δὲ τεκμήριον at *Aer.* 16, 20, 21 and as μέγα τεκμήριον at *Morb. Sacr.* 2; these two works, regarded by some on grounds of content as having common authorship, were probably among the ‘earliest’ Hippocratic works. There are many triads, a stylistic device pervading *VM* and certain other medical texts. More tentatively, it may be suggested that a preference for θέλω not ἐθέλω and τέως not ἔως is conscious emulation of the idiom of Ionic prose.<sup>16</sup>

How did Plato set about writing this speech for Aristophanes? Did he reread *Birds*? Did he refresh his memory on folktales? Did he check scientific and medical treatises to get his terminology right? Or did he have so much in his head already that it just wrote itself? This extended parody confirms that Plato had a peculiar interest and expertise in medical matters and suggests that he expected his readers too to be familiar with the terminology of medicine and science. Of course, this is not Plato speaking directly, but Plato depicting brilliantly the brilliance of Aristophanes. Aristophanes’ attitude to medicine is unknown.<sup>17</sup> Perhaps surprisingly, as doctors were freely caricatured by other comic poets, Aristophanes does not use this target, even in places where the

fifth-century Greek, when the development of a medical vocabulary from ordinary usage was inchoate, an article on ‘Medical reference in Euripides’ is currently being considered for publication. Medical terminology in another ‘lay’ writer, Thucydides, is discussed in a further note, ‘Thucydides on the plague: physiology of flux and fixation’, *CQ* 51 (2001), 102–8.

<sup>14</sup> The usage in *Plt.* 270e (αἱ παρειαὶ λεαινόμεναι πάλιν . . . σώματα λεαινόμενα) illustrates further Plato’s familiarity with this kind of specialized terminology. The repetitions in language and content found in *Smp.* are, however, indicative of a particular concerted purpose.

<sup>15</sup> The same verb in *Prt.* 322a (ἐπειτα φωνὴν καὶ ὀνόματα ταχὺ διηρθρώσατο τῇ τέχνῃ) has a different sense, similar to that of *X. Mem.* 1.4.12 (γλώσσα ἄρθροί τὴν φωνήν). For ἄρθρον in the sense of a linking word, cf. *Arist. Po.* 1457a6.

<sup>16</sup> However, copyists’ practice in Hippocratic texts is inconsistent; a tendency to normalize dialect forms coexisted with a certain carelessness. Differences between synonyms may have seemed unimportant to them.

<sup>17</sup> Like the tragedians, Aristophanes uses medical language quite extensively: for lists of terms see H. W. Miller, ‘Aristophanes and medical language’, *TAPhA* 76 (1945), 74–84 and S. Byl, ‘Le vocabulaire Hippocratique dans les comédies d’Aristophane’, *RPh* 64 (1990), 151–62.

humour would have been apt—for instance, in the same procession as Meton in *Birds* or in the same way as priests in *Wealth*—and he seems to treat the notional origins of the profession reverentially at *Ran.* 1032. But his main interest in doctors, like that of Menander later, was likely to be for their comic potential.

Comparative study of a wide range of literary texts (especially datable texts, such as plays) might afford much needed help to address the vexed questions of the composition and dissemination of Hippocratic treatises.<sup>18</sup> It would be quite wrong to argue, on the basis of affinities with Eryximachos' and Aristophanes' speeches, that any particular Hippocratic treatises were in circulation in Athens by 416 B.C. or even by 380. But on other grounds it is probable that *VM*, *Vict.* 1 and *Nat. Hom.*, the treatises isolated by Bury and other commentators, were 'early' works with wide circulation, likely to be familiar to educated people in the early fourth century. An interesting case is *Flat.*, which is apparently regarded as Hippocratic in Anonymus Londinensis but has generally been dismissed as 'late':<sup>19</sup> in addition to the echoes noted in *Smp.* there seem to be some in a Euripidean play produced in 428 B.C. (*Hipp.* 186–90).

From the allusions here traced to other treatises, especially the surgical work *Artic.*, we may deduce something of the character of Plato's specialist interest. As a *habitué* of gymnasium and palaestra, he would be familiar with the vocabulary of the doctors who corrected dislocations and fractures like those described in the group of treatises *Artic.–Fract.–Mochl.* However, Plato is himself included in the list of doctors in Anonymus Londinensis, where *Timaios* is summarized.<sup>20</sup> The apparent echo of Archytas (noted above) in addition to the Empedoklean analogies (treated by Bury) may corroborate the evidence of *Timaios* that Plato's medical knowledge is of primarily west Greek origin. It may be added that *Artic.*, like other Hippocratic works which treat anatomy, has pronounced Doric, perhaps western Doric, elements.<sup>21</sup> But *ars est celare scientiam*: the 'doctor' Plato ingeniously embeds his medical ideas into successive layers of this pedimentally constructed dialogue, where each contribution is both integrated with and an extension of the one before, separately and collectively leading up to the crowning glory of Socrates/Diotima.

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<sup>18</sup> Much work remains to be done here. The Ionic of Herodotos (doubtless contemporary with some Hippocratic works; though the lexicographer Powell unhelpfully regards all of the Corpus as later than Herodotos) might provide a useful instrument for comparative study.

<sup>19</sup> The papyrus known as 'Anonymus Londinensis', itself dating from the second century A.D., contains material from a much earlier history of medicine, plausibly identified with that of Aristotle's pupil Menon.

<sup>20</sup> It would be useful to know the date of *Timaios*, with its heavy concentration on medical matters; but this remains highly controversial. See H. F. Cherniss, 'The relation of the *Timaieus* to Plato's later dialogues', in R. E. Allen (ed.), *Studies in Plato's Metaphysics* (London, 1965), an attempted rebuttal of Owen's challenge to the orthodox view that *Timaios* is 'late'; see also more generally L. Brandwood, *The Chronology of Plato's Dialogues* (Cambridge, 1990). I owe these references to Dr. Kyung-Choon Chang.

<sup>21</sup> See V. Schmidt, 'Dorismen im Corpus Hippocraticum', in R. Joly (ed.), *Corpus Hippocraticum* (Mons, 1977), 49–64.